## C S ULB B U L L ETIN

CATALOG OF UNDERGRADUATE AND GRADUATE STUDIES 1992-1993

CALIFORNIA STATE UNIVERSITY, LONG BEACH

The California State University

The individual California State Colleges were brought together as a system by the Donahoe Higher
Education Act of 1960 . In 1972 the Education Act of The California State system became The California State
University and Colleges and in 1982 the system became The California State University. Today, all ${ }^{2}$ and
campuses have the title "university" The oldest campus university State University - was founded as a Normal School in 1857 and became the first institution of public higher education in California. The newest
campus - Caliornia State University San Marcos - began admitting students in fall 1990.
Responsibility for The Calfornia State University is vested in the Board of Trustees, whose members are
appointed by the Governor. The appointed by the Governor. The is the chief executive officer of the system, and the Presidents, who are the chief executive officers on the
respective campuses. The Trustees,
The Presidents develop systermwid policy, with actual implementation at the campus level taking place through broady based consultative
procedures. The Academic Senate of The California State University, made up of elected representatives of the faculty from each campus,
recommends academic policy to the Board of Trustees through the Chancellor.
Academic excellence has been achieved by The California State University through a distinguished
faculty, whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character all campuses, as multipurpose graduate instruction for professiona and occupational goals as well as broad liberal education. All of the campuses require for graduation a
basic program of
general basic program $\begin{aligned} & \text { education-breadth } \\ & \text { requirements, } \\ & \text { regardless of the type of bachelor's }\end{aligned}$ regardless of the type of bachelor's degree or major field selected by the student
The CSU offers more than 1,500 bachelor's and master's degree Many of these programs are offered so that students can complete all upper-division and graduate
requirements
an part-time late requirements by part-time late
atternoon and evening study. in addition, a variety of teaching and
school service credential programs are available. A limited number of doctoral degrees are offered jointly with the institutions in California and with private titutions in California
System enrollments total over ome 20,500 faculty. Last year by onstem awarded taculy. Last year the the bachelor's degrees and 30 percent the bachelor's degrees and 30 percen California. More than 1.2 million persons have been graduated from the campuses since 1960

Campuses -
The California State University

California State University, Bakersfield 9001 Stockdale Highway Bakersfield California $93311-1099 \mathrm{Dr}$. Tomas A
Arciniega, President (805) $664-2011$

Caifornia State University, Chico 1st \& Normal Streets Chico, California 95929 Dr. Robin S. Wilson, President
(916) 898-6116
(916) 898-6116

California State University, Dominguez Hills 1000 East Victoria Street Carson California 90747 Dr. Robert $C$
Detweiler. President (310)
$516-3300$

California State University. Fresno 5241 North Maple Avenue Fresno California 93740 Dr. John D. Welty, President (209) 278-4240

California State Uiversity, Fullerton 800 North State College Boulevard Fullerton, Caifornia 92634 Dr. Milton A.
Gordon, President (714) 773-2011

California State University, Hayward Haywar, Calion Una 94542 , Har. Non

Humboldt State University Arcata California 95521 Dr. Alistair W
MCCrone, President (707) $826-3011$

California State University, Los Angeles 5151 State University Drive Los Angeles, California 90032 Dr. James
M. Rosser, President (213) $343-3000$

California State University, Northridge 18111 Nordhoff Street Northridge,
California 91330 Dr. James W. Cleary California 91330 Dr James W. Cleary

California Stare University, Long Beach
1255 Bellfower Boulevard
Long Beach, California 90840 Long Beach. California
Dr. Curtis L. MoCray
President (310) $985-4111$

California State Polytechnic University, Pomona 3801 West Temple Avenue Pomona, California 91768 Dr. B

California State University, Sacramento 6000 J Street Sacramer, Sacramento 95819 D. Donald R. Gerth, President
(916) 278-6011 (916) 278-6011

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Califonia State University, San
    Caifornia State University, San
    San Bernardino, California 92407 Dr.
    80.4.5000
San Diego State University 5300
Campanile Drive San Divgo, California
(619) 594-5000
imperial Valley Campus 720 Heber Avenue Calexico, California 92231
``` (619) 357-3721

San Francisco State University 1600 Holloway Avenue San Francisco,
California
94132
Dr. Robert A.


\section*{San Jose State University One
Washington Square San Jose,} Washington Square San Jose,
California 95192 Dr. J. Handel Evans, Acting President (408) 924-1000

California Polytechnic State University, San Luis Obispo San Luis Obispo, California 93407 Dr. Warren J. Bake

California State University, San Marcos California State University, San Marcos
820 West Los Vallecitos Boulevard San Marcos, California 92069 Dr. Bill W. Stacy, President (619) 752-4000

Sonoma State University 1801 East Cotati Avenue Rohnert Park, California
94928 Dr. David W. Benson, President (707) 664-2880

California State University, Stanislaus
801 West Monte Vista 801 West Monte Vista Avenue Turlock,
California 95380 Dr California 95380 Dr. John
President (209) \(667-3122\)

The Cairiornia State University, Long Beach Bulletin is the general catalog of undergraduate and graduate studies. It describes the courses, programs and services of the University projected for academic year 1992-1993. Most of the policies these rules. Some rules and regulations are very detailed and complex, the prospective or enrolled student may wish to hav additional advice from the Academic Advising Center, LB E-109, of from a particular academic department.
The following information concerning student financial assistance may be obtained from the Office of Financial Aid, SSA 270
(310) \(985-4641\) :
1. Student financial assistance programs available to students who enroll at California State University, Long Beach; 2. The methods by which such assistance is distributed among recipients who enroll at California State University, Long Beach
. The means, including forms, by which application for student financial assistance is made and requirements for ccurately preparing such application:

The standards the student must maintain to be considered to be making satisfactory progress for the purpose of .andshing and maintaining eligibility for financial assistance.
The following information concerning the cost of attending California State University, Long Beach is available from the Office
of Financial Aid, SSA \(270,(310) 985-4641\) : 1. Fees and tuition (where applicable)
2. Estimated costs of books and supplies
3. Estimates of typical student room and board costs or typical commuting costs; and
4. Any additional costs of the program in which the student is enrolled or expresses a specific interest.

Information concerning the refund policy of the University for the return of unearned tuition and fees or other refundable portions of costs is available from the University Business Office, SSA 155, (310) 985-4167.
Information concerning the academic programs of the University may be obtained from the Office of School Relations, SSA 289, (310) 985-5358, or the Academic Advising Center, LB E-109, (310) 985-4837, or the appropriate department may
include:
1. The current degree programs and other educational and training programs
2. The instructional laboratory, and other physical plant facilities which relate to the academic program;
.The faculty and other instructional personnel;
. Data regarding student retention at California State University, Long Beach and, if available, the number and percentage The names of associations program in which the student is enrolled or expressed interest; and
programs, and the procedures under which any current or prospective student may obtain or review upon request a copy of the documents describing the institution's accreditation, approval, of licensing
Information regarding special facilities and services available to handicapped students may be obtained from the Office o Disabled Student Services, Student Union 206, (310) 985-5401 or (for the deaf) \(985-5426\)

\section*{Institutional Commitment to the Human Corps}

CSULB strongly encourages all students to be involved in community service activities while attending the University. Studen participation in community activities is intended to enhance their academic work, develop an awareness of social issues and problems and to directly improve the quality of life in the community.
A wide variety of community needs and issues can benefit from the concern and talent of CSULB students: concerns for the elderly, substance abuse, juvenile delinquency prevention, the disabled, the homeless and hungry, education and literacy, heath care, immigration concerns, and child care and protective services.
Students can become involved in the community through class-related projects, internship programs, part-time jobs University out-reach programs, campus service and leadership positions, individual volunteer activities, as well as, club and
organization service projects. Iganization service projectis.
The Human Corps office is located in the Career Development Center, SSA 250. See also the Cooperative Education in the
University Programs section of this catalog.

\section*{Editor's Note:}

We are always interested to know what improvements to this catalog the readers believe to be appropriate. We accep suggestions in writing and incorporate them in future editions when possible
The Bulletin is produced by Dr. James R. Brett, Director of Curricular Administration and Janice Jackson Curriculum Assistant Cover design and photography are by the Otfice of University Publications. Back cover photo clockwise from upper right: Carolyn Lamb, Courtney Hamer, Glynda Johnson, Vien Quoc Vo, Stacy Cornelius, Zachary Zakour.

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\section*{ALL 1992 SEMESTER DATES}

August 24 -- First Day of the Semester August 24-28-- Departmental Advising August 31 -- First Day of Instruction September 7 -- Labor Day Holiday (campus closed) October 12 -- Columbus Day (campus open) November 11 -- Veterans Day (campus open) November 26 and 27 -- Thanksgiving Holiday (campus closed)
December 11 -- Last Day of Instruction December 14-18 -- Final Examinations December 23 -- Last Day of the Semester December 24-January 1 -- Winter Recess (all offices closed)

\section*{WINTER 1993 SESSION DATES} January 4 -- First Day of Instruction January 18 -- Martin Luther King Holiday (campus closed) January २२ -- Last Day of Instruction

\section*{SPRING 1993 SEMESTER DATES}

January 21 -- First Day of the Semester January 21-25-- Departmental Advising January 26 -- First Day of Instruction February 12 -- Lincoln's Birthday (campus open) February 15 -- Washington's Birthday (campus closed) April 5-9 -- Spring Recess (campus closed May 14 -- Last Day of Instruction May 17-21 -- Final Examinations May 25 -- Memorial Day Holiday (campus closed) May 26-28 -- Commencements May 28 - Last Day of the Semester

\section*{UMMER 1993 SESSION DATES}

First Session May 31 -- July 9
Second Session June 21 -- July 30
July 4 -- Independence Day Holiday (campus closed) Third Session July 12 -- August 20

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\hline Office of the Chancellor & Dean, College of Natural Sciences ..................Fred Shair \\
\hline Chancellor-CSU System . . . . . . . . . . . . . . . . . Dr. Barry Munitz & Acting Associate Dean . . . . . . . . . . . . . . . . . . Henry Fung \\
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\hline \begin{tabular}{l}
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and Operations \\
Dr. June Cooper
\end{tabular} & \begin{tabular}{l}
Dean, College of Social and Behavioral \\
Sciences \(\qquad\) Dorothy Abrahamse
\end{tabular} \\
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\hline Acting General Counsel .............. Mr. Bruce M. Richardson & Dean, University Extension Services .............Robert Behm \\
\hline 400 Golder & Associate Dean ........................ Marilyn Crego \\
\hline Beach, California,
\((310)\)
\(590-5506\) & Executive Director, Downtown Center .............Mary Barton \\
\hline & Director, Professional Development .......... LouAnne Bynum \\
\hline California State University, Long Beach & Director, University Television Services ............ Mat Kaplan \\
\hline & Dean, Center for International Education ........ Maurice Harari \\
\hline Administration & Director, American Language Program ............. Karen Fox \\
\hline President ............................ Curtis L. McCray & \begin{tabular}{l}
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and Exchanges \\
Paul Lewis
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\hline Immediate Office of the President & Director, International Student Admissions ....... George LaDue \\
\hline Executive Assistant to the President ..................Va & Director, University Library . . . . . . . . . . . . Jordan M. Scepanski \\
\hline Special Assistant to the President .............Marilouise Sims & Acting Associate Director .................. Henry Dubois \\
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\hline \begin{tabular}{l}
Provost and Senior Vice President \\
for Academic Affairs \\
Karl W.E. Anatol
\end{tabular} & Interim Vice President for Student Services .. Douglas W. Robinson Director of Special Projects \(\qquad\) Paula Gleason \\
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\hline & Director, Student Life and Development . . . . . . . Stuart L. Farber \\
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\hline Employee Relations Administrator ........ Armando Contreras & Director, Student Life and Development .......... Rowland Kerr \\
\hline Assistant Vice President & Director, Student Life and Development ......... Bron Pellissier \\
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\hline Director, Learning Assistance Center . . . . . . Genevieve Ramirez & Senior Director, Women's Resource Center \\
\hline Director, Academic Advising Center ........ Marilee Samuelson & and Professional Development ........... Marcela Chavez \\
\hline Director, University 100 .................. Sharon Olson & Senior Director, Judicial Affairs ...................Steve Katz \\
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Director, University Research and \\
Curricular Administration James R. Brett
\end{tabular} & \begin{tabular}{l}
*Director, Isabel Patterson Child Development \\
Center \\
Pamela Macdonald
\end{tabular} \\
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\hline rector, Ocean Studies Institute .............. Murray D. Dailey & Educational Support Services . ................. Alan Nishio \\
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\hline Dean, School of Business Administration . . . . . & School Relations ........................Valerie Bordeaux \\
\hline Dean, School of Business Administration . . . . . . Robert H. Dean & Director, Educational Information Se \\
\hline Acting Associate Dean ...................... David Horne & Talent Search . . . . . . . . . . . . . . . . Loretta Enriquez-Najera \\
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\hline Dean, College of Humanities .............. Virginia Warren & Assistant Director, Administrative Services . . . . . . . . Carol Revers \\
\hline Associate Dean ..................... Shirley Mangini & \\
\hline
\end{tabular}


History
The history of the institution now known as California State University, Long Beach began in 1947 when a state survey of anticipated post-World War a population grown Orange County and southeastern Los Angeles County. The college-first called Los Angeles-Orange County State College-was officially authorized by Assembly Bill 8 signed by Governor Earl Warren on January 29, 1949. The early curricular emphasis was on theachough additiona prosional studies were quickly added Students registered for their first classes, which were held in a converted apartment building at 5381 Anaheim Road


President Curtis L. McCray
Long Beach, on September 26 and 27, 1949. The cost 25 couse to support a tot of five arcalaureate degree majors. There were 169 students and 13 faculty. In November the students held their first council meeting and elected Roger Bryson to be the first A.S. President.

During the 1950 's, under the leadership of President \(P\)
Nar felerson, he loundaions were 320 -acre site was firs
ccupied in November 1951. The land was a gift of the City of Long Beach, which bought it from the Bixby Ranch Company and donated it to the State of California. In this period the Forty-Niner newspaper was established; the pecond-semester ediror was lsabol atleson, he to Long Beach philanthropist who later donated the funds to Before long the sheep, rabbits, and meadowlarks on the top of the hill gave way to the Language Arts and Fine Arts Buildings, the Little Theatre, and the Library. Enroiment increased dramatically when freshmen and sophomores were admitted in 1953. A faculty council was estabished and after 1961 the faculty governance process was embodied in the Academic Senat.


Chancellor Barry Munity
Pesiden Carl Mclash oversaw further rapid growth throughout the 1960's. Enrollment soared from 10,000 students in 1960 to 20,000 in 1966. Rapid expansion meant many new physical lacilities, a broader range degree and course offerings, and a greatly enlarged facult The mission of the campus was modiried to encompass peter's dearee in six schools: Applied Arts and Sciences, Busines Administration Education, Engineering, Fine Arts, and Letters and Science. In 1965 an International Sculpture

Symposium brought eight world-renowned sculptors to campus to create permanent monumental works of art.
The School of Fine Arts pioneered in offering the first professional arts degrees (BFA, MFA) in the California State University system.
Under the leadership of President Stephen Horn, the campus continued its rapid growth during the early 1970's, although the pace slowed considerably later in the decade. University, Long Beach in 1972. A year later enrolment reached 30,000 . Important new buildings included the


University Student Union, the Isabel Patterson Child Development Center, the Psychology and Theatre Arts Buildings, the Student Services Administration Building, and the West Library, with its six floors of stacks and study
areas. During this period the University developed a campus-wide system of academic requirements, established a pioneering Learning Assistance Center, and began to emphasize the internationalization of its curriculum. Greatly increased faculy research and creative activity established the University as a significant contributo the weath of human knowledge.
Little physical expansion occurred during the 1980's, but additional dormitories, the number of residential students doubled to more than 1800, giving the campus a new sense of community. The acquisition of KLON, FM- 88 which soon became one the nation's premier public radio
stations, featuring jazz and information programming, the
expansion of the University Art Museum, and the opening o the Earl Burns Miller Japanese Garden, the University Music Elmer Huntington International Houses all enhanced the rich cultural fabric of the University. In 1989 the Library celebrated the acquisition of its one-millionth volume and a year later opened striking, technology-oriented north campus building. At the same time, led by its success in baseball, and sofftball, the athletic program rose to national prominence.
The University enters the decade of the 1990's under the guidance of President Curtis L. McCray, proud of its successes and confident of its future as a majo comprehensive university serving the citizens of California Stting
The hilltop portion on the 322 -acre campus overlooks the Pacific Ocean. Sixty-one permanent buildings house the
various colleges/schools, 70 academic departments and programs, 8 centers, 5 institutes, and 3 clinics.
An impressive University Student Union is located at the crossroads of the campus, providing a focal point for the total campus community. A centralized Studen Services/Administration center in close proximity to the Engineering and Industrial Technology, Microbiology, Music, and Nursing have been completed, as has the new International House student dormitory and meeting complex. A high technology library for the north campus was opened in 1990 and state-of-the-art facilities for the
School of Business Administration in 1991 . A central
3,200 Helen Borcher flowering peach design is a planting of citizens of Long Beach. Secluded landscape areas and buildings of appropriate scale help maintain a learning environment that encourages small group identification and personal privacy in the midst of 33,000 individuals sharing the same sit, on hat is essentialy a large urban campus, The campus has assumed a highly individual character. In
1965, the international Sculpture Symposium contributed 9 monumental pieces and designs to the University, These works received credits in 21 national and international publications, and in 1972 additional community funds in the form of a trust provided for the completion of the Carlson Memorial Tower, designed by French sculptor Andre Bloc.
The campus sculpture collection has continued to expand The campus sculpture collection has continued to expand, Michael Davis, Robert Irwin, Bryan Hunt, and Woods Davy. These acquisitions were made possible by private donations and grants from the National Endowment for the
Arts to the University Art Museum Arts to the University Art Museum.

\section*{Mission}

California State University, Long Beach is a large urban comprehensive university in the California State University system. Its mission is high-quality education leading toward spanning the liberal arts and sciences and many applied and professional fields, with emphasis on instruction at the upper-division (junior and senior) and graduate levels, in
ccordance with the California Master Plan for Higher ducation.
CSULB is committed to serving the people of California. To assure access and equity consistent with educational
priorities, the University endeavors to serve students who can only attend in the evening as well as those who can attend during raditional daytime hours, hose who must attend who attend full-time, and hose from population groups whose rates of enrollment historically have been lower than average as well as those from groups higher rates of education. The University serves students who have gradua-
ted in the top third of the ted in the top third of the State's high school gradua-
ting class, students who have completed a community college program, and adults re-entering educa-
The University's educa tional mission is to promote intellectual and personal development and to pre pare students for lifelong learning as well as prepar ing them to succeed in variety of professional
endeavors and to function as informed, contributing members of the commu nity. To these ends, the mission of the undergraduate curriculum is grounded in a strong gram, emphasizing the acquisition of writing, critica thinking, and analytica
skills and knowledge
cultural and artistic traditions, the analysis of humar behavior and society in the past and present, and scientific provide each student with the skills necessary to pursue knowledge and to integrate information from various sources, and also to provide depth in at least one area specialization. The mission of the graduate programs is to prepare students to enter careers requiring training beyond advanced study. Doctoral programs are intended to provide both advanced knowledge and the skills needed to pursue independent research. Educational suppo programs and services for students

importance of personal, interpersonal, and societal development.
personal,
and socie

A fundamental goal of all of the University's programs is to prepare students to function effectively in a culturally diverse society, by developing an understanding of our diverse heritage, including the
essential
contributions of women and ethnic minorities. Instruction emphasizes the ethical and social dimensions of all disciplines, as well as their applications to contemporary world issues.
Building upon the culturally diverse region it serves and the international character of its faculty, the University emphasizes international cation in its curriculum. The University seeks to
involve students in learning involve students in learning curriculum in small sections taught by fully qualified, professionally active faculty members, and by providing
opportunities for underopportunities for under-
graduate as well as graduate graduate as well as graduate
students to work with faculty members in independent study and research. CSULB serves the surrounding community through applied
research,
training and community service programs, and consulting for government agencies, non-profit organizations, and private industry.

\section*{Accreditation}

The University is accredited by the Western Association of Schools and Colleges, the
agency responsible for granting national accreditation to colleges and universities in the western by the California State Board of Education and is on the list of approved institutions of the American Association University accreditation may be obtained from the Office of Academic Affairs. Additional information concerning departmental accreditation may be obtained from the department concerned or the -ite of ap college/school dean.
Art - National Association of Schools of Art and Design
- Business Administration - American Assembly of
- Chemistry (undergraduate) - American Chemical Society, Committee on Professional Training
- Communicative Disorders (graduate) American Speech and
Training Board

The Faculty
The faculty of California State University, Long Beach is a dedicated group of men and women. Each has been well-prepared for the work of providing instruction to
undergraduate and graduate students. The faculy create

- Dance - National Association of Schools of Dance
- Design - National Association of Schools of Art and
- Interior Design - Foundation for Interior Design
- Engineering (undergraduate: Chemical, Civil, Computer, Electrical, Mechanical) - Accreditation Board for Engineering and fechnology
- Home Economics - American Home Economics
- Environmental Factors: Interiors - Foundation for
- Journalism - Accrediting Council on Education in

Journalism and Mass Communicatio
- Music - National Association of Schools of Music
- Nursing - National League for Nursing
- Physical Therapy - American Physical Therapy
- Public Policy and Administration - National As
of Schools of Public Affairs and Administration
- Recreation and Leisure Studies - National Recreation and Park Association, Council on Accreditation
- Social Work - Council on Social Work Education
- Theatre Arts - National Association of Schools of

Mniversity Art Museum- American Association of
an intellectual atmosphere that encourages students to develop a spirit of investigation which becomes a life-lon that students will gain respect for excellence performance and take advantage of the wide range of educational opportunities available to them
Faculty earn academic rank as they develop their course materials, research, academic and community service, and
publications. The highest faculty rank is "Professor," pubications. The highest faculty rank is "Professor,
sometimes called 'full Professor." The intermediate rank is 'Associate Professor." Most faculty begin their careers as 'Assistant Professors.
The faculty are assigned to departments and programs within colleges/schools of the University. The Department Chair is the academic leader of the department faculty. A dean is the chief executive officer of a college/school.
Deans are appointed by the Provost and Senior Vice President for Academic Affairs in consultation with the President and the college/school faculty. Most colleges/schools have one or more associate deans to assist in the administration of college/school resources. Elsewhere in this Bulletin you will find the explicit policy of the University on grades and grading as well as policies on class attendance, withdrawal from courses, and cheating concerns of the faculty that students take seriously the opportunities made available to them. Beyond these rules and regulations the faculty expect student participation in education that may be different from or more active than what students have been used to in secondary schools. Fo every discipline the fund of knowledge to be absorbed
understood, and added to is expanding rapidly.

The role of the university professor is somewhat different from that of the high school teacher. University faculty are involved in the creation of knowledge as well as the use not only the 150 instructional days per year to the best possible advantage, but that by reflecting on the learning process, by thinking about how the professor came to understand and organize what she or he knows, they wil also learn how to take advantage of the Universtys and process of personal education.

\section*{Academic Organization of the University}

During the regular session California State University, Long Beach is as large as a small city. Thirty-five thousand students, eighteen hundred faculty members, and nearly twelve hundred staff members study and work on campus each week. In order to operate, the campus has been organized into nine separate units and many academic
departments and programs. The names of the colleges/schools, departments, and programs and their current deans are shown at the end of this catalog.
Colleges/schools are usually composed of academic areas with some common characteristics. Because of this colleges/schools themselves suggest a way to look at the function of a college/school is to provide a forum for the faculty and the students to express academic matters before a knowledgeable group of people. At the universtit level this is a very important aspect of the educationa process.
For students who have just begun their life in the University, some of the departments of the colleges/schools will turn out to be considerably different from first expectations or previous experiences with high schoo subjects with the same or similar names. For students who have begun to focus their academic interests, exploration o the departments and programs of a college/school beyond the favorite first contact area will choosing an academic major.
This catalog is organized so that the departments and programs of the individual colleges/schools are grouped together. In order to find Mathematics, for instance, you need to know that it is within the College of Humanities. Please use the table of contents; it will solve these riddes names of deans and department chairs should be useful for times when information or approvals are not available from faculty or other administrative offices.

\section*{Departments, Programs, and Studies}

The elemental unit of academic organization at this University is the department. Departments are most ofte coincident with a discipline and usually share the same name. Faculty are members of departments. The degrees in Biology and Botany, a minor in Biology, and a certificate in Biomedical Art. You will also find in this catalog academic areas, like Gerontology, which are not part of any ne department. Some of these areas are called "Studies"
e.g., Women's Studies, Medieval Studies. This means that the field is essentially an interdisciplinary one and is the product of the activities of faculty from many departments. The faculty of Religious Studies formed a department and is an exception.

\section*{University Extension}

University Extension Services is the community outreach branch of the University. It is a self-supporting entity which
provides general education as well as professional training provides general educatorly adult. Approximately 450 seminars, briefings, short for the adult. Approximately 450 seminars, breifings, stor
courses, and certificate programs are provided each semester throughout the Los Angeles-Orange County region. University Extension Services encompasses the Extended Education Office, the Summer Session Office (the largest in the CSU system), the South Coast Center for
Professional Training and Development, and the University Television Center. In the area of professional training, the South Coast Center provides customized industry training, creates and manages company retraining, and offers qualified researchers and trainers to assist companies in designing their own training. The University Television Center Long aeach and Lakewood cable systems. The University Television Center also works in concert with the South Coast Center and academic schools to deliver raining via television to on-site business and industry ocations.


\section*{Academic Senate, Councils, and Committees}
- Chair of the Academic Senate-Professor Frank Alfien
- Chair of the Planning and Educational Policies

Council-Professor William V. Wittich
- Chair of the Graduate Council-Professor Dorothy Fornia
- Chair of the Financial Affairs Council-Professor Joseph gaddino
- Chair of the Teacher Preparation Committee - Seniar Assistant Librarian John D'Amicantonio
The faculty is subdivided into departments and programs
 matters. Since departments
and programs are constituand programs are constitu-
ent parts of the colleges/ schools, they also send members to college/schoollevel committees and councils. These bodies serve to develop, refine, and
review curriculum. At the review curriculum. At the
University level faculty nembers from all of the colleges/schools are elected to several councils and to the Academic Senate.
These bodies concern themselves with campus-wide issues. Many of these councils, their subcommittees, and the Academic Senate have also provided for staff, student, and administration membership. The University Library
The University Library excels in all forms of information delivery to students, faculty, and members of the community. In the Spring of 1992, construction will begin for addition/remodeling of the main library (south campus
building). In approximately two years, the project will be completed with seating and book storage capacities increased. The next two years will be exciting, but will also entail some disruption of normal library services and traffic patterns about the building.
The main library is a six-story structure housing over a million books and bound periodicals. These holdings are supplemented by approximately two milion ant prints,
slides, sound recordings, audio and video cassettes, microtexts, filmstrips, maps, government documents, computer software, archival material, and rare books.
The north campus library is a one-story building with four 'pods" connected by a gallery. It includes areas for quiet
study, informal reading, and computer-based work study, informal reading, and computer-based work
isiret personal assistance in the use of library resources Assistance with general inquiries and in searching for detailed information on specific academic topics is available in the reference center. Access to books, journals and other materials is facilitated through COAST, CSULB's n-line catalog
On-line search services are available for retrieval of computer access to periodical references in virtually all subject areas through use of compact disks or remotely located data bases such as those of DIALOG, Bibliographic Retrieval Services (BRS), and Dow Jones. These on-line services not only save time in conducting comprehensive literature searches, but also provide subject specificity and
the most current information The library's bibliographic instructio
he most comprehensive instructional program is one of anywhere. It includes a required course and a series of classroom presentations on bibliographic resources and

Outstanding collections in history, politics, and the humanities are found in Special Colections. Brough the Emancipation movement, and the history of art and painting. Among the holdings is a notable collection of first editions, private printings, manuscripts, anthologies, criticisms, and ephemera on the poet Robinson Jeffers California legislators Vincent Thomas, Mark Hannaford, and Richard Hanna have donated papers and files covering
their years of public service to the library, and important works are found on radicalism in Southern California centering on the political activities of Dorothy Healy.
Original art works, photographic prints by Edward Weston and Ansel Adams and numerous contemporary West Coast photographers, and other significant holdings in the University Archives provide invaluable resources for study and research
The University's Learning Resources department offers a
variety of creative, technical, and consultative services in the area of photography, video, and graphic arts and sound Audio-visual equipment maintenance and distribution service in support of classroom instruction is also provided Other library services include facilities for the and a large selection of award-winning books for younge readers. The CSULB Library is a depository for Federal and State government documents.


Faculty, graduate students, and undergraduates have Facuity, graduate students, and undergraduates have
access to national and international interlibrary loan services. Resources of the 19 other CSU campuses and
the nine campuses of the University of California are readily the nine campuses of the University of California are readily
available.

Automated circulation and book processing services round out a modern university library, ready to offer the inest resources and the most advanced

\section*{University Computer Facilities}

The University provides an extensive array of mainframe, minicomputer, and microcomputer resources. More than 1000 student access terminals and microcomputers may connect to the University's VAX 6320 supermini, and a 5810 running Unix. An X. 25 network (CSUNET) links more than 50 mainframe and minicomputer systems at the 20 CSU campuses. CSUNET also provides links to other networks and computers,
including INTERNET, BITNET, CERFNEI, and a at the University of California a San Diego. Fifteen general access computing laboratories situa-
the throughout the campus provide access to an extensive collection of sottware pack-
ages and ages and
gramming languages. More than 1,000 microcomputers are
available available for stu-
dent use dent use. These
includes IBM PC's and compatibles,


Institute for Science and Math Education — Wiliam Ritz Director
- Institute of Parasitology-Murray Dailey, Director
- Molecular Ecology Institute - Kenneth Jenkins, Director
- Pacific Rim Institute - Maurice Harari, Director

Fine Arts Public Performances and Exhibitions The College of the Arts presents more than 350 performing and visual arts events each year; many are world renowned artists. With the support of the Louise Carlson Cultural Fund and the Lillian Newman Komaroff Memorial for the Performing Arts, the College pre-
sents an annual performing arts series featuring outstanding proessional artists and touring com
panies. Most of the performing arts
events are held in two intimate facilities: the Univer-
sity Theatre with sity Theatre with
a proscenium a proscenium
stage and seating for 400 and the Studio Theatre, a complete
"llexible"
theatre "flexible' theatre seating 230. The and compatibles, Apple \(\| \mathrm{I}\) 's, Macintoshes, NeXT workstations, and Zenith AT's. Many of these microcomputers are networked, and many may be used to access the campus mainframes, minicomputers and CSUNET computing resources. Students also use Other special devices for graphics applications.
Research Centers and Institutes
Research Centers and Institutes - Center for Career Studies - Paul Bott, Director
- Center for Criminal Justice Research and Training Arthur Basile, Director
- Center for Educational Applications of BrainHemisphere Research - Betty Edow
Director: Pat Clark, Executive Director
- Center for Educational Research and Services Robert Berdan, Director
Center for First Amendment Studies - Craig Smith Director
Center for Health and Behavior Studies
- Center for Humanities - Virginia Warren, Director

Recital Hall, part of the modern University Music Center, is Recital Hall, part
The Department of Art presents a weekly schedule of graduate student exhibitions in College of the Arts Galleries B and C . Annual events include a New Faculty Exhibition each October, Winter Art Sale during the first week of December, Student Art Exhibition in the University Att The Department of Dance presents two majo performances each year during the first weekends of December and May. The modern dance concerts feature works by CSULB's highly acclaimed dance faculty performed by the faculty and students. Informal concerts featuring choreography by CSULB students are presented each semestlaroration between the Departments of Dance and Music.
The Department of Design presents the Senior Design Show, an outstanding exhibition of projects by Interio Design, Graphic Design, and Industrial Design students each May in the Graduate Center. Design graduate
students present exhibitions throughout the year in Gallerie \(B\) and \(C\).

The Department of Music presents more than 100 concerts each year featuring 18 performing groups
including the Symphony Orchestra, Wind Symphony, Jazz Ensembles, University Choir, String Quartet, Opera Forty-Niner Chorus, Men's Chorus, Women's Chorus Collegium Musicum, Forty-Niner Band, and others. During the first week of December, the Choral Studies Program Congregational Church in Long Beach.
The Department of Theatre Arts produces six majo productions each year. Acclaimed for quality acting and elaborate sets, the theatre season includes contemporary dramas, classics, and musicals. The California Repertory Company, composed of graduate students pursuing the
MFA degree, department faculty, and area professionals, performs four additional plays annually in an intimate 90 -seat theater.


Tickets for all dance, music, and theatre arts performances are sold through the CSULB Fine Arts Ticke
Office located in the southwest corner of the Theatre Arts Building. The Ticket Office is open from \(10 \mathrm{a} . \mathrm{m}\). to \(4 \mathrm{p} . \mathrm{m}\) Monday-Friday and is open one hour prior to performance. Faculty, staff, and student rates are available for mos performances. Visa and Mastercard are honored.

\section*{University Art Museum}

CSULB Library provides the cated on the fith floor of the
communities with quality exhibitions in the visual arts on a year-round basis and presents scholarly publications, guest each a broad general public. Programs that are an integral part of the museum include the Museum Studies Certificate Program, which trains students for careers in museum work; Art to the Schools, which brings educational projects in the visual arts into the classroom; the Summer Institute
for Teachers, which helps teachers utilize the resources of museums as part of their curriculum; and Get the Picture, a workshop to acquaint youth with the history and heritage of he City of Long Beach and surrounding regions,
In 1984, the University Art Museum was accreditated by the American Association of Museums and thus ranks among the top ten percent of the nation's 6,000 -plus
museums. It is one of only two nationally accredited art museums in a public university in Southern California. Its exhibitions and collections - including the Monumental Sculpture Collection spread throughout the 322-acre campus - have brought the University and Long Beach area recognition from both the professional art community community membership program which offers special events, museum tours, and international travel opportunities planned exclusively for museum members. All students are invited to join ArtPartners, the student and young or information aut University At Museu aclivies, call or information

\section*{The Earl Burns Miller Japanese Garden}

Beauty, simplicity, harmony, and peace are all expressed Beauy, simplicity, harmony, and peace are all expressed Long Beach and the community have been enriched by the Earl Burns Miller Japanese Garden, which provides a setting to experience these important qualities.
Mrs. Loraine Miller Collins' appreciation of Japanese
culture is reflected in the planning for the garden The culture is reflected in the planning for the garden. The architect Edward R. Lovell, whose visits to Japan and a number of its gardens enhanced the project. The Japanese stone sculptures were personally selected by Mrs. Collins, as were the bonsai pines, and the furnishings for the eahouse
The natural effects of the garden design are an expression of the Japanese attitude of respect and love for Everything in a Japanese garden has significance-the moss-covered rocks, the brilliant colors of the azaleas, the cascading water, the gracefulness of the forms of the trees, he movement of the colorful koi in the lake. Placement of plants and rocks are all based on asymmetry and rhythm. provides for a delightful sense of peace and harmony.
A unique aspect of the garden is that it has been designed to encourage access by the physically handicapped
The Forty-Niner Shops
The Forty-Niner Shops, an auxiliary organization, enhances and supports the educational processes of
CSULB by providing goods and services at reasonable and
ompetitive prices. The Forty-Niner Shops, Inc. operates the University Bookstore, Campus Copy Center, the new University Dining Plaza, which includes A La Mode, the International Cafe, the Nugget, and the Chart Room, and a variety of food and refreshment stations across the campus. Forty-Niner Shops, Inc. is a nonprofit corporation which has faculy, student, and
representation on its Board of Directors.
The University Bookstore stocks required textbooks, school supplies, stationery, and additional items for personal use. Services include notary public, check ashing, and the sale of money orders and stamps.
The Campus Copy Center offers copying, duplicating, offset printing, book and report binding, transparencies, and typewriter rentals. The Library Copy Center, an needs in that location.
The University Dining Service includes the residence dining units, the new University Dining Plaza, consisting of four dining areas featuring a wide range of foods and service formats, the University Student Union dining facilties, and the satering sevvices are available for campus functions.
The University Student Union
The University Student Union (USU), paid for with student fees, is located in the center of campus and occupies fees, is located in the center feet. With its large interior patios, flexible multipurpose and meeting/dining rooms, comfortable lounges, and food service facilities, the Union is the campus community and hospitality center. It houses and serves as the headquarters for the Associated
Students. Inc. (student government and business office), University Student Union Administration Office, Student Relations and Activities, University-related student groups legal counseling. United Campus Ministries, Disabled Student Services, University Alumni Relations, an Information/Ticket Booth, the Office of the Assoces
Vice-President for Student Services, and much more.
Vice-President Information/Ticket Booth, located on the Plaza Level, offers local bus schedules and maps. Bus passes for the Southern California area, newspapers, photo developing and tickets for campus events sponsored by student organizations are sold there. The Book Exchange Board aids students interested in selling or exchanging books with other students. The Scheduling
scheduling and coordinating service for the entire campus. The Student Relations and Activities area offers advising for student organizations, as well as mail boxes, organizational files, and work space for all student groups. The Student Union Score Board serves breakfast, lunch, and dinner with Area adjacent to the swimming pool and the TV Lounge The Counter sells various candies, popcorn, sodas, and sundry items. Paradise Bakery, located on the Mall Leve offers a delicious selection of tresh baked cookies, muffins, quiches, and beverages
Recreational facilities in the Games Area include bowling, billiards, table tennis, pinball and video games, table games, and enjoyment, a swimming pool and showe
facilities are available. The Outing Center offers backpacking and camping equipment rentals at reasonable prices. In addition, outdoor recreational trips are planned for skiing and camping enjoyment. These programs are offers sign making, graphic arts, and photography equipment complete with a darkroom
The large multipurpose room, meeting and dining rooms, and the small auditorium provide a variety of facilities to various organizations for meetings, conferences, speakers dances, fil
banquets.
A wide variety of commercial services is also available. In addition to the food services, the Union offers Gary \& Co
Hair Design, Campus Travel Agency, and Kinko's Copy Center.

\section*{The Soroptimist House}

The Soroptimist House, presented to the Associated Students by the Soroptimist Club of Long Beach, provide a facility for parties, receptions, and informal meelings. a complete kitchen, and a dance area available fo scheduling by all campus organizations and departments The Soroptimist House has a small, intimate, home-like setting. Reservations may be made at the Scheduling Desk In the University Student Unio

\section*{KLON-FM 88 Public Radio}

FM88/KLON ( 88.1 on the FM dial), a noncommercial ducational radio station stafted by nine fillerin ong Beach Foundation. KLON's primary signal coverage is the southern portion of the Los Angeles basin with secondary coverage to most of Los Angeles and Orange counties. It has a cur potential of \(2,000,000\).
The station is on the air 20 hours per day with a program ormat principally of information, public affairs, and jazz. and Pacific Rim business affairs. KLON provides diverse professional learning opportunities for CSULB students, including a unique opportunity for students in the Radio/lv and Journalism departments to gain experience in a facl-time, professional radio station wrofessionals. Over 40 students are currently involved in the operation of the station. KLON provides additional learning experiences for students in marketing, graphic design, industrial design, and public relations. FM88 is a listener-supported radio station, funded by a combination of institutional, governmental, corporate, foundation, and pivate Faculty Office I on the CSULB campus.

\section*{University Developmen}

The Office of University Development actively encourages and coordinates the receipt, acknowledgment, and disbursement of donations from alumni, parents, graduating seniors, and many friends or the University.
ollars are given annually in support of various activities which further the educational mission of CSUIB
Annual Fund Phonathon: Opportunities for Quality Alumni, too, give generously to the University. Throughout
the year, thousands of CSULB alumni are contacted by the year, thousands of CSULB alumni are contacted by
student callers in the various Annual Fund Phonathon/ Opportunities for Quality campaigns. Several donor club evels have been established in the Annual Fund, and special beneftts are given to the members. Most donations
rom the annual alumni fund effort are directed to meet the needs of the colleges/schools and departments. Some of the funds are used for specially designated projects.
Alumni Scholars Program
The annual Opportunities for Quality Phonathon continues o support an Alumni Scholars Program. Each year, fiftee outstanding high school seniors are named 'CSULB Alumn Scholars" and receive \(\$ 1000\) stipends, renewable annually
based on the achievement of a required grade-point average. Unique features of the Alumni Scholars Program include assigned faculty mentors for each student and outreach activities which require the students to return to their high schools during the year to provide information

\section*{concerning Csulb}

A Parents' Fund campaign was initiated in 1986 and the esponse was excellent. In a one-month campaign, for with average pledges of nearly \(\$ 100\) per family. The willingness of parents to pledge financial support to the University is a confirmation that CSULB provides xcellent educational environment for the students it serves Senior Gift Campaign
A past campus tradition was reinstated with a phonathon tampaign directed toward the Senior Class of 1986. In just support of a lasting gift to the CSULB campus. Monie provided by those donors are designated toward the onstruction of permanent picnic sites across the campus. In the future, each Senior Class will choose its commemorative gift to the University.

\section*{Major Gifts}

The Office of University Development works with individua donors in securing current and deferred gitts. Major named Patterson Child Development Center and the Earl Burns Miller Japanese Garden
Other donors have established trusts to provide ontinuing funds for special events, for example, the arlson Fund for the Performing Arts and the Zeitlin ectures in the visual arts. Private donations supplied a portion of the funds used to complete the new Internationa
House complex. Other contributions will be used for menities in the new School of Business Administration and Dance buildings.
Even more, endowed scholarships honoring individuals and families have been established in all areas of the University. In 1986, the \(\$ 1.1\) milion endowed Chair in Health Other individuals have included CSULB in their wills by
providing for future scholarships, endowed faculty chairs, and lectureships, or the transfer of cash, securities, rea property, personal libraries, private collections, works of art and musical instruments.
Major gifts may serve restricted purposes in accordance
with the donor's designation, or their use may be left to the

discretion of the CSULB Foundation and the President of the University. For additional information, please contact the ce fresident for Development, (310) 985-5197
University Foundation
The California State University, Long Beach Foundation is a nonprofit, tax-exempt corporation organized to administer grants and contracts for research and other activities elated to the University's programs. The Foundation also

University-related use, and provides tax-deductible advantage to the donor
The research and other activities involving the Foundation are related directly to the academic program. They involve substantial interaction between faculty, staff, and students, Often, businesses, government, and non-profit agencies in he broader Southern California community are involved and participate in the benefits of the projects. Donations, gitts, and bequests provide a
addition to the accomplishments of the University. Publio unds provide support for most of the instructional and instructionally-related activities and facilities, but private contributions are essential for the support of creative faculty efforts which extend beyond normal instructionaly supported areas; scholarships for needy stuiner rooms, libraries, and laboratories which become available to enhance the learning process
Facilities which cannot be provided through available public funding also depend upon outside contributions. The beautiful Louise Carlson Memorial Tower (designed by the late French sculptor Andre Bloc), the lsabel Patterson Child Garden are outstanding examples of such donations which enrich the University environment both aesthetically and unctionally.
Charitable donations counseling and consulting services are available to potential donors. Information can be secured from the Vice President for Development (2ta) University, Long Beach Foundation, a 501 (c)(3), non-profit Corporation recognized by the Internal Revenue Service

Phi Beta Kappa - Phi Beta Kappa, founded at the College of William and Mary in 1776, is the oldest and most prestigious honor society for students of the liberal arts and sciences. A chapter was establis.
California State University, Long Beach in 1977.
Graduating seniors are elected to membership in Phi Beta Kappa on the basis of extraordinary scholarly performance at this University, after study of their records by faculty members who are themselves
members of Phi Beta Kappa. No action on the part of the student is necessary to initiate consideration. In reviewing candidates the Elections Committee of the chapter will look for evidence of broad liberal arts and cultural interests, scholarly excellence, and good
character. Certain minimum requirements must normally be met:
1. Residence at CSULB for at least four semesters ( 60 units) at the time of graduation.
A grade point average of 3.70 A at CSULB and in all college work
A maior, or the equivalent, in one of the liberal arts 3. A major,

At least 90 semester hours in liberal subjects, including:
. Reasonable breadth or work outside the major b. Knowledge of a foreign language at least
minimally appropriate to a liberal education. Thi
means satisfactory completion of at least one course at the second year college level (3 semesters) or three years
school or the equivalent. . Knowledge of mathematics at least minimally atisfactory completion of course work to the leve of one of the following: MATH 111, 112, 114, 115, 117, or the equivalent.
The Elections Committee may make minor exceptions to the specific requirements noted above.
Inquiries should be directed to the President of the University chapter of Phi Beta Kappa, Dr. Ro
Markman, c/o Department of Comparative Literature.
Two additional societies which may elect students from al
Two additional soci
academic areas are:
- Mortar Board - A national honor society for senior students who have achieved academic excellence and have made personal contributions to campus lif
- Phi Kappa Phi - A national honor society for men and women which eac - membership includes both student and faculty
Other societies may limit membership to particular academic areas. Among these organizations at California State University, Long Beach are the following:
- Beta Alpha Psi (Accounting) National scholastic fraternity to \(g\)
accounting.
- Beta Gamma Sigma (Business Administration) Nationa honorary business society to recognize superio academic performance
- Chi Epsilon (Civil Engineering) National honor sociel
- open to Civil Engineering majors with a 2.9 GPA .
- Chi Sigma lota (Counseling) International honor society open to graduate students with a GPA of 3.5,
- Eta Kappa Nu (Electrical Engineering) National honor society furthering area interests and promotin scholarship.
juniors 3.0.
Kappa Delta Pi (National honor society for teachers) encourages high professional, inting
standards. Recognizes outstanding contributions to education
- Omicron Nu (Home Economics) superior scholarship and promoting leadership and resear
- Phi Alpha (Social Work) Nationa honor sociel in crimpus. GPA requirement 3.0
- Phi Delta Gamma (Scholarship) National honor society for women graduate students. Fosters
academic achievement and professional preparation
- Phi Delta Kappa (Education) National organization which promotes service, research, and leadership in
education. Members include both students and faculty.
- Phi Epsilon Kappa (Physical Education) National society or recognition in sports and physical education. 3.0
- Phi Mu Alpha-Sinfonia (Music) National organization for students h music. Momotes music especially contemporary American music
- Phi Alpha Alpha (Public Administration) National society o encourage scholarship among students of public

Phi Sigma Tau (Philosophy) National honor society for students with a strong undergraduate concentration philosophy.
- Pi Kappa Lambda (Music) National honor society for scholastic achievement in music.
- Pi Lambda Theta (Education) National organization for undergraduate and graduate students. Purpose is to mor teaching.

PI Mu Epsilon (Mathematics) National honor society recognizing distinction in mathematics.
- Pi Sigma Alpha (Political Science) National honor sociey for political scientists. Open by invitation to
- Pi Tau Sigma (Mechanical Engineering) Nationa onorary rema encouraging and recognizing outstanding scholastic achievement of students in the
field.
- Sigma Alpha lota (Music) National organization for women in music. Aims to further the development o music in America through performance, study, and music in America through performance, study, and
participation in both campus and community projects.
- Sigma Theta Tau (Nursing) international honor society recognizing superior scholastic achievement leadership, and community service in nursing.
- Sigma Tau Delta (English) National honor society onferring distinction or high ach
- Sigma Xi (Science) National honor society
- Tau Beta Pi (Engineering) National honor society recognizing engineering students for academic elected from top 20 percent of the senior and top 12 percent of the junior class.


Academic Advising Center
The Academic Advising Center, located in Library East, Room 106, serves students who seek advice and
information concerning general education requirements, information concerning general education requirements,
electives, University rules and regulations, graduation requirements and academic probation. Students who have not declared a major are encouraged to look upon the Center as their academic home
Service is provided on a walk-in basis by well-trained upper division or graduate student peer advisors. The Thursday and from 9:00 a.m. to 4:00 p.m. Tuesday and Wednesday. The Center is closed on Fridays. Hours may vary during holiday and vacation periods.
Learning AssistanceCenter
Located in Library East-12, the Learning Assistance Center is an all-university support service that helps students increase their learning efficiency and effectiveness. The Center houses three academic support programs: 1) Learning Skills Services,
Learning Skills Services provides diagnostic and prescriptive materials for self-help in study management, lextbook study/reading, listening/notemaking, examination lechniques, writing improvement, research paper witing, memory, and concentration, madal to special collections of course support materials such as content audio-visual materials for self-learning and systematic eview. The Center also houses course materials supplied by or recommended by professors for student assignments or course reviews. Assistance is available to help students who want to prepare for such standardized tests as the international students who wish to and CBES their conversational command of the American language may use the Conversation Laboratory in the Center for help with enunciation, pronunciation, idioms, and diction.
Tutorial Services provide tutors for general education courses, for the Writing Proficiency Examination, and the Entry Level Mathematics test. Special tutoring is available for all Educational Opportunity Program (EOP), Student Action (SAA) students.
Supplemental Instruction (SI)
The University offers supplemental instruction for students who have experienced difficulty with the Writing Proficiency Examination or with certain courses in which language and earning skills are particularly necessary.
SI 050A-E. Preparation for the WPE (1) F,S
Non-baccalaureate-level course designed to prepare students for the Wirting Roficiency Examination WPE. S.-1 0 S50 is is open to students who have not
have falled the WPE. Students will be assigned to two hours a week in the
 SI 060. Supplemental Instruction (1) F,S
Non-baccalaureate credit course. This course is attached to specified designned to teach learning strategies and tecchniques which will assist reading compreenension, critical analysis of material, notetaking, essay-
 currse. (Lecture-Discussion.) Credin No Credit grading only. Repeatable win
different associated courses. Supplemental Instruction coordinates learning assistance activities for students in high risk courses with optional course tutorials, as well as study skills diagnosis and prescription to master course concepts and to perform For further information phone: \(985-5350\) or \(985-4192\), or visit the Center on the first floor, East Library.
Educational Opportunity Program (EOP)
The Educational Opportunity Program identifies potential candidates, guides them through the admissions and financial aid process, and provides academic and personal support. EOP provides orientation, academic and personal adisement, and study skills instuction to all students opportunity for success in the University.
All EOP participants are expected to enroll in EOP 100 during their first semester of enrollment.
EOP 100. EOP Orientation (2) F,S
An introduction and orientation to college life for students from backgrounds rraditionally underrepresented within higher education. A review of campus and community resources available to support students participating in the
Educational Opportunity Program. Instuction in various academic survival skills that are necessary for collegos succesess. Areas of feview include: time management, research methodology and term paper development
test-aking strategies, and decision-making. Traditional grading only.
Career Development Center
The Career Development Center facilitates employment processes for students, alumni and job recruiters and is a clearinghouse for information vital to career planning, internships, and job procurement.
Individualized counseling is available to those in the process of delineating career goals. This is especially educational and employment strategies. Various career days, workshops and speakers programs are all designed to encourage meaningtul career exploration. The Career Resources Room provides a wide selection of published materials relating to the world of work. Video tapes are also the
Cooperative Education (Co-Op)
Cooperative Education internships offer students paid work experience in business, industry, government and the experience is directly related to a student's academic major
or career goal. Students may alternate full-time work periods with full-time academic periods or they may work part-time while simultaneously attending the University. Bot ower and upper-division Co-op courses are available for up
06 units of elective academic credit ducational Participademic credit.
dhational Participation in Communities (EPIC) program provides volunteer internship opportunitites (EPIC) students who wish to participate in career-related field experiences that complement their classroom study. EPIC internships are avallable with organizations and agencies in the not-for-profit sector. Both lower and upper-division academic credit. Human Corps
Established in 1987, the Human Corps program provides students with the opportunity to become involved in local community service activities. Students may volunteer in non-profit agencies in order to combat social problems and improve the quality of community life. Typical areas include: health care, literacy, child care, services to the elderly, substance abuse, and programs for the disabled student organizations seeking community service projects.

\section*{Career Placement}

Experienced counselors assist students in developing effective job seeking skills through one-to-one counseling
and workshops in the areas and workshops in the areas of resume writing, interviewing
techniques and job search techniques. Counselors and provide assistance with other facets of the job search process including such topics as networking, accepting or rejecting a job offer, and negotiating a salary.
listinge Career Development Center receives over 3,000 job listings every year for positions in the areas of business, listustry, government, health and human services. Curren Resource Center Resource Center.
for graduating seniors and onradumpus Interview Program for graduating seniors and graduate students. Through this
program over 200 employers visit the campus program over 200 employers visit the campus each
semester to conduct interviews. The employment opportunities in this program are generally in the areas of accounting, banking, computer science, engineering, inance, government, general management training, insurance, retail management, sales and marketing. Vearious which offer an opportunity for stake place every employers on a face-to-face basis cortacts to meet Development Center for specific information on annual events such as Career Day, Accounting Recruiting Day, and ob Faire
The Career Development Center is located in Room 250 98 -4151 for tunt Services Administration Building. Call (310) Tor futher information
Teacher and school administration candidates receive assistance through the Educational Career Services Office information on the services offered.

\section*{Testing and Evaluation Services}

Information regarding the administration of admission from the office of Testing and Evaluation Services, SSA 21 (310) \(985-4006\). Test programs currently offered include the SAT and Achievement Tests, ACT, EPT/ELM, WPE, GRE, GMAT, NTE, and CBEST. Students are advised to refer to testing requirements described elsewhere in the
Bulletin, and in particular, the EPT, ELM and WPE programs. Additional placement or admission examinations may be offered to meet the needs of academic department's requirements. Registration Bulletins for the above mentioned exams as well as the MCAT and LSAT exams are available at the information rack immediately in front of the offic
Testing and Evaluation Services, in addition to administering the above mentioned exams, maintains a interpretation of University testing requirement Consultation services regarding the selection and use of lest instruments, test construction, and evaluation research design are also offered. Testing and Evaluation Services the Division of Student services and regram evaluations for

\section*{The University Counseling Center}

The University Counseling Center offers a strong array of services in direct support of helping students achieve a
satisfactory and meaningful academic experience Stati satisfactory and meaningtul academic experience. Staff
members of the Counseling Center are trained in applied psychology and student development services delivery at oth the M.A. and Ph.D levels. Staff members are skilled in assisting students to translate their individual persona ducational experience into optimal academic previous and collegiate life experience
Students are seen at the Center by an intake counselor. Counselors are assigned to students based on the type of problem expressed and/or identified in the initial review. lve sessions. The staff is as shor-term and lasts three to ypes of career and personal problems address complex more extensive counseling. Crisis intervention services are available on an immediate basis.
In addition to one-to-one counseling across all areas of personal development and problems in living, individual counseling is provided to students needing intensive career xploration and educational counseling (not formal ability, and personality-style psychological tests to aurest, the self-exploration process. An extensive group counseling program exists for specific kinds of counseling issues such as shyness or interpersonal skill development. The mini-workshops offered on campus acquaint students with our focus on entiveness and various ine skills such as operates an exceptionally well-equipped Center also program for stress reduction. The Center is especially dedicated to working with students from highly diverse backgrounds.

The University Counseling Center is open from 8:00 a.m.
The University Counseling Center is open from 8:00 a.m.
6:00 p.m. Monday through Thursday, and from 8:00 a.m. to 6:00 p.m. Monday through Thursday, and from \(8: 00 \mathrm{a} . \mathrm{m}\).
to 5:00 p.m. on Friday. The telephone number is \(985-4001\). University Student Health Service
The Student Health Service (310) 985-4771, located on State University Drive near the residence halls provides outpatient care for acute illness or injury. This basic medical service is provided for all enrolled students without charge. The Health Service is open from 8:00 a.m. to \(4: 00 \mathrm{p} . \mathrm{m}\). and Wednesday 10:00 to 6:00 p.m. (5:00 to 6:00 p.m. is reserved for those students attending evening classes). Medical emergencies arising on campus are directed to the Department of Public Safety - dial 911
The Student Health Service pharmacy provides prescriptions for a nominal fee and also offers certain over-the-counter medications without a physician's
prescription.
Prescriptions for long-term or costly medications must be filled at outside pharmacies.
Other medical services provided by the Student Health Service include heath counseling, anonymous HIV testing laboratory tests, \(x\)-rays, family planning, and measles and rubella clearance. Provision is made for outside referrals to medical specialties
Health education programs designed to promote good health practices, disease prevention, proper nuttition and
appropriate self-care of illnesses are provided on a regular basis. Discussion groups will be scheduled to discuss any health topics of concern to a group of students.
University medical services are not provided for major, chronic, complicated or severe illness or injury, except on an urgent acute basis. Associated Students, Inc. sponsors an individual health and accident and insurance policy, or annual basis, with cost to be borne by the student. The plan requires that students utilize the Student Health Service when feasible for minor illnesses and injuries. In addition the Associated Students, Inc. sponsors a fee for sevice dental plan. Information brochures and application forms tor both plans may be obtained irom the Associated
Students Business Office, University Student Union, Room २२०. For further information contact the A.S. Student Health Advocate (310) 985-8311.

\section*{Disabled Student Services}

Information regarding special facilities and services available to handicapped students may be obtained from David Sanfilippo, Director, Disabled Student Services, University Student Union, Rm. 206 (310) 985-540
The Disabled Student Services Office provides support services to both permanently and temporarily disabled Services (DSS) includes: the Adult Learning Disability Program and the High Tech Center for the Disabled. In DSS, accessibility assistance includes: elevator keys, visitor parking permits and, wherever possible, arrangements for accessible classroom locations. Academic support adapted equipment, requests for tests, some proctored alternative test locations, and referral to on-campus services.

Some of the services are: priority registration, registration assistance, counseling and advisement. The DSS works with the Department of Rehabilitation and can provide fee orisets for rehabilitating students. In the main ofice, (Student Union, 206, is a current set of
The Disabled Student Services provides referrals to the


High Tech Center for the Disabled and the Adult Learning Disability Program. Students with a learning disability or a suspected learning disability can make an appointment for screening and referral to tutoring and counseling
Students needing special parking due to medical or \(985-5401\) before calling the Parking Office.
Isabel Patterson Child Development Center
In January of 1975, the University and the Associated Center to provide quality child care services to the University and community.
The facility was made possible by the generous donation of Isabel Patterson, CSULB alumna. It was designed by Frank Sata, a recognized architect in the field of early childhood education.

The services provided enable a student parent to attend classes at the University. The children of University staff, faculty, administration and then community are offered student children.
Child Development Programs are available for children six months to \(21 / 2\) years in the Infant/Toddler Program; \(21 / 2\) to five years in the Pre-school Program; and Kindergarten through second grade in the Extended Day Program.
The environment of the Center allows children to move include reading, music, water and sand play, art, science cognitive games and dramatic play. Some of the program's goals are to help children be responsible and able to solve their problems, to be inner-directed, to be aware of alternatives and able to make choices, and to be free from
sex role and other stereotyping sex role and other stereotyping. The program includes a
family-style breakfast, lunch and afternoon snack. The Center employs professional early.
education staff members. The part time teaching staff is composed of CSULB students who are required to participate in the Center's comprehensive training program. The Center is located on campus at 5700 Atherton Avenue. For information call (310) \(985-5333\) between \(8: 00\) a.m. and 5:00 p.m

\section*{Women's Resource Center}

The mission of the Women's Resource Center is to contribute to the personal, educational and professiona women's library, offers women's support groups, and peer counseling. It provides referrals to community services scholarship information, and is a clearinghouse for current events of interest to women. The Center also offers a comfortable lounge where students can study, chat with
friends, or hold meetings. fiends, or hold meetings
In addition, The Women's Resource Center sponsors seminars, workshops and/or conferences range year. The more current theoretical women's issues to practical concerns of university women. The Center is open from \(9: 00 \mathrm{a} . \mathrm{m}\). to \(5: 00 \mathrm{p} . \mathrm{m}\). Monday through Thursday, and from Center services are to on Friday. The Women's Resource campus and community. The Center is located in LA3-105, For further information, please call (310) 985-5466/8575.

\section*{Student Life and Development}

The Student Life and Development (SLD) office provides an "open officice with directors to assist students with student activities, questions, concerns, emergencies,
referrals, and college/school-bise referrals, and college/school-based student services in each academic college/school. Meetings, debates, lectures, coffee hours, newsletters, seminars, and other
projects which encourage communication amang students and between faculty and students in academic departments and colleges/schools are promoted and coordinated by directors in the colleges/schools. College/School-based directors may be reached through SLD office for the location and telephone number Call the
director. SLD is located in the University Student Union Plaza Level and can be reached by calling (310) 985-4181. Students may seek assistance with leadership training programs, the Student Orientation, Advising, and
Registration (SOAR) progran Registration (SOAR) program, fraternities and sororities
and program advising and approval for organizations and clubs. Interpretation of campus regulations including those governing eligibility, posting solicitation, fundraising, food sales, University recognition use of facilities and grounds, and consumption of beer and wine are also available. Students who for emergency reasons must be absent from classes may call the office for information and to have their professors notified. The office policies and regulations, and brochures on publicity and scheduling group activities, as well as the student yearbook
SLD provdes annual registration, mail boxes and categories: Recognition and Honor Societies the following and Academic Organizations, Special Interest Groups, Political and Social Action Organizations, Service Clubs, Ethnic and Cultural Groups, Religious Organizations, Social Fraternities and Sororities, Coordinating Councils and epartmental Associations.

\section*{csulb Campus Organizations}

\section*{Special Interest Clubs}

Air Force ROTC, Alpha Chi Phi, Archers, Army ROTC Arnold Air Society, Badminton, Ayn Rand Society, Beach Coalition, Black Dolphin Workshop, Cinema Society, Circle K, Club Wilderness, College Students in Broadcasting, Crew Team, CSULB Akido, CSULB Democratic Club, CSULB Games Group, CSULB Winter Guard, Cycling Club, Club, Flying Samaritans, Forty-Niner Field Hockey Club Forty- Niner Rangers, Forty-Niner Ski Club, Forty-Niner Tournament Water Ski Club, French Club, Friendship International, Goldmine Yearbook, Gospel Choir, Gymnastics Club, International Association of Business Club, Korean Engineering Club, Kung Fu Club, The Law Society, Long Beach Table Tennis, Marketplace Club Model United Nations, Moorish Sports Club, Pacific Rim Club, Real Estate Society, Re-Entry Adult Learners (REAL), Residence Hall Association, Rugby Club, Sailing Association, Scuba Club, Semper Fidelis Society, Shotokan Klus Club, Ski Club, Soccera, Silver Wings Society, Sixty Societas Rhetoricas, Students for AIDS Facts and Education (SAFE), Students for Life Choices, Surf Club, Women's soccer Club, Women's Waterpolo, Zeta Epsilon

\section*{Political and Social Action Clubs}

Alliance for Survival, American Civil Liberties Union,
College Republicans, CSUIB College Republicans, CSULB Democratic Club, International Solidarity Committee, Model United Nations,
Students for Choice, Students for Peace and Justice World Constitution and Parliament, Young Americans for Freedom, Young Democrats.

Sororities
Alpha Kappa Alpha, Alpha and Omega, Alpha Omicron if, Alpha Phi, Delta Delta Delta, Delta Gamma, Delta Sigma Theta, Delta Zeta, Gamma Phi Beta, Sigma Gamma Rho, Sigma Kappa, Zeta Phi Beta

\section*{raternities}

Acacia, Alpha Epsilon Pi, Alpha Gamma Omega, Alpha hi Alpha, Delta Chi, Delta Sigma Chi, Delta Upsilon, Kappa Alpha Psi, Kappa Sigma, Omega Psi Phi, Phi Beta Sigma,
Phi Gamma Delta, Phi Kappa Tau, Pi Kappa Alpha, Sigma Alpha Epsilon, Sigma Chi, Sigma Phi Epsilon, Sigma Pi, Tau Kappa Epsilon, Theta Chi.


Cultural Clubs
African Repertory Ensemble, Armenian Students Association, Association of Lebanese Students of CSULB, Black Cultural Programming Committee, Black Performing Arts Ensemble, Black Student Union, Cambodian Student Asociation, Chinese Student Association, Chinese Student Club. Friendship International Association, Gay and Iesbian Student Union General Union of Palestine Students. Hawaii Club, Hong Kong Student Association, Indian Student Association, Indonesian Student Association, International tudent Association, Iranian Student Union, Japanese Student Association, Kappil-Filipino Fellowship, Korean International Student Association, Korean Student Associated Students, Muslim Students Association Organization of African Students, Pacific Islanders, Pakistani Student Association, Philipino American Coalition, ingapore Student Association, Thai Student Union, Turkish tudent Association, Vietnamese Fellowship Assistance, ietnamese Students Association

\section*{Religious Club}

Asian American Christian Fellowship, Baha'i Club, Baptist student Union, Beth Sar Shalom, Campus Advance, Campus Ambassadors, Campus Crusade for Christ, Chabad, Chinese Christian Fellowship, Christian Fellowship, Christian Students, Eckankar Campus Society, Episcopalians at CSULB , Friendship International, Front
Line College Fellowship, Hillel, International Fellowship-CSULB, Intervarsity Forty-Niner Christian Fellowship, KAIROS, KAPPIL Fillino Fellowship, KYRIE, Korean Christian Fellowship, Korean Intervarsity Christian Fellowship, Latter Day Saints Student Association, Lutheran Student Movement, Methodist Wesley Foundation,
Navigators, Network Christian Fellowship, Student Ministries, Newman Club, Studies in the Old \& New Testaments, University Bible Fellowship at CSULB, Victory Campus Fellowship, Vietnamese Fellowship Assistance, World Wide Students.
Academic and Professional Organizations
Black Scholars (Long Beach), Flying Samaritans, Student Alumni Scholars, The Organization of Pre-Professional Students.
Honor and Recognition Societie
Alpha Phi Omega, Golden Key National Honor Society, Kappa Deta PI (National Honorary, 3.25 Graduate GPA), Kappa ( 3.50 Graduate Student GPA), Phi Epsilon Kappa Phi Eta Sigma-Alpha Lambda Delta, Phi Kappa Phi, Pi Alpha Alpha (Government, 3.7 GPA), Sigma Alpha lota, Sigma Lambda Chi

\section*{Academic College/School Organizations}

College of Health and Human Services
Applied Arts and Sciences Student Council
Departmental Associations: California Association of Health, Physical Education, Recreation and Dance,
California Nursing Student's Assn., Criminal Justice Students Assn., Eta Sigma Gamma (Health Science), Graduate Nurses' Association, Graduate Nursing Student Assn., Health and Human Services Student Council, Health Science Student and Faculty Assn., Industrial Education Club, Omicron Nu (Economics), Physical Education Majors Club, Physical Therapy Student Assn., Recreation Society, Club, Students in Fashion

\section*{School of Business Administration}

Associated Business Students Organization Council
Departmental Associations: Accounting Society, AIESEC, Alpha Kappa Psi (Business Administration). American Marketing Association (AMA), Beta Aplha Psi (Accounting), Beta Gamma Sigma (Business Honorary), Black Business Financial Management Association (FMA). Hispanic Students Business Association, Management Information Systems Society, National Association of Black Accountants, Personnel Industrial Relations Association,

Quantitative Systems Student Association (QSSA), Society for Advancement of Management (SAM), The MBA Student Association.

\section*{Graduate School of Educatio}

Education Student Council
Departmental Associations: Alpha Chi-Pi Lambda Theta (Education), Assn. of Instructional Systems Technology, Bilingual Education Student Organization, California Teacher's Association, Educational Psychology Student
Assn., Education Student Council, Graduate Education Student Council, Reading Educators Student Assn., State of California Assn. of Teacher Educators.
College of Engineering
Associated Engineering Student Body (AESB)
Departmental Associations: American Indian Science and Engineering Society, American Institute of Chemical


Engineers, American Institute of Plant Engineers, American Society of Civil Engineers, American Society of Mechanical Engineers, American Society of Naval Engineers,
Associated Geneal Contractors, Association of Industrial
Technology Biomedical Technology, Biomedical Engineering Society, Chi Epsilon of America, Eta Kappa Nu Management Association International Society of Hybrid, Korean Engineering Club
Ind Microelectronics, Institute of Electrical and Electronics Engineers (IEEE), Mexican American Engineering Society, National Society for Black Engineers, Pi Tau Sigma (Mechanical Engineering), Society of Automotive Engineers, Society of Hispanic Professional Engineers, Society of
Women Engineers, Tau Beta Pi(upper division Engineering). College of the Arts

\section*{Fine Arts Student Counci}

Fine Arts Student Council
Departmental Associations: American Society of Interior Designers, Art Education in Our Univervisy, Dancers in Motion, Design Student Association, Metal Arts Guild, Music Educators National Conference, Music Student Association,

Music Therapy Student Association, Phi Mu Alpha Sia Fonia, State and Screen Make-up Artist Core, Students in College of Humanities
Coliege of Humanities
Humanities Student Council
Humanities Student Council
Departmental Associations: Associated Students of Comparative Literature, French/talian Student Assn. German, Russian, Classics Student Assn., German Society, Graduate Student Communication Assn., Linguistics Circle Math Club, Mathematics and Computer Science Studen Associated Engineering Student Body (AESB) Assn. (Philosophy), Public Relations Student Soceity of America Rhilosophy). Public Relations Student Soceity of America,
Radio/TV/Film Student Assn., Religious Studies Student Assn., Spanish and Portuguese Student Assn., Student English Assn., Student Philosophy Assn., Student Speech Communication Assn., University Scholars Program Studen Assn.
College of Natural Sciences
Natural Science Student Council
Departmental Associations: Anatomy and Physiology Student Assn., Black Students in Science Organizatog Chicanos for Community Medicine, Geology Student Assn Korean Science Student Assn., Latinos in Science, Microbiology, Society of Anatomy and Physiology Students Science Education, Society of Physics Students, Studen Graduate Center for Public Polloy
Graduate Center for Pubic Policy and Administration Graduate Center for Public Policy and Administration Sollege of Socil
Coliege of Social and Behavioral Sciences
Departmental Associations: American Indian Student Council, American Studies Student Assn., Anthropology Students Assn., Asian American Student Assn., Associated Students of Social Work, Black Law Society, Black Psychological Student Assn., Black Studies Student Assn.,
Economics Student Ass Economics Student Assn., Geography Students Assn.,
History Students Assn. Human History Students Assn., Human Development Student
Assn., Latinos in Social and Behavioral Sciences Phi Alpha Social Work), Phi Alpha Theta (History), Pi Sigma Alpha (Political Science), Political Science Student Assn., Psychology Student Assn., Sociology Students Assn., Student Alumni Scholars Assn., Women's Studies Student ssn.

\section*{Student Government}

Student government through the Associated Students is a unique opportunity for service to students by students.
Students interested in management of a large corporation and in taking part in the decision-making process of the University will also find student government rewarding. Every student becomes a member of the Associated Students upon registration. Through the Associated Students, Inc., a non-profit corporation in the State of student activity/interest commissions, a newspaper, student activity/interest commissions, a newspaper,
college/school councils and departmental associations, and various social, athletic, ethnic and cultural programs.

The corporate structure of the Associated Students, Inc. includes legislative, executive, and judicial branches for the
student government. Students are elected to approximately 28 positions by the student body each year to fill the executive and legislative branches. In addition, students are also elected to policy-formulating bodies of the University including the Sports, Athletics and Recreation Board, the Child Development Center Board of Directors, the Forty-Niner Shops Board of Directors, and the Academic activities has been a significant part of many students' University experience.
The executive branch of student government is
comprised of the A.S. President, A.S. Vice President, A.S. comprised of the A.S. President, A.S. Vice President, A.S. Treasurer and A.S. Administrator. The Associated Students President is the chief executive officer of the Associated
Students, Inc. and acts as the representative and host of Students, Inc. and acts as the representative and host of
the Associated Students, Inc. to the University and the general public. The President can initiate or veto Senate legislation and is responsible for executing Associated Students policies. The President is also responsible for making all A.S. executive appointments and has the power to create committees. The President is also an ex-officio
member of all A.S. executive bodies. member of all A.S. executive bodies.
The Associated Students Vice President chairs the Senate campus committees. The Vice President is responsible for assembling the agenda for the Senate meetings. The Vice President assists the President with his or her duties and assumes the President's duties should the A.S. President leave office or become incapacitated.
The Associated Students Treasurer is responsible for the Associated Students finances and enforcement of the A.S.
fiscal policy This officer prepares the Associated Students budget and chairs the A.S. Board of Control. The Treasurer approves all expenditures of A.S. monies and assists clubs and organizations with budget preparation.
The Associated Students Administrator is the chief by the A.S. President each year, the Administrator is the executive assistant to the President and is responsible for overseeing the A.S. Commissions, activities, and services. The Administrator also represents the Associated Students and the President on several campus committees.
The Associated Students Board of Control is the fiscal advisory body to the Senate and is chaired by the A.S. Treasurer. The Board handles personnel matters and
supervises the use and maintenance of the Associated Students buildings and equipment. All groups requesting Associated Students funding must go before the Board of Control for approval prior to appearing before the Senate. The Board of Control makes recommendations regarding expenditure allocations to the Senate, and the Senate has final approval in all A.S. Board of Control actions
government. It serves as the Board of Directors of the Associated Students by steering the corporation's finances and policies. The Senate creates and revises its laws, allocates funds for old and new programs, approves presidential appointments, fills vacancies in elected offices
between elections, and forms committees to study problems and proposals. The Senate also charters
sororities), which enables these groups to request
Associated Students funding for programs, use the Student Associated Students funding for programs, use the Student Union's facilities, plus enjoy the benefits of the Associated
Students' support and recognition. The Senate is comprised of 21 voting members, including the A.S. Vice President who serves as the Chair. There are two senators representing each of the eight colleges/schools at CSULB except for the School of Education, which is represented by one senator due to its relatively small size. Senators must be majoring in one of the departments within the
college/school they represent. In addition, there are five Senators-at-large seats also chosen by the general student body.
The Associated Students Judiciary interprets the Associated Students bylaws, codes, decisions, regulations, or any other A.S. document. When a dispute arises, the Judiciary may take disciplinary action, including suspension
or revocation of charter privileges against recognized or revocation of charter privileges against recognized
organizations on campus. The Judiciary also renders final decisions in election disputes. The decisions of the A.S. Judiciary are the final authority in Associated Students

matters. A chief justice and six associate justices and a chief justice are appointed yearly by the A.S. President. The A.S. President also appoints an Attorney General and a o develop legal skills and address any iniustice or wrongdoing in student government.
The Associated Students government offices are located on the Plaza level of the University Student Union in the Nest wing. For further information, please call (310) \(85-5241\) or write to: Associated Students Inc., 1212 Beiliflower Blva., Long

\section*{Aumni Association}

The CSULB Alumni Association provides an important link graduates. With alumni needs and intere than in 140,000 Association develops social, educational and recreational programs that bring alumni back to campus, encouraging ositive relationships and ongoing communication between ormer students and CSULB's faculty and staff.
All former students of at least one semester at CSULB are considered alumni and are invited to remain a part of the Graduates and credential recipients can join by simp completing an enrollment card and paying a one-time \(\$ 5.0\) fee; non-graduates, including employees and friends of Alumni may join as associate members for a yearly tee. Alumni volunteers assist on Alumni Associatio commencement hospitality centers, scholarship and war programs, the summer Concerts in the Grove series, and other events.
Alumni Association chapters allow former CSULB students with common interests to maintain friendship formed in college and to network with new acquaintances students and recent graduates planning to follow simi paths.
Members of the Alumni Association are entitled to benefit package that includes library privileges at all CSU institutions (there are some restrictions on compute usage), on-campus assistance at the Learning Assistance Cen a yearly extra charge, the Career Development Center membership, a hotel/motel discount credit union short-term and long-term major medical health insurance programs. Also available to members are the semi-annual Alumni Calendar of Special Events; the CSULB Review publication; University Student Union privileges; and discounts on some CSULB theatre performances, athletic events and local attractions.
former and current CSU B Alumni Association services fo Relations Office at (310) 985-5252

\section*{Educational Equity Services}

The Office of Educational Equity Services (EES) assists in the admission and retention of low income and underrepresented ethnic minority students who might no orior educational support. Programs currently under EES include the

Educational Opportunity Program, Summer Bridg Program, University Outreach and School Relations, and the federally-sponsored Student Support Services, Talen Search and Upward Bound programs.

\section*{Summer Bridge Program}

The Summer Bridge Program provides an intensive five week summer residential experience for entering University
students. The program provides English and mathematics instruction, tutoring, orientation and study skills workshops and cultural enrichment activities for eligible students.

\section*{Student Support Services Program}

The Student Support Services Program provide academic and personal counseling and tutorial assistance to low income and/or first generation college students Academic support is provided in the areas of Language Social Sciences. In addition, staff assist in the testing and orientation of incoming students and conduct a summer instructional program in basic academic skills.

\section*{es/Talent Search}

Educational Information Services/ Talent Search Program provides college advisement for low income youth residing in the Los Angeles County area. Professional and student community colleges to provide assistance high schools and choosing an appropriate post-secondary institution and in applying for admission and financial aid

\section*{Upward Bound Program}

The Upward Bound Program is a precollege preparatory program designed to assist low income and minority high-school students who demonstrate potential to succeed in college but suffer from inadequate secondary school preparation. Summer and weekend instructiona tutorial and counseling assistance given to The program also facilitates the admission of these students into college through advisement and orientation.
University Outreach and School Relations
The University Outreach and School Relations office provides information about the University and its admission policies and academic programs to educators, counselors, and community collegts. Outreach staff visit high schools prospective students and to distribute counselors and University programs and policies. The office offers student-guided tours of the campus by appointment; those interested should call (310) 985-5358.
The office develops and maintains effective publications and communications systems which respond to requests or information about the University from prospective students and other interested persons, and which facilitate nrolled students. enrolied students.
Iformation about the Educational Relations also provides ow- income students who may not meet regular admission equirements to the University. The staff supervises CSULB students who work in area high schools and community
colleges with high minority enrollments in order to
admission requirements.
Special emphasis is placed on providing academic nrichment activities to elementary and middle schoo students in an effort to increase the pool of Underrepresesented students eigible to matriculate to the fffie hosts specialized visits to the University for K-12 students, counselors and other special constituencies.
The office also provides adult re-entry counseling for admission purposes. Interested adults may call the office or an appointment.
Parking
Parking at CSULB is limited. Parking permits are required 24 hours a day, Monday through Friday, and the vehicle ode is enforced at all times. Please contact the Parking Housing

\section*{University Residence Halls}

The campus residence hall complex consists of 19 halls and accomodates 1,844 residents. This includes an International House complex accomodating 86 students. available throughout the halls. The room and board rate is approximately \(\$ 4,800\) for an individual student in a double room and includes 19 meals a week and local telephone service

Residence hall application forms are sent to all applicants applying to the university. Applications for the academic year are accepted after January 1 of the same year Additional information may be obtained from the Housing Office. The phone number is (310) 985-418
In order to obtain preference in hall placement, student to apply for housing even before being notified about admission to the university

\section*{Service}

Listing boards of available rentals is maintained at the Housing Office and is available 24 hours a day. Thes listings include rooms, furnished and unfurnishe parments and houses, and a limited number working for the room and board or room rent. It is suggested that prospective students visit Long Beach to make such living arrangements since information abou these listings cannot be mald

Fraternity and Sorority Housing
Most fraternities and sororities own or lease homes nea the campus and provide lodging and meals for their members and pledges. Students interested in affiliating with
a sorority or fraternity should contact either the Panhellenic Office (for sororities) or the Interfraternity Council (for fraternities), Office of Student Life and Development University Student Union.

\section*{Admission to the University}

Admissions Procedures and Policies
Requirements for admission to California State University ong Beach are in accordance with Title 5, Chapter 1 , Subchapter 3, of the Callomia code of Regulations. If you high school or community college counselor or the admissions office. Applications may be obtained from the admissions office at any of the campuses of The California State University or
mportance of Filling Complete, Accurate, and
Authentic Application for Admission Documents
The CSU advises prospective students that they must upply complete and accurate information on the pplication for admission, residence questionnaire, and financial aid forms. Further, applicants must submit athentic and oficial transcripts of all previous acade and authentic apolication documents may result in denial of admission, cancellation of academic credit, suspension, o expulsion (Section 41301, Article 1.1, Title 5, California ode of Regulations)
Undergraduate Application Procedures
Prospective students, applying for part-time or full-time programs of study, in day or evening classes, must file a complete application as described in the admission in the form of a check or money order payable to "The California State University" and may not be transferred o used to apply to another term. Applicants need file only at heir first choice campus. An alternate choice campus and major may be indicated on the application, but applicants California State University that they can attend. Generally, an alternate maior will be considered at the first choice campus before an application is redirected to an alternate choice campus. Applicants will be considered automatically at the alternate choice campus if the first choice campus alternate choice can
accommodate them

\section*{Readmission}

Students not in attendance the past semester mus reapply for admission. Transcripts of work completed he absence exceeds three years, all transcripts must be eplaced with official copies. Students who left under academic disqualification must submit an Academic Appeals Pettion, with their completed applications.
Impacted Programs
The esu designates programs as impacted when more applications are received in the first month of the fling period than can be accommodated. Some programs are
impacted at every campus where they are offered; others are impacted only at some campuses. You must meet supplementary admissions criteria applying to an mpacted program.
The CSU will announce before the opening of the fall filing period which programs are impacted and the
supplementary criteria campuses will use. That announcement will be published in the CSU School and College Review, distributed to high school and college counselors. Information about the supplementary criteria is also sent to program applicants.
You must file your application for admission to an mpacted program during the first month of the fling period o be considered in impacted programs at two or more campuses, you must file an application to each. Nonresident applicants are rarely admitted to impacted programs
upplementary Admission Criteria
Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may incluce ranking on the freshman igibility index, equired to submit scores for either the SAT or the ACT, you should take the test no later than December if applying for all admission
The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the CSU School and College Review and are oo an impacted program.
Unlike unaccommodated applicants to locally impacted programs who may be redirected to another campus in the same major, unaccommodated applicants to systemwide mpacted programs may not be redirected in the same najor but may choose an alternate major either at the first hoice campus or another campus.

Application Filing Periods
\begin{tabular}{|c|c|c|}
\hline Terms in 1992-1993 & Applications First Accepted & Student Notification Begins \\
\hline Fall 1992 Spring 1993 & November 2, 1991 August 1, 1992 & December 1991 September 1992 \\
\hline
\end{tabular}

Filing Period Duration
Each campus accepts applications until capacities are eached. Many campuses limit undergracuate admission in an enrollment category because of overall enrollment limits. applying all

\section*{Application Acknowledgment}

You may expect to receive an acknowledgment from you first choice campus within two to four weeks of filing th will also include a request that you submit the records necessary for the campus to evaluate your qualifications You may be assured of admission if the evaluation of you qualifications indicates that you meet admission oqurer to another campus
Preparation and Eligibilly

\section*{Undergraduate Admission Requirements - Freshmen} You will qualify for regular admission as a first-time
freshman if you freshman if you
. are a high school graduate,
2. have a qualifiable eligibility index (see section on Elyiny index), and
3. have completed with grades of " \(C\) ' or better each of the courses in the comprehensive pattern of college
preparatory subject requirements (see "Subje Requirements"). Courses must be completed prior to the first enrollment in the California State University

\section*{Eligibility Index}

The eligibility index is the combination of your high school
grade point average and your score on either the grade point average and your score on either the American Your grade point average is based on grades earned during your final three years of high school (excluding physical education and ROTC).
two years of high school can be accepted. Fach thit of \(A\) in an honors couse wil can be accepted. Each unit of \(A\) points; and C, 3 points.
You can calculate the index by multiplying your grade point average by 800 and adding your total score on the
SAT. Or, if you took the ACT, multiply your grade point average by 200 and add ten times the ACT composite score (add 2 points to ACT score if taken prior to October, 1989). If you are a California high school graduate (or a resident of California for tuition purposes), you need a minimum index of 2800 using the SAT or 694 using the
ACT; the Eligibility Index Table illustrates several ACT; the Eligibility Index Table illustrates severa
combinations of required test scores and averages. If you neither graduated from a California high s
are a resident of California for tuition purposes, you need a minimum index of 3402 (SAT) or 842 (ACT - add 2 points to ACT score if taken prior to October, 1989).
If your grade point average is 3.00 or above ( 3.61 for nonresidents), you are exempt from submitting test scores.
However, you are urged to take the SAT However, you are urged to take the SAT or ACT since all
campuses use test results for advising and placement campuses use test results for advising and placement
purposes. Below a 2.00 GPA does not qualify for regular admission
verifies that you have a qualifiable eligibility the university have completed have a qualifiable eligibility index and will preparatory subjects and, if applying to an impacted program, meet supplementary criteria


Graduates of secondary schools in foreig countries must be judged to have academi preparation and abilities equivalent to applicants eligible under this section
Subject Requirements
The California State University requires that first-time freshman applicants complete, with grades of "C' or better, a comprehensive pattern of college preparatory study totaling 15 units. A 'unit' is one year of study in high
school.
English - 4 years
Mathematics -3 years: algebra, geometry, and intermediate algebra
-1 year
Science - 1 year with laboratory: biology chemistry, physics, or other acceptable aboratory science
Foreign language -2 years in the same
language (subject to waiver for language (subject to waiver for applicants
demonstrating of equivalent competence). Visual and Performing Arts - 1 year: dance, drama/theater, or music
Electives - 3 years: selected from English advanced mathematics, social science history, laboratory science, foreign language visual and performing arts, and agriculture If you have completed at least 15 college shortage in one subject area by completing an extra unit in another subject area. This option is available from fall 1992 through summer quarter 1995. Although you will be granted egular admission under this option, you are strongly advised to complete all courses in the mathematics and English, so that you will be adequately prepared to begin your university studies. Please see your high school counselor for further information

\section*{oreign Language Waiver}

Foreign Language Subject Requirement
The foreign language subject requirement may be satisfied by applicants who demonstrate competence in a language other than English equivalent to or higher than
expected of students who complete two years expected of students who complete two years
of foreign language study. Consult with your school counselor or any CSU campus admission or relations with schools office for urther information.
Subject Requirement Substitution for
Students with Students with Disabilities
Disabled student applicants are strongly encouraged to complete college preparatory
course requirements if at all possible. If an applicant is judged unable to fulfill a specific course requirement because of his or her
isability, alternative college preparatory courses may be substituted for specific subject requirements. Students who are deaf and hearing impaired, are blind and visually impaired, or have learning disabilities, may in certain circumstances qualify for substitutions for the foreign anguage, laboratory science, and mathematics subject equirements. Substitutions may be authorized on an individual basis after review and recommendation by the applicant's academic advisor or guidance counselor in ervices program. Athough the distribution may be slightly different from the course pattern required of other students, students qualifying for substrutions will still be held for 15 units of college preparatory study. Students should be aware that course substitutions may limit later enrollment in
certain majors, particularly those involving mathematics. For crrther information and substitution forms, please call the Director of Disabled Student Services at 310-985-5401.

\section*{Honors Courses}

Grades, in up to eight semester courses designated as honors courses in approved subjects and taken in the last wo years of high school, receive addational points in grade point average calculations. Each unit of \(A\) in approved courses will receive a total of 5 points; B, 4 points; C, 3
points; D, 1 point; and none for \(F\) grades.

\section*{High School Students - Young Scholars Program}

Students still enrolled in high school will be considered for the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for given program and does not constitute the right to
rovisional Admission
California State University, Long Beach may provisionally admit first-time freshman applicants based on their and planned for the senior year. The campus will monito he senior year of study to ensure that those so admitted complete their senior year of studies satisfactorily, including he required college preparatory subjects, and graduate from high school.

\section*{Undergraduate Admission Requirements - Transfer} pplicants
You will qualify for admission as a transfer student if you have a grade point average of 2.0 (C) or better in al
transferable units attempted, are in good standing at the last college or university attended and meet any of the following standards:
1) You will meet the freshman admission requirements in effect for the term to which you are applying (see 'Freshman Requirements' section).
2) You were eligible as a freshman at the time of high
school graduation and have been in continuous attendance in an accredited college since high school graduation.
3) You were eligible as a freshman at the time of high school graduation except for the subject requirements have made up the missing subjects, and have been in
continuous attendance in a accredited college since high school graduation.
4) You have completed at least 56 transterable semester ( 84 quarter) units and have made up any missing subject requirements (see 'Making Up Missing College Preparatory Subjects' section). Nonresidents must have a 2.4 grade point average or better
Transferable courses are those designated for that purpose by the college or university offering the courses Requirements - Undergraduate transfer applicants who did not complete subject requirements while in high school may make up missing subjects in any of the following ways. One college course of at least three semester or four quarter units will be considered equivalent to one year of high school study.
) Consel appropriate courses with a "C" or better in alt school or high school summer sessions.
2) Complete appropriate college courses with a " \(C\) " or better.
3) Earn acceptable scores on specified examinations. ) II you have 56 or more semester ( 84 quarter) units, you may COMPLETE one of the following alternatives
a) 1987 or earlier high school graduates: complete the CSU general education requirements in communication in The English language (at least 9 semester units) and mathemach course;
b) 1988 or later high school graduates: complete a minimum of 30 semester ( 45 quarter) units, with a ' C ' or better in each course, chosen from courses in English, arts and humanities, social science, science, and mathematics of a level at least equivalent to courses that meet general education requirements. Each student must complete all english language (at least 9 semester units) and mathematics (usually 3 semester units) as part of the 30 -unit requirement.
Please consult with any CSU admission office for further information about alternative ways to satisfy the subject equirements

\section*{est Requirements}

Freshman and transfer applicants who have fewer than 56 semester or 84 quarter units of transferable college work on page 34), from either the Scholastic Aptitude Test (SAT) of the College Board or the American College Test Program ACT). If you are applying to an impacted program and are equired to submit test scores, you should take the test no later than early December if applying for fall admission. Test scores are also used for advising and placement ACT are available from school or college counselors or from a campus testing office. Or you may write to or call:
The College Board (SAT) American College Testing
Registration Unit, Box 592 Registration Unit, P.O. Box 1 Princeton, NJ \(08541 \quad\) lowa City, Iowa 52240 (609) 771-7588
(319) 337-1270

\section*{TOEFL Requiremen}

TOEFL Requirement - All undergraduate applicants, havaless of citizenship (excluding visa students), who for at least three years full time where English is the principal language of instruction must present a score of 500 or Some on the Test of English as a Foreign Language.
Systemwide Tests Required of Most New Students The CSU requires new students to be tested in English and mathematics after they are admitted. These are not prepared for colls but a way to determine whil hel students how to strengthen your preparation. You might be exempted from one or both of the tests if you have scored well on other specified tests or completed appropriate courses.

\section*{English Placement Test (EPT)}

English Placement Test (EPT) - The CSU English ndergraduates* prior to placement in non-exemp University English coursework. Exemptions from the test are given only to those who present proof of one of the
ollowing:
- a score of 3, 4, or 5 on either the Language and examination of the Coll Program:-
- a score on the CSU English Equivalency Examination that qualifies a student for exemption from the English Placement Test;
- a score of 470 or above on the Verbal section of the College Board Scholastic Aptitude Test (SAT-Verbal);
- a score of 22 or above on the ACT English Usage Test (Iaken prior to October 1989)
- a score of 25 or above on the enhanced ACT English
Test (taken October 1989 or later): lat (lakn Ociober 198 or later).
- a score of 600 or above on the College Board
- for transfer students, complotion
- for transfer students, completion and transfer to the composition of four quarter or three course in English a grade of ' \(C\) ' or better.
Information bulletins and registration materials for the EPT will be malled to all students subject to the requirements. The materials may also be obtained from the Admissions Undergarauates adminting and Evith 56 or more trantion Services.
who are subuject toa a campusth catalog or or bultetinn earlier than \(19886--77\) are not
required to complete the EPT.

\section*{Entry Level Mathematics (ELM) Test}

All new undergraduate students must satisfy the Entry course that satisfies the tequisite before enrolling in a requirement of the General Education-Breadth mematics Exemptions from the test are given only to those students. who can present proof of one of the following:
- a score of 3 or above on the College Board Advanced lacement mathematics examination ( AB or BC )
- a score of 560 or above on the mathematics section of
the Scholastic Aptitude Test (SAT-MMath): the Scholastic Aptitude Test (SAT-Math);
- a score of 27 or above on the American College Test
(ACT) Mathematics Test (taken prior to October 1989);
- a score of 28 or above on the enhanced AC
Mathematics Test (taken October 1989 or later);
- a score of 560 or above on the College Boar
Mathematics Achievement Test, Level 1 or Level 2 .
- for transfer students, completion and transfer to the ESU of a college course that satisfies the General ducation-Breadth Requirement in Quantitative grade of ' 'C' or better
Failure to take either the ELM or EPT, as required, during the first semester after admission will result in a loss o future registration privileges and may lead to administrative probation and possible disqualification from future and CSU Executive Order 393) fitl 5, Administrative Code and CSU Executive Order 393)
Ind ELM will be mailed registration materials for the EPT and ELM will be mailed to all students subject to the office of admissions and records or the campus test office. Graduation Requirement in Writing Proficiency
All students must demonstrate competency in witing skills as a requirement for graduation. This is done by passing the Writing Proficiency Examination (WPE) Information on this graduation requirement may be must take the Writing Proficiency Examination (WPE) by the end of the semester in which 75 units are earned, and must do so prior to filing their request to graduate (the "grad

\section*{Graduate and Postbaccalaureate Application}

All graduate and postbaccalaureate applicants (i.e. master's degree applicants, those seeking credentials, and professional growth) must file a complete application as described in the admission booklet. Applicants who ompleted undergraduate degree requirements and raduated the preceding term are also required to and submit an application and the \(\$ 55\) nonrefundable application fee. Since applicants for postbaccalaureate programs may be limited to the choice aternate campuses or later changes of campus choice will e minimal. To be assured of initial consideration by more han one campus, it will be necessary to submit separate appications (including fees) to each. Applications may be blaned from the Graduate Studies Otfice of any California indergraduate applications.

\section*{Graduate and Postbaccalaureate Admission}
equirements
Graduate and postbaccalaureate applications may apply for a degree objective, a credential or certificate objective,
or may have no program objective. Depending on the bjective, the CSU will consider an application for admission as follows:
- General Requirements - The general requirements for admission to graduate and postbaccalaureate studies as well as Title 5 chapter 1 , subchapter 3 of the California Code of Regulations. Specifically, a student shall: (1) have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accreatited by a regional accredivent academic preparation as determined by appropriate campus authorities; (2) be in good academic standing at the last college or university attended; (3) have in the last 60 semester ( 90 quarter) units attempted; and (4) satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, ncluding qualifying examinations, as appropriate circumstances, a campus may make exceptions to these criteria.
If you meet the general requirements for graduate and ostbaccalaureate studies, you will be considered for admission in one of the four following categories
for professional or personal growth, you must be admitted as a postbaccalaureate unclassified student. By meeting the general requirements, you are eligible or admission as a postbaccalaureate unclassified student. Some departments may restrict enrollment of pressure. Admission in this status does not constitute admission to, or assurance of consideration for admission to any graduate degree or credential program; or

Postbaccalaureate Classified - If you wish to enroll in a位sty additional professional personal scholastio and other standards, including qualifying examinations, prescribed by the campus; or
Graduate - Conditionally Classified standing to enrol in a graduate degree curriculum if in the opinion of appropriate campus authority you can remedy any

Graduate Classified - To pursue a graduate degree qualifying examinations, perscribed by the campus.

\section*{TOEFL Requirement}

All graduate and postbaccalaureate applicants, egardless of citizenship, (excluding visa students), whose preparatory education was principally in a language other han English must demonstrate competence in English.
Those who do not possess a bachelor's degree from a Those who do not possess a bachelors degree from a
language of instruction must receive a minimum score of 550 on the Test of English as a Foreign Language (TOEFL) Some campuses require a higher score.
Auditors
Persons who have not been accepted by the University for the semester they wish to attend may reques permission to audit courses only after the close registration. Applicants must present to the Registration Once written authorization from the instructor of the cours issue a class admission card upon payment of regular fees nce enrolled the student is restricted to auditor status and may not apply for creait at any time for work completed during the semester restricted to audit.
Other students who have been accepted by the University to register for credit may, in addition, audit courses. See the regulation under "Grades and Administrative Symbols." At the end of the semester the instructor will report audit on
the grade sheet to the Records Office. However, such students may, in a later session, enroll in the course audited previously and complete it for credit. Deadline to enroll to audit is the same as to register.
Courses successfully audited are listed on the student's academic record but carry no credit or grade points.

\section*{Adult Students}

As an alternative to regular admission criteria, an aplicant who is twenty-five years of age or older may be onsidered for admission as an adult student if he or she eets the following conditions:
equivalence through either the Tests of General Educational Development or the California High School Proficiency Examination)
2. Has not been enrolled in college as a full-time student or more than one term during the past five years.
3. If there has been any college attendance in the last five ears, has earned a ' C ' average or better
Consideration will be based upon a judgment as to whether the applicant is as likely to succeed as a regularly
admitted freshman or transfer student and will include an assessment of basic skills in the English language and mathematical computation.
Senior Citizen Education Program
California State University Long Beach, is pleased to ontinue the Senior Citizen Education Program on campus. his program enables eligible California residents who are 60 years of age or older to enroll as regular students at a cost of \(\$ 3.00\) per semester. The program, which was individuals are attending courses in a variety of subject areas and class levels from freshman through graduate tanding.
Note: Regular admission standards apply, and requests 10 waive the application filing fee must accompany the application it the applicant seeks this waiver. Courses are asis. Due to high enrollments many courses may not be open for participation by Senior Citizens.

Additional information on the Senior Citizen Education Office, SSA-198 or by calling (310) \(985-5484\).

\section*{Returning Students}

Returning students must reapply to the university under the same conditions and deadlines as all other applicants. International (Foreign) Student Admission
Requirements
The CSU must assess the academic preparation of foreign students. For this purpose, "oreign students nclude those who hold U.S. visas as students, exchang Applications and questions should be classification Center for International Students at CSULB
The CSU uses separate requirements and application filing dates in the admission of foreign students. Verification of English proficiency (see the section on TOEFL Requirement for undergraduate applicants), financia considerations for admission. Academic records and supporting documents from foreign institutions must be o file by the deadine dates noted in the Internationa Application. If academic records are not in English, the must be accompanied by certified English translations. There is little likelihood of nonresident replicants indifionia international students, being admitted ppicants, including majors or to those with limited openings
Special application forms are required of foreign studen applicants. Forms and directions for their use may be obtained from the Center for International Education. A medical certificate of health, and evidence of financia resources adequate to provide for all expenses
(approximately \(\$ 750\) United States currency per month) during the period that they expect to be registered month student in the University are required
Among citizens of countries other than the U.S. who do not already hold status as Permanent Resident Aliens (Form \(1-551\) ), the University will admit and enroll only those applicants who, through their admission to this University. Naturalization Service to the U.S. by the Immigration and in valid nonimmigrant status in the US or will achieve a continue such status. Enrollment in courses through Extended Education does not constitute admission to the University. For purposes of maintaining valid nonimmigran student status (F or J visa) under immigration regulations enrollment in courses through Extended Education will be approved in advance of registration by the Director when or International Education, International Admissions
All foreign students for whom English is a second anguage are required upon arrival to take the Examination English as a Second Language (EESL) and enroll in any hecessary class in English as a second language. In some educed course loads in their maior feld uired to take proficiency can be demonstrated in the English classes This requirement cannot be postponed.

Admission of foreign graduate students will involve consultation with the graduate advisor from the departmen or coliege/school to which the student is applying for study admitted, dependent upon the preparation of the studen as assessed by the Director for International Education International Admissions, and the graduate advisor of the appropriate college/school or department. The graduate advisor of the appropriate college/school or department in Director of the American Language Program will decide the English standard to be applied to foreign students applying to that college/school
Hardship Petitions
The campus has established procedures fo consideration of qualified applicants who would be faced with extreme hardship if not admitted. Petitioners should write the Admissions Office regarding specific policies Concurrent Enrollment
All students wishing to enroll concurrently at CSULB and one of the other 19 California State University campuses Office and Records. Deadlines are the same as application fling deadlines. Concurrent enrollment within The California Sate University system is limited to students who have CSULB with a 2.0 grade one semester and 12 units at ees at CSULB for 12 nits or average and must have paid be collected after the last day to add classes
Upper division students wishing to have concurrent enroliment at CSULB and another institution outside of The California State University system must request permission rom the Registration Office
No graduate student may register concurrently at this and any other collegiate institution without advance permission. CSULB and other institutions if recommended by the department graduate advisor and approved by the Dean of he appropriate college/school. Forms for concurrent enrollment may be obtained from the college/school office. When such permission is granted, the academic load at Other Applicants

\section*{ther Applicants}

Applicants not admissible at this time under any of the institution, such as a community college to prepare for dimissibility at a future date. Open University Enrollmen
Enrollment in regular courses through the CSULB University Extension Services Office is considered adjunct nroiment. Units received through adjunct enrollment are education course work applicable to the baccalaureate ecane course work applicable to the baccalaureate egree; this is explained in greater detail in the section on are available in the University Extension Services Office Students may not be enrolled concurrently through adjunct and the regular University
isitors
The University restricts attendance in class sessions to hose who have been formaly registered in the course and who maintain good standing as students. Please see Regulations.

\section*{Regulations \\ ummer Session Students}

Students who do not intend to become candidates for egrees or credentials at the University need not file an application for admission or transcripts of record to attend summer session. Registration for credit in the summer session is limited to graduates of accredited high schools and to persons of sufficient maturity to profit by enrollment credit may register as auditors with the approval of the instructor and payment of fees. Registration in the summer session does not insure the privilege of enrolling in the fall semester. Students entering the University during the summer session who wish to re-enroll in the fall semester must file an application and the necessary official transcripts periods and meet admission criteria. To apply for admission o summer session courses, students should contact the Summer Session Office at \(985-5561\) during the spring emester

\section*{Registration Procedure}

When admission and re-admission requirements have been satisfied, the student is ready to register for classes at the University. Students who have been accepted for of Classes in the University Bookstore before registration. Registration dates, time and detailed instructions are included in the Schedule of Classes
Students are not permitted to attend any class for which hey have not officialy registered. The deadiline to register is up to the end of the fourth week of classes.
Note: Admission and readmission deadlines are much arlier.

\section*{Student Orientation, Advising, and Registration
(S.O.A.R.)}

If you are an incoming freshman or a transfer student, you are eligible to participate in the Student Orientation, Advising, and Registration (S.O.A.R.) program. S.O.A.R. will assist you in planning your course schedule and in egistering for your classes. An invitation to S.O.A.R. will be mailed to you. There is a separate fee to participate which University catalog, and other materials.

\section*{Adding Classes}

Students may add classes during the first four weeks of the semester, provided that space is available. During the third and fourth weeks of the semester the written permission of the instructor is required to add a class. No request to add classes will be considered after the fourth week uniess there is a technical error or an enirolment exception. (Deadline dates to add and drop classes

\section*{Advanced Placemen}

California State University, Long Beach grants credit toward its undergraduate degrees for successful Program of the College Board. Students who present scores of three or better will be granted up to six semester units (nine quarter units) of college credit.

\section*{Credit by Examinatio}

The California State University grants credit to those students who pass examinations that have been approved for credit systemwide. These include the Advanced Placement Examinations, CSU English
Examination and some CLEP examinations.
xamination and so
Students may challenge courses by taking examinations developed at the campus. Credit shall be awarded to stablish Credit By Examination forsty. The Petition to in the department offering the course and in the Registration Office. Approval the course and in the the examination is required prior to registering for the course. The examination must be conducted within the first three weeks of classes. If a student does not take the examination at the time offered or does not pass the examination, he or she may either continue in the course as a regular student or withdraw officially from the course, following the procedures for withdrawal pertaining to all
courses. (See the current Schedule of Classes.) For a courses. (See the current Schedule of Classes.) For a
student passing the examination, a grade of CR will be recorded at the end of the semester. Please refer also to Unit Credit by Examination in the General Regulations section of this catalog.

\section*{Credit for Noncollegiate Instructio}

The California State University grants undergraduate degree credit for successful completion of noncollegiate istruction, either military or civilian, appropriate to the baccalaureate, that has been recommended by the merican Council on Education. The number of units lowed are those recommended in the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training rograms

\section*{Health Screening}

All new and readmitted students, born after January 1 1957, will be notified of the requirement to present proof of measles and rubella immunizations. This is not an by the beginning of their second term of enrollment in CSU. Proof of measles and rubella immunizations shall also be equired for certain groups of enrolied students who have ncreased exposure to these diseases

Average Annual Cost of Education and Sources o Equivalent Student
The 20 campuses and the Chancellor's Office of The California State University are financed primarily through state appropriation to the CSU system for 1991/92 including capital outlay and employee compensation increases, is \(\$ 1,788,282,238\). However, the total cost of education for the CSU system is \(\$ 2,128,676,028\) provides support for a projected 280,220 full-time equivalent (FTE) \({ }^{\text {a }}\) students. The total cost of education in the CSU system is defined payments made to the students in the form of financial aid, and all fully reimbursed programs contained in state appropriations, but excluding capital outlay appropriations The average cost of education is determined by dividing the total cost of education by the total FTES. This average cost (the state appropriation, excluding capital outlay). Student Fee Support, and Support from Other Sources (including Federal Funds).
Thus, excluding costs which relate to capital outlay (i.e. building amortization), the average cost of education per FTE student is \(\$ 7,596\). Of this amount, the average student ee support per F is amount paid by nonresident students.

\section*{Student Fees}

\section*{Procedure for the Establishment or Abolishment of} tudent Body Fe
The law governing The California State University provides hat a student body fee may be established by student eferendum with the approval of \(2 / 3\) of those students oting. The student Body Fee was established at CSULB y student referendum on Dimila \(1 / 3\), of students lee can on a referendum called for by a petition signed by \(10 \%\) of the regularly enrolled students (Education Code, Section 89300.)
The level of the fee is set by the Chancellor. An increase in the student body fee may be approved by the Chancellor only following a referendum on the lee increase approved by a majority of students voting. Sturent body sees suld care enters, and special student support programs.
State University Fee
The State University Fee, established by the Board of ervices:

1991-1992 CSU SUPPORT BUDGET
SOURCE OF FUNDS AND AVERAGE COSTS FOR 1991-1992 CSU BUDGET
Projected Enrollment: Systemwide 280,२20 FTES \({ }^{\text {a }}\)
\(\left.\begin{array}{lrrr} & & \begin{array}{c}\text { Average } \\ \text { Cost Per }\end{array} \\ \text { Atudent (FTE) }\end{array}\right) ~\) Percentage

For budgetary purposes, a tull-time equivalent (FTE translates total head count into total act
Some students enroll for more than 15 units; some students enroll for fewer than 15 units.
The total cost of education does not include the amount related to lotery and the capital investment of the CSU. The estimated replacement col
of al the system's permanent tacilities and equipment on the 20 campuses \(i\) in
This figure dcoes not include the captal outlay appropriation of \(\$ 141,033,000\).
This figure dooes not include the captal outlay appropiation of \(\$ 141,033,000\).
than \(\$ 1,376\) depending on whether they are part-time, fulltime, resident or nonresident students.

\section*{Counseling}

Counseling assists students in personal growth, value formation, and the resolution of personal problems which, especialy in the period of early adulthood, may impede the
Experiential Learning Center
The Experiential Learning Center assists students in gaining a deeper understanding of the relationship between heory and practical application through on-the-iob experience with professionals in the field. The Experiential Learning Center develops, certifies and maintains paid and volunteer internships in community organizations and

\section*{亚manies.}

\section*{Learning Assistance Center}

The Learning Assistance Center provides drop-in and eferral service and tutorial assistance to students who equire assistance in learning skills regarding any .

\section*{College/School-Based Programs}

The College/School-Based Student Services exist in each of the academic colleges/schools to provide a sense of community. They identify and produce programs which bring together students, faculty members and alumni by developing seminars, presentations, social events and all Deans in each College/School also serve as a student services liaison.

\section*{Disabled Student Services}

The Disabled Student Services provide and develop a support service to equalize educational opportunities tor students with disabilities and to maximize their educationa independence. The program offers a whole host of speciaized services to meet the ongoing needs of studen
with varied disabilities. Testing
Testing
The Testing and Evaluation Services administers interprets and, when necessary, develops tests used by student support services. It also administers academic placement and advanced placement tests and conducts student profile surveys used in assessing the need for speente student support progran

\section*{Career Development Cente}
placement are the cooperative education/internship and this Center. Career planning serv service offered through vocational and career opportunities related the student on field of study. The cooperative education/internship program heips students acquire work experience related to their field of study. The placement service assists students in preparing resumes, improving interviewing techniques, and in securing employment both part-time while students
and full-time employment following graduation.

\section*{Social/Cultural Development}

The Socia/Cultural Development Program provides both opportunities and direction for students in developing organizational skills, planning and implementing programs, developing and administering program budgets and in Health Services
The Student Health Service aids students to maintain physical and mental heath to avoid health-related problems which prevent active participation in educational programs Financial Ald Administration
Although funds for grants and loans are provided by Federal and State governments and through private benefactors, the administrative staff required to assis students in securing needed financial support is funded through State University Fee reimbursements.

\section*{Housing Administration}

Not all campuses offer on campus housing for students Each campus, however, provides services to all students in and at a reasonable cost. A bulletin board cost.
Housing Office. These listings ings is maintained at the board, rentals to share, furnished and unfurnished apartments and houses, and a limited number o work-opportunity listings for students who are interested in suggested that prospective students visit Long Beach to make such living arrangements since information about these listings cannot be mailed. Information about summe housing is available in May.

\section*{Schedule of Fees - 1992-1993}

Legal residents of California are not charged tuition. The following reflects applicable fees and nonresident tuition fo the semester system in which CSULB operates. (Fees are subject to change without advance notice. The following ees represent Fall 1991 and Spring 1992 semesters and subject to change.

\section*{Application}

Application Fee (nonrefundable), payable by check or money order at time application is made: \(\$ 55.00\) State University Fee
\[
\begin{array}{ll}
\begin{array}{ll}
\text { Units } & \text { Semester } \\
0.1 \text { to } 6.0 & \$ 270.00 \\
6.1 \text { or more } & \$ 468.00 \\
\text { Other Mandatory Fees (per semester) }
\end{array}
\end{array}
\]
acilities Fee
Atructionally Related Activities Fee
Associate Students Inc. Fee
University Student Union Fee
Student ID Card Fee
Student ID Card Fee
Total Resident Fees Per Semester
0.1 to 6.0 units
Total Resident Fe

\section*{Nonresident Students (U.S. and Foreign)}

Nonresident Tuition (in addition to other fees charged all students. The following tuition represents Fall 1991 and Soring 1992 semesters and is subject to change.) emester Charge Per Unit
The total fee paid per term is determined by the total fifteen.
No fees of any kind shall be required of or collected
No fees of any kind shall be required of or collected
from those individuals who qualify for such exemption under the provisions of the Alan Pattee Scholarship

\section*{Act.}

\section*{ptional Fees (per semester)}

The following represents rates for the Fall 1991 and pring 1992 semesters and is subject to change. (per semester)
\(\begin{array}{ll}\text { (per semester) } & \$ 13.50 \\ \text { Automobile Parking (per semester) } & \$ 54.00\end{array}\)
Athletic All-Event Pass \(\$ 40.00\)
Replacement Parking Permit Current Price
Other Fees and Charges (Non-Refundable)

\section*{Late Registration}
\(\$ 25.00\)
Application and Reapplication Fee \(\$ 55.00\)
Missed Deadline Fee \(\$ 10.00\)
Bad Check Charge (Credit Cards
not accepted
(If Bad Check was for payment of registration
fees, the Late Registration Fee may also apply)
Complete transcript of record
Replacement of Student ID Card
Reminder: Fees are Subject to Change Without Reminder: Foes
Full Payment of Registration and Activity Fees must be made at time of registration

\section*{Auditors}

Students enrolled as auditors, not for credit, are exemp rom payment of the application fee, but must pay fee Refund of Fees

\section*{Refund of Fe}

Details concerning fees which may be refunded, the circumstances under which fees may be refunded, and the may be obtained by consulting Section 41803 (parking fees), 41913 (nonresident tuition), 42019 (housing charges) and 41802 (all other fees) of Title 5, California Code of Regulations. In all cases it is important to act quickly in applying for a refund. Information concerning any aspect o Office, SSA 170A, (310) 985-1673

\section*{State University Fees}

If a student completely withdraws from the University within 14 days following the start of instruction, this fee wil automatically be refunded less a \(\$ 5.00\) charge and less any other money due the University. If reduction of the
category within the first 14 days from the start of instruction the difference will be refunded to the student, less
If a student is unable to continue enrollment due to a University regulation, complete disability or because of compulsory military service, the entire fee may be refunded. Currently, the completed request for Medical Withdrawal the 8 th week of instruction for a refund credit to be considered.
Nonresident (U.S., Out-of-State, and Foreign) Tuitio If a nonresident student officially withdraws from the University, drops in unit load or is reclassified a resident, tuition is automatically refunded, less any other money due the University, in the following amount effective the date the withdrawal occured
Withdrawal Date
Percent
(1) Before or during the first week
of the semester
2) During the second week of the semester
D) During the third week of the semester
(5) During the fifth week of the semester
6) During the sixth week of the semester
7) Seventh week through the end of the

100\%
semester

\section*{Parking Fee}

Partial refund of the parking fee is made according to the ollowing schedule if a written application for refund is submitted to the Accounts Receivable Office and all relevant parking documents issued by the Universid, If any of these are affixed to the vehicle, their removal by a campus security officer or under the officer's direction shall constitute appropriate return. Following is the schedule for efunds which will be paid
\begin{tabular}{llr}
\begin{tabular}{l} 
Period \\
Refund
\end{tabular} & \begin{tabular}{l} 
Percent \\
Refunded
\end{tabular} & \begin{tabular}{r} 
Amoun \\
Refunde
\end{tabular} \\
\hline \(1-30\) days & \(75 \%\) & \(\$ 40.50\) \\
\(31-60\) days & \(50 \%\) & \(\$ 27.00\) \\
\(61-90\) days & \(25 \%\) & \(\$ 13.50\) \\
\(91-\) end of sem. & None & None
\end{tabular}

Fees charged for self-propelled vehicles of less than four wheels which are required to be licensed by the State Department of Motor Vehicles shall be applied at \(25 \%\) o the refunds above rounded to the nearest dollar, excep There shall be no refund for: (1) coin operated parking meters, (2) daily permits for coin operated parking gates (3) special events, and (4) fees paid by monthly payrol deductions.

Student Body Fees, Instructionally Related Activities
Fees, and University Student Union Fees
The Student Body fee, Instructionally Rea
fee, and the University Student Union fee are Activities refunded if a student officially withdraws from the University within 14 days after the start of instruction. After that date, no portion of these fees is refundable. Refund credits are posted to the student's account. Refund balances afte paymen
check.
There is no refund of the Student Body fee, Instructionally Related Activities fee or the University Student Union fee because of a reduction in unit load from 6.1 units or more, o 6.0 units or less

\section*{Determination of Residence for Nonresident Tuition
Purposes}
urposes
The campus Admissions Office determines the residency status of all new and returning students for nonresident Adition purposes. Responses to the Application for the student are used ins, other evidence furnished by student who fails to submit adequate information. A establish a right to classification as a California resident will be classified as a nonresident
The following statement of the rules regarding residency determination for nonresident tuition purposes is not a
complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing esidence determination for tuition purposes by The California State University is found in Education Code Sections \(68000-68090, \quad 68121, \quad 68123, \quad 68124\),
89705-89707.5, and 90408 and in Title 5 of the California 89705-89707.5, and 90408 and in Titte 5 of the California statutes and regulations is available for inspection at the campus Admissions Office.
Legal residence may be established by an adult who is hyysically present in the state and who, at the same time, intends to make California his or her permanent home Steps must be taken at least one year prior to residence permanent home with concurrent relinquishment of the prior legal residence. The steps necessary to show California residency intent will vary from case to case. Included among the steps may be registering to vote and voting in elections in California; filing resident California state income tax forms on total income; ownership of residential property or continuous occupancy or renting of an apartment on
lease basis where one's permanent belongings are maintaining active resident memberships in California professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks: maintaining permanent military address and home of record in California if one is in the military service.
purposes only who is within the state for educational purposes only does not gain the status of reside
regardless of the length of the student's stay in California. In general, the unmarried minor (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of
bode. The residence of a minor cannot be changed by the mor or the minor's guardian, so long as the minor's arents are living
A married person may establish his or her residence An
An alien may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. An unmarried minor alien derives his or her residence from the parent with whom the minor maintains or last maintained his or her place of abode.
Nonresident students seeking reclassification are required boncerning financial independence.
The general rule is that a student must have been a
California resident for at least one year immediately California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A and is the date from which residence is determined for that term. The residence determination dates are: Fall September 20
Questions regarding residence determination should be directed to the campus Admissions Office which can give you the residence determination date for the term for which you are registering.
There are exceptions from nonresident tuition including: residentsons below the age of 19 whose parents were student, who California but who left the state while the reaches age 18 , the exception a minor. When the minor enable the student to qualify as a resident student
(2) Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time:
(3) Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year;
military service stationed in california of persons in active determination date. The exception, once attained, is no affected by retirement or transfer of the military person outside the state;
(5) Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education.
(6) Dependent children of a California resident who has been a Cairornia resident for the most recent year. This
exception continues until the student has resided in the exception continues until the student has resided in the
state the minimum time necessary to become a resident, so long as continuous residence is maintained at an institution. (7) Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs including, but not limited to, the Sherman Indian High

School. The exception continues so long as continuous attendance is maintained by the student at an all. (8) Certain credentialed, full-time school districts
and spous State University employees and their children and spouses; State employees assigned to work outside applies only for the minimum time required for the student o obtain Callfornia residence and maintain that residence or one year;
(10) Certain exchange students;
(11) Children of deceased public law enforcement or fire who were killed in the course of law enforcement or fire suppression duties.
Any student, following a final campus decision on his or her residence classification only, may make written appea her resid
to:

\section*{The California State University \\ 400 Golden Shore \\ Long Beach, California 90802-4275}
within 120 calendar days of notification of the final decision on campus of the classification. The Office of Genera Counsel may make a decision on the issue, or it may send the matter back to the campus for further review. Students exception from nonresident tuition are subject to eclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subjec to discipline pursuant to Section 41301 of Title 5 of the Callornia Code onds and nonresident students quallifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions Office. Applications for a change in classification with respect to a previous term are not accepted.
The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should nonresident tuition, in the statutes, and in the regulations between the time this catalog is published and the relevan residence determination date.
Changes in residency for tuition purposes are no automatic. Students wishing to apply for residence reclassification may submit a form and supporting socumenter and from April 15 to May 15 for Fall semester. Exceptions from nonresident tuition are valid for on semester only. Students must reapply for an exemption each semester
Forms are located at the Office of Enrollment Service SS/AD 101

\section*{Debts Owed to the University}

Should a student or former student fail to pay a deb owed to the instiution, the institution may withol wemision to regiter, to use failities for which a fee is
athorized to be charged, to receive services, materials, ood or merchandise or any combination of the above from ny person owing a debt" until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381). or example, the institution may withhold permission for uture registration with the University and permission to receive official transcripts of grades from any person owing debt. If a student believes that he or she does nould contact the campus business office. The business office, or another office on campus to which the student may be referred by the business office, will review the pertinent information, including information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

\section*{Bad Checks}

A \(\$ 10\) fee is charged to the student for any dishonored A \(\$ 10\) fee is charged to the student for any dish toward the student's account (insufficient funds or stop payment). The amount of the original dishonored check plus the \(\$ 10\) fee becomes a financial obligation of the student to the University. The student may be liable fo damages equal to three times the amount of the returned check or draft (see Civil Code, Section 1719). The studen will have 15 calendar days to pay the amount in castor by he University demanding cash payment. If payment is not made within 15 days, the University may initiate collection proceedings with an outside collection agent for the amoun of the bad check plus collection fees of \(331 / 3 \%\) of the utstanding debt. A hold will be placed on all academic ecords.
A Stop Payment Order on a check does NOT constitute an official withdrawal from the University, nor does it relieve he student from the financial obligation for registration fees or tuition incurred by registration for classes.
If an obligation continues to be unpaid beyond the response period of a demand for payment, the student' name (and/or the name of the maker of the bad check) is submitted to the State of California Franchise Tax Board to the University from any tax refund to which the studen (and/or maker of the check) may have been otherwise entitled.
A student whose check is dishonored for insufficien funds or stop payment order may lose the privilege of endering checks for future payments to the University and be required to pay all ob or recognized money order.

\section*{Estimated Expenses}

Students should be prepared to meet expenses for fees at the time of registration. Books should be purchase he antiasses begin. Other expenses are ongoing and mus attendance. Expenses gnerally god an average six to eight percent per year. Actual costs depend upon where the student lives and if there are dependent children. Financial aid programs are designed to help students meet year. The following budgets will assist students in planning costs for average expenses: (Costs include University fees,
books and supplies, room and board, persona miscellaneous and transportation based on 1989-1990 CSULB budgets.)
Student living at home with parents-nine month
term- \(\$ 5,553\);
Student living in a residence hall-nine month
term- \(\$ 8,633\);
Single student living off-campus (apartment,
house)-nine month term- \(\$ 10,593\) (assumes shared housing).
Institutional and Financial Assistance Information
The following information concerning student financial assistance may be obtained
Bldg., Rm. 270, (310) \(985-4641\) :
(1) Student financial assistance programs available to students who enroll at CSULB;
(2) The methods by which such assistance is distributed among recipients who enroll at CSULB;
(3) The means, including forms, by which application for
student financial assistance is student financial assistance is made and requirements for
accurately preparing such application accurately preparing such application;
(4) The rights and responsibilities of students receiving (5) The standards
considered to be making satisfactory academic progress for the purpose of establishing and maintaining eligibibily for financial assistance.
The following information concerning the cost of attending California State University, Long Beach is available from the Otfice of Financial Aid, S
(1) Estimated costs of books and supplies;
(2) Estimates of typical student room and board costs and typical commuting costs; and
(3) Any additional costs of the program in which the student is enrolled or expresses a specific interest.
Information concerning the refund policy of California State University, Long Beach for the return of unearned tuition and fees or other refundable portions of costs is
available from the Controller, SS/AD BId available from the Controller, SS/AD Bldg., Rm. 365.
regarding any refund due to the federal Title NV student assistance programs as required by the regulations is available from the Office of Financial Aid, SS/AD Bldg., Rm. 270, 985-4641
Information concerning the academic programs of California State University may be obtained from Curricular Administration and may include:
(1) The current degree programs and other educational
and training programs;
(2) The instructional, laboratory, and other physical plant
facilities which relate to the academic porem facilities which relate to the academic program;
(3) The faculy and other instructional personnt;
(4) The facitarding iner instructional personnel;
available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest; and
(5) The names of associations, agencies, or governmental bodies which accredit, approve, or license the institution and its programs, and the procedures under which any Current or prospective student may obtain or review upon
request a copy of the documents describing the institution's accreditation, approval, or licensing. Information regarding special
available to disabled students may be obtained from the Office of the Provost and Senior Vice President for Academic Affairs.
The Office of Financial Aid at CSULB provides both
financial and advisory assistance financial and advisory assistance to enable students to
pursue a quality education despite increasing costs. It administers funds made available by the federal costs. It governments, CSU and by private sources that are awarded to students who demonstrate a need to cover educational expenses.
Due to limited funding, deadlines are critical. Students
financial aid files must be complete before financial financial aid files must be complete before financial need
can be determined. To receive maximum funding stidents can be determined. To receive maximum funding, students
must file a Student Aid Application for Califrnia by March and have a complete file by May 10 .
Application
To apply for financial aid from CSULB, students must file the Student Aid Application for California (SAAC). The SAAC is a multi-purpose form that also is used to apply for
California Grants from the California Sur California Grants from the California Student Aid Commission and for Pell Grant funds from the federal
government. The SAAC must be mailed to a nationaly government. The SAAC must be mailed to a nationally
designated processor. New students may obtain the SAAC from high school counselors or local college financial aid offices. Students currently enrolled at CSULB may pick up the SAAC from the Office of Financial Aid. Detailed information about CSULB financial aid programs is available in the Office of Financial Aid, SS/AD Bldg., Room 270, (310) \(985-4641\). The submission of various supportive documents may be required. These may include the following: (1) on the SAAC; (2) financial aid transcripts from all colleges previously attended; and (3) other clarifying information requested by the Office of Financial Aid. Upon receipt of all documentation, the applicant's file is evaluated to determine eligibility for financial aid. A student is automatically considered for all programs for which he/she
qualifies at the University by submitting the SAAC qualifies at the University by submitting the SAAC, and programs are available for the academic year.

Financial Assistance

\section*{Financial Ald Eligibility}

To determine financial aid eligibility, a standard needs analysis system is used. This system allows the Office of Financial Aid to analyze family financial strength and ability
to contribute toward the cost of attending CSULB. Subtracted from the student's educational expenses to arrive at financial need are: the parental contribution, the applicant's (and spouse's) contribution from employment, savings, a portion of assets and other resources. As long as program funds permit, a "package" consisting of various types of funds (grants, loans, work-study) is awarded to meet full need.
Enrollment is assumed to be full-time. Part-time students carrying a minimum of six undergraduate units, or fou graduat-time student's ability to contribute toward educationa costs is expected to be greater. This may result in reduce financial need.

\section*{Notification of Awards}

Upon determination of eligibility, students are sent inancial aid offer. Students are also notified if determined to be ineligible.
It is the goal of CSULB to package aid that fully meets the
 whose financial aid files are complete by May 10 and who demonstrate the highest need. [A complete financial aid file includes: (1) SAAC filed by the March 2nd deadline and (2) all appropriate supportive documents submitted by May 8 th oo the Office of Financial Aid.

\section*{Academic Responsibilities}

Aid recipients must: 1) be in good academic standing, 2 make satisfactory academic progress toward a degree by a minimum cumulative number of units from each year to the next; and 3) remain within the maximum time frame fo the degree program in which the student is enrolled
Aid eligibility is governed by the number of units attempted and successfully completed with a passing grade ( D or better). Most aid recipients enroll in a full-time program of study carying
graduate level units ( 500 -level courses or higher) semester. To be considered an eligible financial aid applicant, students cannot have earned more academi units than an established "unit cap". At CSULB, the established unit cap for students seeking a bachelor's degree is 150 units and for master's degree candidates the
unit cap is 50 units. This includes units earned as a recipien of financial aid as well as units earned while not receiving aid. It also includes any transferable units for those students who have attended college elsewhere.

\section*{tudents Owing Educational Debts}

Loans are not given to any student with a history of hon-payment of debts. A student who defaults on any loan guaranteed loan program will be denied further aid. A student who owes a refund for any federal financial aid previously received will not receive funds from the University until corrective action is taken. Students are barred from discharging their educational loan debt through bankruptcy proceedings for a five-year period after leaving the University.

\section*{Campus Financial Aid Programs}

\section*{Perkins National Direct Student Loans (NDSL)}

The Perkins Loan is a federal program providing ong-term, low interest loans to both graduate and undergraduate students. Repayment of loan principal and interest begins
at last half-time.
at last hall-tim
Supplemental Educational Opportunity Grant (SEOG) The SEOG is a federally sponsored, non-repayable program for undergraduate students with exceptiona program fial need.
College Work-Study (CWS)
The CWS program is a federally funded employmen program to expand part-time job opportunities for students in tinancial need. Students awarded CWS are placed in jobs according to their skills, career and academic goals and must see the Office of Financial Aid for job referra pastions are available on campus ormum of 20 hours per week while classes are in session

\section*{California State Educational Opportunity Program \\ Grants}

EOP grants are provided by the State of California fo undergraduate students admitted to one of The California State University campuses under the Educational Opportunity Program. Eligibility is determined by the same be made for a maximum of ten semesters. Students also receive special academic counseling and tutorial assistance when needed. Further information may be obtained by contacting the Educational Opportunity Program Office on campus.
State University Grant
The State University Grant is funded by the State o California to assist students whose ability to attend postsecondary institutions is jeopardized by increases in
student fees. Students must be residents of California and must demonstrate need.

\section*{Graduate Equity Fellowship}

The Graduate Equity Fellowship is funded by the Caifiomia State University to graduate students currently
underrepresented in their field of study. These groups are defined as: individuals with disabilities; women majoring in academic areas in which women are underrepresented; Blacks, Chicanos, other Hispanics, American Indians, Filipinos, and Pacific Islanders. Eligible students must be California residents, demonstrate financial need of at least program with at least a 30 grade continuing in a graduate

\section*{University Scholarships}

The Office of Financial Aid administers a limited number small scholarships funded by CSULB. scholarships are funded by private donors, businesses corporations, agencies, religious groups, and fraternal and in financizal noed. Most scholarships are not based solely on financial need. They may be awarded on the basis of academic achievement, leadership, merit, motivations, and
talent. Some scholarships are administered directly by the academic department for specific academic majors. Students may consult with their academic department or he Office of Financial Aid regarding scholarships abailable. Alumni Scholars
Each year CSULB awards \(\$ 1000\) grants to 15 freshman applicants who have an outstanding academic record. The 35 grade point average is achieved while aduate years if a 5 grade point average is achieved while at CSULB. Funds Quality Fund drive.

\section*{Outside Student Aid Programs}

The following programs are administered by other agencies and coordinated by the Office of Financial Aid: State Graduate Fellowships
Fellowships are administered by the California Student Aid Commission and awarded to entering and continuing graduate students who are California residents and who plan to teach at the college level. The fellowship covers a portion of registration fees only. Selection is competitive
and is based upon unusual ability achievement potential for success using GRE test scores and grade point average. The amount of the award differs among colleges according to their tuition and fees.

\section*{Cal Grant A}

Cal Grant A is awarded by the California Student Aid Commission to entering and continuing undergraduat students who are California residents. Cal Grant A awards are based on academic achievement and financial need Grants are for fees only at any of the CSU campuses

\section*{Cal Grant}

Cal Grant B is awarded by the California Student Aid Commission to entering undergraduate students who have Applicants must be California residents, and must demonstrate substantial financial need. Grants vary depending on educational costs. Fees, in addition to the basic award, are normally provided in the second, third and fourth years. The grant is renewable for four years.

\section*{ell Grant Program}

The Pell Grant Program is a federal aid program designed to provide financial assistance to undergraduate students who demonstrate financial need under the guidelines of the Grant, the amount of the award is based on the cost of education at the school attended and enrollment on a half-time, three-quarter-time, or full-time basis. Eligibility is limited to U.S. citizens and eligible non-citizens.

\section*{Stafford Loan (GSL)}

The Stafford Loan Program enables eligible students to obtain loans through banks, credit unions, and other lending institutions outside of the University. During the time
the student is enrolled at least half-time the student is enrolled at least half-time, the federal borrowed. Federal regulations allow any student to apply for the
Stafford Loan providing the student: (1) is enrolled in and in Stafford Loan providing the student: (1) is enrolled in and in
good standing or has been accepted for enrollment at an eligible school; (2) is enrolled as at least a hall-time student; and (3) is a citizen of the United States or an eligible maximums are \(\$ 2625\) per year for undergraduate freshmen and sophomores, \(\$ 4000\) for upper level undergraduates ( \(\$ 17,250\) cumulative), and \(\$ 7,500\) per year maximum for graduate students ( \(\$ 54,750\) for undergraduate and graduate studies combined). Local lender policy is available from the Office of Financial Aid.

\section*{Alan Pattee Scholarships}

Children of deceased public law enforcement or fire suppression employees who were California residents and
who were killed in the course of law enforcement or fire suppression duties are not charged fees or tuition of any kind at any California State University campus, according to the Alan Pattee Scholarship Act, Education Code Section 68121 . Students qualifying for these benefits are known as Alan Pattee scholars. For further information contact the Admissions/Registrar's Office, which determines eligibility.

\section*{Bureau of Indian Affairs (BIA) Grants}

Students who are at least one-fourth American Indian,
Eskimo, or Aleut may apply for a BIA the grant depends upon financial need and availability of the grant depends upon financial need and availability of
funds. Students must complete an application for financial aid and then contact a financial aid counselor to complete a separate form.

\section*{Other Types of Financial Assistance}

\section*{Emergency Loans}

A limited number of emergency loans are available from the Office of Financial Aid on a 30 to 90 day repaymen
basis. The purpose of the short-term loan is to assist students with a temporary emergency situation. These oans take four days for processing and carry no interest charges. There is a fee of \(\$ 5.00\) for the loan.
Long-term loans are available from the Isabel
Patterson/Wheeler Student Loan Funds for a maximum of \(\$ 250\). These loans are charged \(7 \%\) interest a maximum of of the Fund is to assure, to the extent that funds are
available, that no qualified student is denied an opportunity pursue a program of study at California State University, Long Beach because of financial reasons. Loan recipients
are selected on the basis of realistic need and demonstrated ability to repay the loan on a monthly installment basis. For further information contact the Office Financial Aid

\section*{Cooperative Education (CO-OP)}

The Cooperative Education Office places students in career or academic related positions with corporations, businesses, agencies and institutions. Students are paid at normal entry-level wages. Minimum periods of employment
for full-time Cooperative Education placements are one semester. For part-time placements, a minimum of 20 hours is required. Summer internships are also available. Contact the Experiential Learning Center, SS/AD 250

\section*{Ludent Part-Time Employmen}

Listings are available and assistance is offered in the Career Development Center to students interested in part-time employment

\section*{Federal/State Regulations}

The information contained in this publication accurately reflects regulations and policies at the time of printing. Be aid processing and eligibility are subject to change at any time.


Changes in Rules and Policies
Athough every effort has been made to assure the accuracy of thery effort has been made to assure the accuracy of the iniormation in this catalog, students and and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of The California State University, by the Chancellor or designee of The California State
University, or by the President or CSULB designee. Further it is not possible in a publication of this size to include all of the rules, policies and other information which pertain to the student, the institution, and The California State University. More current or complete information may be obtained from he appropriate
Nothing in this catalog shall be construed, operate as, or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of The California State University, the Chancellor of The California State University, or the Pesiden of campus. The rustees, the Chancellor, and the President are authorized apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and CSULB or The California State University. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the heir duly authorized designees
Information concerning the academic programs of CSULB may be obtained from the Provost, SS/AD-309, at 985-4128 and may include:
(1) the current degree programs and other educational and training programs:
(2) the instructional, laboratory, and other physical plant facilities which relate to the academic program
(3) the faculy and other instructional personnel
(4) data regarding student retention at CSULB and, available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest; and
(5) the names of associations, agencies, o governmental bodies which accredit, approve, or procedures under which any current or prospective student may obtain or review upon request a copy of the documents describing the institution's accreditation, approval, or licensing

\section*{Election of Regulations forDegree Requirements}

Undergraduate students acquire "catalog rights" with respect to the requirements for a degree program by
maintaining "attendance" continuously. This means that, if ontinuous attendance is maintained and the degree objective is not changed, students may choose to graduate under the requirements for the degree in effect ( 1 ) at the me they began the study in a California Community Colege of another campus of The Cailiornia State me of graduation from CSULB. Substitutions for iscontinued courses may be authorized or required by the Dean of the cognizant College/School. Students who change their major, including changing from "undeclared" satus to a defined degree objective, are governed by the change or declaration of maior. Students who change from one option to another within the same degree program are not. Students who change majors are advised that some courses counted for General Education or double counted or General Education and the major may be unacceptable for General Education in terms of the new major. These
students should check with the Academic Advising Center. The term "attendance" means, literally, attendance in a course for at least one semester (or quarter) unit credit in at east one semester (or two quarters) in a calendar year, culminating in a record of enrollment on the student's official rranscript. For the purpose of establishing catalog rights, he course must be at the baccalaureate or graduate leve in a California communty college, a Cali
University, or a University of California campus.
Once "catalog rights" are established, absence related to an approved medical, military or academic leave or for attendance at another accredited institution of higher education shall not be considered an interruption of attendance, provided that the absence does not exceed years. Please see Educ section.
For all students, a failure to remain in continuous位dance will mean that the student must meet the egulations current at the time of resuming the degree orram or those applicable at the time of graduation. In adition, for graduate students, a faliure to matina andidacy" for the degree (advancement to candidacy) nd of "catalog rights.

\section*{cademic Calendar}

Eall and Spring Semesters: California State University, -ong Beach operates on the semester system. Normaly, Day in September. The last day of instruction usually comes nidway in December; this allows for a week of final examinations prior to the Winter Recess, which begins about the 23rd or 24 th of December. The Spring Semester usually begins in the last week of January and ends in a week of commencement exercises prior to Memorial Day

The two regular semesters are the only periods during Summer Winter and Extended Ency in the University Summer Session courses are offered duing. sub-sessions extending through the months of June three and August. These courses normally count as regular academic credit. Instruction is also provided through the Office of Extension Services in concentrated formats through extension courses in Winter Session, and the Fall and Spring Sessions and in Special Sessions

\section*{Student Load}

Undergraduate students who carry 12 units or more in a fall or spring semester are classified as full-time students
Those who carry fewer than 12 units are part-time students. To be full-time, graduate students must carry at least 8 units at the graduate level.

Maximum suggested unit load
Graduates
First Semester Freshmen
Students on Academic Probation
All Other Students
Summer and Winter Sessions:
One unit per week of attendance limits may be made only on the basis exceptions to these Permission must feasibility of the student's schedule appropriate authorities: in the (prior to registration) from student's major department, in semester, from the sessions, from the College/School Dean who governs the student's major. (Unclassified majors must consult the cademic Advising Center.)
The faculty recognizes that it is frequently necessary for students to hold part-time positions while attending the students enrolling under these conditions. Students whose outside employment could be expected to interfere with the normal unit load should reduce their academic program accordingly. It is suggested students plan a schedule spending three hours time per week for each unit taken. to do satisfactory work. Students who desire to achieve " \(A\) ' or "B' grades may wish to spend proportionately more time in their studies. A student's employment and college time combined should not exceed 60 hours weekly. Students who make no allowances for their employment and outside bligations in planning their college programs will bear full
Veterans should inquire at the Veteran's Affairs Office SSA 226) about unit load requirements for state and deral benefits.
For more information about graduate student load, see Undergraduate inn Master's Degrees in this Bulletin. Usas must carry international students on non-immigrant semester unless a reduced a minimum of 12 units per tudent's advisor and the Center for International Eduatio Reduced unit loads may be granted for substantial academic reason or compelling personal reasons beyond
e control of the student. Failure to secure such authorization results in violation of student status under mmigration and Naturalization Service (INS) and State epartment regulations, warranting discontinuance of

\section*{lass Attendance}

Students are expected to attend classes regularly because classroom work is one of the necessary and important means of learning and of attaining the educational objectives of the institution.
Students who fail to attend all sessions of a class during he first week of the semester may be removed from the class roster by the instructor and replaced with students on
waiting list. Students thus replaced must officially withdraw from the coruse, as removal from the class roster by the instructor does not constitute official withdrawal.
Students should not miss classes except for valid easons, such as illness, accidents or participation in officially approved University activities. When students are asent from classes, it is their responsibility to inform lo mise esignments and class work insofer to his is possible.
Students who expect to be absent from the University for wo weeks or more for any valid reason, and who have found it difficult to inform their instructors, should notify the cademic department office and the Office of the Vice President for Student Services. The department office will notify the student's instructors of the nature and duration of student to arrange with instructors to make up any academic work missed. Students who miss classes at the beginning of the semester risk being dropped by their instructor.

\section*{Visitors to Classe}

Only students registered for the class either as regular thedents or as auditors, the instructor, and invited guests of wishing to become guests of the instructor should ersons instructor's permission prior the instructor should seek the the class session.

\section*{Course Listings}

Courses are listed in this catalog by department, the departments and programs being arranged alphabetically in the Colleges/Schools in which they are administered. Each isting gives the course number, title, semester units in
parentheses, semester or session offered, and the course parentheses, semester or session offered, and the course
description, which includes prerequisites and other descriction, which includes prerequisites and oth

An asterisk
An asterisk (*) preceding the course title indicates that the degree

\section*{Course Numbers}
credit. through 299 . Thesen courses are numbered from 100 through 299. These courses are designed primarily for
Freshmen and Sophomores. They provide breadth of understanding and the foundation for the more specialized work in upper division, advanced courses. Approved

General Education courses are listed in the Schedule of Classes and are offered at both the lower-division and upper division levels; no upper division General Education division courses are open to Junior, Senior, and Graduate students; however, lower division courses may not be applied to any graduate degree program.
Upper division courses are numbered from 300 through 499. These courses are open to students who have completed the prerequisites to the course, if any, stated in the course description and other departmental regulations
given in this catalog. A "Prerequisite" is a completed course or other measure of academic preparation which provides a foundation for the more advanced course.
Freshmen and Sophomores wishing to enroll in upper division courses which indicate no prerequisites should consult with the course instructor or other knowledgeable advisor prior to enrollment. These courses are presented to Feshmen and Sophomores should not attempt courses with numbers preceded by an asterisk.
Certain 400 -level courses are double-numbered with 500 -level courses. In these courses the expectations of graduate students, who must enroli in the 500 -level course are greater than the expectations of undergraduates Grading scales are different for the 500 -level course and
additional work is required of graduate students. A student may not credit for both the 400 - and 500 -level versions of a course.
Graduate-level courses are numbered from 500 to 799 Courses numbered \(500-599\) may be opened to second-semester senior students upon favorable petition Courses numbered from 600 to 799 are open only to graduate students.
Included with some of the course numbers is a supplementary letter, or surfix, such as \(A\)-B" means that the courses must be taken in alphabetical sequence; " \(A, B\) " designates related courses which need not be taken in sequence. The student is given degree credit for each par of the sequence satisfactorily completed, whether or not the emaining part of the sequence is completed. The ong range planning guide. Funding, student demand, and instructor availability may require that a course be offered in a different semester or session or be postponed until a late academic year. F indicates Fall Semester, S indicates Spring Semester, W indicates Winter Session, and SS indicates Summer Session. The Schedule of Classes be consulted for actual course scheduling information Courses offered only in alternate years are so designated Many of the courses offered during the fall and spring semesters are also offered during the summer session. The University reserves the right to make changes in course offerings without notice
Courses offered through Extended Education conferring Codit Courses in Extended Education with numbers
eginning with an "X" followed by a number in the 0 -series through the 600 -series do confer degree

\section*{Academic Credit}

\section*{Course Credit Units}

Each course has a specific credit unit value which is indicated in parentheses following the course titte. In typical discussion classes, the number of course creat a is equal to the number of class hours per week. Thus, in a typical fitteen-week semester a one-unit class meets for otai of ilteen hours during the lifteen weeks while a three unit class will meet forty-five hours during the same period wice, or three times a week.
In other types of instruction, principally laboratories and ctivities of other kinds, the number of class hours per week is greater than the number of course credit units, epending on the mode of instruction. Courses with varian mixed modes of instruction are noted in the course escription and the Schedule or Classes. Summer Session compressed into a six week session
The instructional "hour" is fifty minutes long, allowing for transit between classes and rest breaks within multi-hour classes. In most classes the student is expected to allow wo hours per week of study time beyond class time for ach unit of credit. Thus, a three-unit lecture discussion ourse normally demands a comm

\section*{erit for Activity Course}

\section*{edit for Activity Courses}

Activity courses provide practice in areas such as dance ournalism, music, speech, theatre arts, and physica ducation. Students may apply to the degree no more than eight units of activity course credit in any one area, and no more than 20 units of activity credit in all areas. For purposes of defining areas Physical Education (P ED) and ports, Athletics, and Recreation (SAR) are counted as one oward the baccalaureate degree, eight in P ED and four in SAR.

\section*{Independent Study Courses}

Each student enrolled in a supervised independent study. esearch, or reading course (exclude thesis courses) must have an agreement on file in the department office where he course is offered. The agreement is to be made between the student and the instructor at the beginning of he course and must mork to lished specific information on the lasks required, the nature of the final report, and the basis for determining the final grade. The agreement must be signed by both the instructor and the student.

\section*{Credit for Cross-Listed Courses}

Certain interdisciplinary courses are listed in this catalog under more than one department. Normaly, students wil eceive credit for such a cross-listed course in the epartment under which they register for it. They may
be credited to a different department which also lists provided that they make this request no later than the en of the semester preceding anticipated graduation.

\section*{Repeatable Courses}

A student may repeat for additional units or credit toward as repeatable in the catalog up to the limits specified. department determines the unit limits and any othe limitations for courses that may be repeated. In general except for activity courses, a student may not repeat a course having the content as the one for which cred was initially received.

\section*{Repetition of Courses for Satisfactory Grade}

Undergraduate students and postbaccalaureate students who are pursuing a second (or subsequent) baccalaureate
degree may repeat, for the purpose of excluding the grade from grade point determination, an undergraduate cours taken at Calfornia State University, Long Beach in which a grade of \(D, F\), or \(U\) was received. Postbaccalaureate students pursuing credential programs, certificate programs, master's degrees or those who have no specific
objective are not eligible for the Repeat and Delate poligy Eligible students may repeat a course once for the purpose of deleting a grade, without prior departmental approval, if both courses were taken at CSULB. The deletion is automatically calculated at the end of the semester in which the course was repeated. Although the first grade will remain on the permanent record, the grade and grade points of the repeated course on the second
attempt will be those used in determining the grade point average and units earned, provided the second grade was C or better. Students are not prohibited from continuing to epeat a course in which the grade is unsatisfactory ( \(D, F\) ), but all grades earned subsequent to the first repeat will emain in the grade point determination, and the units eaned in the course will be applied to the degree only
once. While there is no time limit for repeating a course the student's permanent record may not be altered after a degree has been granted.
If students wish to exclude a grade from grade point determination of \(D, F\), or \(U\) in a course taken at another institution, they may do so by enrolling in an equivalent Admissions and Records. Thust be filed in the Office of course is taught must indicate on the pettion which particular course may be repeated to delete the previous grade. An official transcript from the institution where the
 Only one repeat is allowed for the purpose of deleting a grade, and the repeated grade and grade points will be sed in the overall grade point determination, provided the A grade received or better
may not be used to delete a ge taken at another institution taken at CSULB.

\section*{Transfer Credit}

Students who were in good standing at another or baccalaureate or graduate degree course work. Course
ocredited instith wither
equivalency for major requirements must be determined; students are cautioned that the University is under no obligation to accept transferred courses for subject credit in addition to unit credit for admission. Normally, however, discipline will be exchangeable between universities. Policy egarding transier of courses from California community olleges differs in some respects.

\section*{Transfer of Undergraduate Credit From Accredited}

A maximum of 70 semester units earned in a California ommunity college may be applied toward the stipulations: (a) No
(a) No upper division credit may be allowed for courses (b) N community college,
(b) No credit may be allowed for professional courses in actation taken in a community college, other than introduction to education courses;
(c) Individual program regulations for specific transfer
imitations should be consulted.

California Articulation Number (CAN) System
California State University, Long Beach participates in the CAN System. The CAN system is a cross-reference course
identification system designed to identify lower-division transferable courses commonly presented by transferring students. The CAN system not only simplifies the transfer process, but makes it easier for students, faculty, and counselors
The development of a written faculty-approved articulation agreement for each course with four public four-year campus provides the foundation of the CAN system. Articulation agreements for each course are periodically eviewed with each campus by the faculty and Department hairs.
The CAN system is based on course articulation--courses considered to be comparable, not necessarily identical, and acceptable 'in lieu of' each other. The system assures students that CAN courses on one participating campus will another participating campus. EXAMPLE: CAN H EC 2 on one campus will be accepted for CAN H EC 2 on another participating campus. Each participating campus not only etains and uses its own course number, prefix, and title, but also adds the appropriate CAN designation parenthetically in its publications when it has qualified the
course. For a listing of CSULB courses and the assigned CAN NUMBERS, see the end of this section. For additional information contact the University Articulation Office, (310) 985-8221.

\section*{Extension Credit}

A maximum of 24 semester units credit for courses taken by correspondence, or through extension (including open university enrollment), may be accepted toward the
baccalaureate degree. Such credit must be accepted for baccalaureate degree. Such credit must be accepted for
degree purposes by the institution in which the work was taken. Extension credit may not be used to fulfill the minimum 30 unit residence requirement.

\section*{Credit for Noncolleglate Instruction}

CSULB grants undergraduate degree credit fo successful completion of noncollegiate instruction, eithe military or civilian, appropriate to the baccalaureate, that has been recommended by the Commission on Educationa Credit and Credentials of the American Council on Education. The number of units allowed are those Experience in the Armed Service and the National Guide to Educational Credit for Training Programs. Students must provide acceptable documentation of the training to the Office of Admissions and Records.

\section*{International Program Credit}

Course credits earned in universities abroad may be accepted for degree credit at CSULB subject to evaluation by the cognizant department or program upon admission of he student to the University. CSULB students who desire degree credit must have each such course approved in advance in writing by the Chair of the appropriate department or program.
The Center for International Education administers many international education and exchange programs. Students ully accepted into one of these programs may, in most approved foreign institution. Some courses taken through these programs do not have to be approved in advance.

\section*{Acceleration of University Studies}

The University provides several means by which students may accelerate their studies; these are discussed below Each of the following options may be subject to restrictions and regulations within individual academic programs hoplde, students interested in any of these option

\section*{Advanced Placement}

The University grants credit toward its undergraduate degrees for successful completion of examinations of the Examination Board. Students who present scores of three or better will be granted up to six semester units of college credit.

\section*{Unit Credit by Examination}

California State University, Long Beach grants credit to hose students who pass examinations that have bee approved for credit system-wide. These are: the CSU English Equivalency Examination; the College Leve Entrance Program (C.L.E.P.) general examination in Algebra-Trigonometry, in Calculus and Analytic Geometry, in Statistics, in General Chemistry, and in German; the College Entrance Examination Board (C.E.E.B.) Advance Placement examinations; and the American Chemica Society Cooperative Examination.
Students may also challenge some courses by taking examinations developed at the campus. Credit shall be earned in this manner will be recorded as "CR" (credit) on the student's transcript and will be counted toward the tota number of units required for the degree although they will
not be included in calculation of the grade-point average. minimum residence requirement.
Students must be enrolled in the University and in the course for which they wish to receive credit by examination vailable during the academic semester in which the course is being offered. Students must secure a signed and dated approval form from the department prior to enrolling in the course. Students must provide the instructor with a copy o he signed and dated approval form at the first clas meeting. The instructor will ensure that the examination is conducted, scored, and the results reported prior to the
end of the third week of classes. Students who pass the examination will receive a grade of "CR." Students who do not pass the examination have two options.
(1) continue in the course as a regular student; or
(2) withdraw from the course.

The University sets no maximum on the number of credits a student may receive by examination. However, not all courses are available for credit by examination. Information permitted is available in the Department Office, in the College/School Office, and the Office of Admissions and Records. A student may not receive credit by examination:
(a) for an activity course
(b) for any course which is a prerequisite to one for which redit has been received, (see department for possibility o course waiver);
(c) to remove a grade of "F," "U," "NC,"
(d) to satisfy the courses required for a major in a naster's degree
(e) for any course in which the content or methodology is exat an examination does not appropriately measure Application forms to apply for creatr by examination are available in the Office of Admissions and Records Procedures and criteria for requesting unit credit by examination in a given course are available in th

\section*{pubstitution of Courses \\ ubstitution of Course}

Students who believe that a course they have taken (or intend to take) may be appropriate to their program and requirement may request that a substitution of courses be indicated on the departmental program planning guide, fled prior to graduation. Course substitutions are normally imited to cases where the required course cannot be Iffered or where the student has taken a similar but not
identical course elsewhere identical course elsewhere.

\section*{Waiver of Course Requirement}

In addition, students who believe that previous training has sufficiently prepared them in a certain area may request waiver of a speciric eourse requirement (subject credi nade on an application form available in the department office. The student will be required to justify the request in a
course requirements does not reduce the total number of credits required for the major or the degree

\section*{Graduate Credit Earned as a Second-Semester}

Graduate credit usually may not be earned in advance of the baccalaureate degree. However, based upon faculty recommendation, academic performance (in general a grade-point average of 2.75 overall and a 3.0 (B) in the major), and promise of academic achievement in post-graduate study, second-semester seniors may be
granted approval to earn a maximum of six units of course work in the 300, 400, and 500 levels taken at this University and designated as acceptable for graduate credit, to be applied towards their prospective graduate program Approval is subject to the following conditions: (a) the course work must be in addition to that required by the department or college/school for the undergraduate major; Earn Graduate Credit in the Senior Year" approved prior to enrollment by the departmental graduate advisor and the dean or associate dean for graduate studies of the college/school involved.
In those areas in which graduate credit is for a credential only, the petition must be submitted to the Associate Dean or Graduate Studies and Research, Graduate School o
Education. Petitions submitted atter completion course(s) will not be approved.

\section*{Senior Enrollment in Gra}

Under special conditions, second-semester seniors who have an overall 3.0 grade-point average or better and who have adequate undergraduate preparation in the subject may enroll in a course in the \(500-599\) series to fulfill the
elective requirements of the bachelor's degree only The course work may not be applied to the units of \(500-600\) evel course work required by the department or College/School for the master's degree. The student must have a "Petition to Earn Credit Toward a Bachelor's Degree for a 500 Level Course Taken in the Senior Year" approved by the instructor, department, and College/School Dean Neither of thiton in the class(es) is permitted.
excess credits from the baccalaureate to the post-baccalaureate or graduate program.

\section*{Grades and Grading Procedures}

\section*{Definitions}
the following definitions apply to grades assigned in all undergraduate and graduate courses
A- Performance of the student has been at the highest levirements sustained excellence in meeting all course intellectual intiative.
B- Performance of the student has been at a high level, showing consistent and effective achievement in meeting course requirements.
C- Performance of the student has been at an adequate evel, meeting the basic requirements of the course. dequate, meeting only the minimum course requirements.

F- Performance of the student has been such that minimal course requirements have not been met. A fina grade of "F" may be assigned as the result of cheating or section.)
CRNC - In addition to the standard grades, the University permits students to select evaluation on a Credit" or "No Credit" basis. These grades are defined as ollows
For undergraduate students, a \(C R\) is equivalent to an \(A\), , or \(C\); an \(N C\) is equivalent to a \(D, F\), or \(U\);
For graduate students, a CR is equivalent to an \(\mathrm{A}, \mathrm{B}\), or C o a \(D, F\), or \(U\), as above, but for 300 -, 400-, 500 -- and 600 -level courses, the CR is equivalent to an A or B only; a \(N C\) grade is equivalent to a \(C, D, F\), or \(U\).

\section*{Grade Point Computation}

\section*{Arocoles 4 points per unit}

B receives 3 points per unit
receives 2 points per unit
D receives 1 point per unit
F receives 0 points per unit
J receives 0 points per unit
CR is not calculated in the grade point average
NC is not calculated in the grade point average

\section*{- Course Grading Option Polic}

The faculty determine in advance which courses may be taken for traditional (A-F) grade only, CR/NC only, or either. Any undergraduate course may be designated for or closed
to the option of CreditNo Credit grading whether or not the course is a requirement for an undergraduate degree major, minor, certificate, credential or concentration.
No course in which a grade of CR has been assigned may be used to fulfill the requirements for a master's degree, except that the grade of CR may be permitted for master's theses or projects (to a maximum of six units) when the individual department has specifically designated Credir/No Credit grading for the thesis/ project course in the
department, and for fieldwork, practicum, and/or internship courses (also to a maximum of six units). The option of Credit/No Credit grading for graduate students in undergraduate courses is subject to specific regulations of the individual departments regarding their graduate students and regarding the authorization for this option
intrinsic to the approved course Otherwise, no limitation intrinsic to the approved course. Otherwise, no limitation
exists as to the number of courses taken by graduate students under this policy
An undergraduate student may elect Credit \(N\) No Credit grading in no more than a total of 24 units, of which no more than 12 may be upper division units. No more than eight units per semester may be taken for Credit No Credit grades. Courses graded Credit No Credit taken at another institution, course credit earned by examination, and
courses in which CreditNo Credit grading is the only form of grading are exempt from these limitations.

\section*{Administrative Symbols}

The symbols AU (Audit), SP (Satisfactory Progress), RD Report Delayed), I (Incomplete), and W (Withdrawal), iscussed below, are not used in computing the grade-point average.
AU- Audit. Enrollment as an auditor is subject to permission of the instructor. Enrollment in a course as an auditor shall be permitted only atter stuadents otherwise eligible to enroll on a credit basis have had an opportunity to do so. Auditors are subject to the same fee structure as Once enrolled as an auditor, a student may not change to credit status unless such a change is requested prior to the ast day to add classes. A student who is enrolled for credit may not change to audit after the third week of instruction. o establish audior status in a course, students must file a Schedule Records.
SP- Satisfactory progress. This symbol is used in Connection with courses requiring multiple enrollment, i.e., hat extend beyond one academic term. It indicates that we satisfactory to date, but that assignment of a final grade must await completion of all units required. Cumulative enrollment in units attempted may not exceed the total number applicable to the student's educational objectiv Work is to be com
RD-Report Delayed. This symbol is used exclusively by he Registrar to permit processing of all final grades when he grades for an entire class section have not been reported by the inst
If an instructor fails to report a grade for an individual student, the Registrar will assume that an "I" could not be assigned and so will enter a symbol "U," discussed below. - Incomplete. The symbol " " " indicates that a portion of equired course work (normaly not more than one third) has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons and esponsibility of the student to bring pertinent information to he attention of the instructor and to determine from the istructor the remaining course requirements which must be satisfied to remove the incomplete. A final grade is assigned when that work has been completed and valuated
An "I" must normally be made up within one calendar year immediately following the end of the term during which
it was assigned, whether or not the student maintains continuous enroliment. Failure to complete the assigned work will result in an " "" being counted as a faliing grade for grade-point average and progress point computation, except as noted in item 3 immediately below)
An extension of time may be granted for contingencies Ach as military service or documented, serious heath or The conditions for
reduced to writing by the instructor on a "Requirements for

Assigning an Incomplete Grade" form. This form shall include a statement of
(1) all work completed in the course, the grades assigned for that work, and the percentages of the final grade (2) the work not each iter, , and the percentage that each a) and
(3) the final grade the instructor will assign if the course requirements are not completed within one calendar year
(or a shorter period as specified on the form) immediately following the term in which the "I" was assigned, without respect to continuous enrollment of the student during this period.
A copy of the agreement is to be given to the student, a copy is to be retained in the department office, and a copy is to be filed with the Office of Admissions and Records at should sign the "Incomplete form." If the student is eligible for an Incomplete, a faculty member may assign an "I" even when the student cannot be present to sign the form. In such a case, the instructor will forward to the student a copy of the form via the department office. When the work agreed upon has been completed and evaluated, a final cleared for graduation until all incompletes are resolved.
|l I Ina uthorizod In comoloto Tho cumbal " II" indic
lete. The symbol "U" indicate that an enrolled student did not withdraw from the course but failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments o course activities or both were insufficient to make norma evaluation of academic performance possible (letter grades average and progress point computation this symbol is equivalent to an " \(F\)." In courses which are graded Credit/No Credit or in cases where the student has elected Credit/No Credit evaluation, use of the symbol is inappropriate and " NC " will be used instead
W- Withdrawal. The symbol "W" indicates that the student was permitted to drop a course after the third week
of instruction with the approval of the instructor and appropriate campus official. It carries no connotation of quality of student performance and is not used in calculating grade-point average.
Students are held responsible for completion of every course in which they register or for withdrawing during the first three weeks of classes from courses which they do not intend to complete. Students must file an official application
for withdrawal from the University or from a class at the Office of Admissions and Records whether they have ever attended the class or not; otherwise, the student will receive a grade of "U" (unauthorized incomplete) in the course. Application for withdrawal is made at Admissions and Records. (See also The California State University policy on "Return of Fees.")
Students mawals during the first three weeks of instruction Students may withdraw during this period and the course
will not appear on their permanent records. To do this, a student must file a Schedule Adjustment Form to drop all classes or courses may also be dropped using the Voice

Response Registration system. Fees are not refundable atter the second week of classes
(2) Withdrawals after the third week of instruction and prior to the final three weeks of instruction: Withdrawals during this period are permissible only for serious and compelling reasons. The procedure for withdrawals during this period is the same as in item 1 except that the approval signatures of he instructor and department chair are required. The request and approvals will state the reasons for the serious and compelling reasons" as applied by faculty and administrators may become narrower as the semester progresses. Copies of such requests are kept in department offices and copies of approvals are kept on file the Office of Admissions
(3) Withdrawals during the final three weeks of instruction:
Withdrawals during the final three weeks of instruction are not permitted except in cases such as accident or serious illness where the circumstances causing the withdrawal are cleary beyond the student's control and the assignment of an Incomplete is not practical. Ordinarily, withdrawals in this category will involve total withdrawal from the campus
except that a Credit//No Credit grade or an Incomplete may be assigned for courses in which sufficient work has been completed to permit an evaluation to be made. Request for permission to withdraw under these circumstances must be made in writing on forms avaliable at the Admissions and Records Office. The requests and approvals shall state the reasons for the withdrawal. These requests must be
approved by the instructor, department chair, and Dean of the College/School. Copies of such requests are kept in department offices and copies of approvals are kept on file in Admissions and Records;
(4) Medical withdrawals: A student who becomes seriously ill or injured, or is hospitalized and hence is unable to complete the academic term may withdraw without
academic penalty. A Physician's Statement for Medical Withdrawal, obtainable from the Student Heath Service must be completed by the student's attending physician and submitted to the Medical Director. Additional evaluation by the Director of Financial Ald may be required for those students receiving financial aid. The Student Health Service, upon approval of such a request, will forward its (5) In Ad And Record
(5) Instructor Withdrawals: An instructor may withdraw a the Enrollment Verification List at the end of the third week of classes. However, students should not rely on the instructor to drop them from classes they have never attended. Students should officially withdraw from classes themselves to avoid assignment of a " \(U\) " in the course. An a course requiring "permission of the instructor" or completion of prerequisites if the student has not properly secured this permission or satisfactorily completed the prerequisites before enrolling.
An instructor may exclude from the class as many students as necessary to bring enrollment to within the limits authorized by the Dean of the College/School. These limits
re usually set by State policy or national accreditation standards for the particular field

\section*{Assignment and Change of Grades}

\section*{General}
(1) University policy requires that final grades shall be based on at least three, and preferably four or more, demonstrations of competence by the student. Students
 policy that a single instance of cheating or plagiarism may esult in a failing grade in the class. (See the section on heating and Plagiarism later in this section):
(2) In no case shall the grade on the final examination

scores on each of the demonstrations of competence on which the final grade is based;
(4) Students have a right to be informed promptly of their sores and to review each of their demonstrations of competence with their instructors:
(5) Instructors are expected to provide students with an the determination of their final grade in the course, as early as is reasonable and no later than the mid-point of the semester or summer session;
(6) Instructors are further expected to make clear to their tudents during the first week of instruction what grading olicies and practices will be employed in the class and hat rules will apply to withdrawals
(7) If materials submitted for a demonstration of competence are not returned, these materials will be instructor be absent during that term, retained in the department office. A qualified instructor may be appointed by the chair, in the absence of the original instructor, to Fieview the demonstration of competence with the student.

\section*{Final Examination}

It is the policy in most courses to have several Final examinations are required in all courses for all students, except in certain activity courses or when the Dean of the College/School authorizes an exception. The schedule of final examinations is given in the Schedule of Classes. Permission to take a final examination at a time other than that regularly scheduled must be secured from The instructor may not change the scheduled time for the final examination without authorization from the Dean of the College/School.

\section*{Final Grade Reports}

Within approximately three weeks after the end of the term, reports of final grades are mailed to each student at the end of each semester or session

\section*{- Student Grade Record}

A record is kept and grade or administrative symbol week of instruction. The Registrar will eradicate originally awarded grades from official transcripts but note that there was a grade adjustment made when the following grade changes are made.
(1) Grade change due to a clerical error on the part of the instructor of record;
(2) Grade change due to a favorable grade appeal:
(3) Grade change due to a resolution of RD (report

The Registrar will not eradicate original grades from student transcripts when the following situations occur:
(1) Resolution (make-up) of an incomplete
(2) Repetition of a course.

The Registrar will indicate some grade or administrative ymbol for any student enrolled in a course beyond the outh week

Change of Grade
Grades reported to the Office of Admissions and Records are considered to be official and final grades. Changes to inal grades can be made only
(1) a computational or recording error; or
(2) the evaluation of additional assignments of xaminations ONLY when an Incomplete has been peviously recorded, except
(3) when the chair of a College/School or University-level grade appeal committee acts as the result of a grade Appeals.)
Except for changes of grade resulting from grade appeals processes, all changes of grade must be filed within one year from the date of the filing of the first grade, without esult of a grade appeal will a grade be changed atter the award of a degree or credential.
All requests for changes of grade shall carry the ecommendation of the instructor (except as provided for in the Grade Appeals Procedures), the department chair, and he approval of the Dean of the College/School.
Grade Appeals
Students have the right to formally appeal the final grade, but only the final grade, in a course. Appeals are limited to
situations in which the student believes the grade was "prejudicially," "capriciously," or "arbitrarily" assigned. The appeal must be initiated within the first regular semester after assignment of the grade. It must first be directed to the instructor of the course, orally or in writing. If further action is ecessary, the student should appeal in witing to the epartment chair or to the dosignated deparment ssue continues to remain unresolved, the witten appeal can be directed to the Grade Appeals Committee of the College/School in which the course was taken. Information bout college/school grade appeals commintees and the University policy (P.S. 86-05) can be obtained from the Educational Leave

\section*{Educational Leave}

Any registered student, undergraduate or graduate, in ood academic standing may request an Educational complete an Educational Leave Form, in advance, including an explanation of their reasons for seeking the leave and a
statement of when they intend to resume academic work The completed form is to be submitted for approval to the studvisor
ad
The minimum initial leave will be one full semester; the maximum will be one calendar year. A student may request, in writing, in advance, an extension of leave. Under no circumstances will the total number of approved approved educational leaves extend beyond two calendar years.
Students returning from an approved one semester educational leave are not required to submit an application form. Students on leave longer than one semester must apply for readmission to the university. Students returning appropriate but not approved in edvance must reapply for admission and pay the reapplication fee.
Graduate students who plan to enroll for credit at another institution of higher education during the leave period must obtain prior approval for the transter of course credit to the student's program from the department graduate advisor, departmen
The period of an educational leave is counted in the calculation of elapsed time under the regulations governing the maximum period for completion of degree requirements. (S
of this catalog).
For the period of an educational leave the student's rights under the "Election of Regulation" rule are preserved, he or she had maintained continuous attendance.
An educational leave presupposes no expenditure of University resources or faculty and staff time in behalf of the student during the period of the leave. In addition, no computer facilities, no library privileges, and no student
services are available to a student on educational leave.

\section*{Change of Major or Other Objective}

Students declaring a major for the first time or changing another must complete and submit an approved Change of Major form. These are available in most department offices and in the Office of Admissions and Records.
Students who are candidates for a certificate or credential program must also file an application card. (Please see Election of Regulations in this section of the catalog.)
The evaluation of credits transferred to the University is
based in part upon the objective indicated on the based in part upon the objective indicated on the
application for admission. Students should be aware, therefore, that under some circumstances transfer courses accepted for one purpose may not be acceptable for other purposes. Graduation checks needing to be redone may carry a special fee.
- Graduation Check

Seniors and graduate students who expect to receive degrees at the end of any semester or summer session Credential form well in advance. The appropriate request for Spring or Summer candidates must be filed by the
preceding September 15; for Fall candidates, by the preceding February 1, at the Office of Admissions and deadines will appear in the Commencement Program published each Spring. Credential students should apply in the Credential Processing Office, located in the Graduate School of Education, or the Office of Admissions and Records by February 1 for December cor

\section*{- Graduation with Honors}

The following grade point average criteria are used to dentify undergraduate students eligible for the honors specified
(a) 3.95 to 4.00 -graduated Summa Cum Laude
(b) 3.80 through 3.94 graduated Magna Cum Laude
(c) 3.50 through 3.79 - graduated Cum Laude

An undergraduate student may be considered eligible for honors at graduation provided that a minimum of 45 units are earned at California State University, Long Beach. Fo the first baccalaureate degree the GPA will be det
from units earned at CSULB plus transferred units.
With the approval of the Dean of the College/School departments may elect to award department honors to as many as three of their graduates according to criteria othe than GPA.
University honors will be noted on the diploma and transo
only.
- Honor Lists

Undergraduate students exhibiting outstanding scholastic achievement are honored by being included on the

\section*{- President's List}

Students will be placed on the President's List to honor them for academic achievement each semester in which they complete 12 or more graded course units with a semester grade-point average of \(3.75-4.0\). A certificate will be issued for each semester in which the studen

\section*{- Deans' List}

Students will be placed on the Deans' List to honor them for academic achievement each semester in which they grade-point average of \(3.5-3.74\). A certificate will be ssued for each semester in which the student receives this honor

\section*{Scholastic Probation and Disqualification}

\section*{Academic Probation}

Undergraduate students are placed on academic probation if at any time their cumulative grade-point average in all college work attempted or their cumulative grade-point average at California State University, Long
Beach falls below 2.0 (C). Graduate students are placed on academic probation when their cumulative praced on average falls below 3.0 . Undergraduate students shall be removed from academic probation when their cumulative grade-point average in all college work attempted and their
cumulative grade-point average at California State

University, Long Beach is 2.0 (C) or higher. Students who emain on academic probation for more than two disqualification. Exceptions may be made for students actively participating in an intervention program.
Administrative-Academic Probation
An undergraduate or graduate student may be placed on Administrative-academic probation by action of appropriate campus oficialis tor any of the following reason
program of studies in two successive semesters or in a hree semesters;
(B) Repeated failure to progress toward the stated degree objective or other program objective (when such failure appears to be due to circumstances within the control of he student);
(C) Failure to comply, after due notice, with an academic requirement or regulation which is routine for all students or defined group of students (example: falure to take - Academic Disqualification

Undergraduate students on academic probation are subject to academic disqualification:
(A) As lower division students (fewer than 60 semester hours of college work completed), if they fall 15 or more grade points below a 2.0 (C) average on all units attempted Beach;
(B) As juniors ( \(60-89\) semester hours of college work completed), if they fall nine or more grade points below a 2.0 (C) average on all units attempted or on all unis
attempted at California State University, Long Beach;
(C) As seniors ( 90 or more semester hours of college (C) As seniors ( 90 or more semester hours of college
work completed), if they fall six or more grade points below work completed), if they fall six or more grade points below
a 2.0 (C) average on all units attempted or on all units attempted at California State University, Long Beach
(D) At any time, if the student remains on academic probation for more than two consecutive semesters fi.e. cumulative GPA remains below 2.0 at the end of 2 consecutive semesters).
In addition to the above disqualification standards applicable to students on probation, individuals not on probation may be disqualified when the following circumstances exist:
(A) At the end of any semester the student has fewer and;
(B) The cumulative grade point deficiency is so great that in view of the student's overall educational record it seems unlikely that the deficiency will be removed within a easonable period.
Disqualification - Impacted Programs
Students who fail to maintain an overall GPA of 2.0 will be the undeclared category (Maior Code 0000), or in a general category appropriate to the discipline. To be reinstated as majors in the impacted program, they must reapply at the ime when change of major requests are normally

Administrative-Academic Disqualification
Students who have been placed on administrativeacademic probation may be disqualified from further attendance if: probation are not met within the period specified
(B) The students become subject to academic probation
while on administrative-academic probation,
(C) The students become subject to administrative-academic probation for the same or similar eason for which they have been placed on currenty in such status.
For students who subsequently become eligible for Reinstatement (see below), disqualification under the provisions of the preceding paragraphs constitutes a break in "continuous enrollment" within a degree major program nd, therefore, students disqualified may not elect - Reinstatement

In order to be considered for reinstatement to the In order to be considered for reinstatement to the academic ability. This demonstration can be achieved by. (1) completing courses through the Extension Services and/or Summer Session programs at CSULB and earning grades that reduce the student's grade-point deficiency by one-har (see example, below); or (2) completing classes at
other academic institutions, earning grades that would, if computed with the CSULB academic record, reduce the grade-point deficiency by one-half. All classes taken, at SULB or other academic institutions, must be applicable or degree credit. Grades earned at other institutions will not reduce the CSULB grade-point deficiency or change the only indicators of academic ability.
After reducing the grade-point deficiency by one-half and/or demonstrating academic ability at other institutions (see example, below), the student may petition the Academic Appeals Committee for reinstatement. The Academic Appeals Commiltee will only consider the petition e university for at least one regular (Fall or Spring) the university for at least
semester after their dismissal.
Pettion forms are available at the Office of Admissions and Records and must be filed by December 1 for the Spring semester or August 1 for the Fall semester. Pettions received after that date will be returned to the student to be submitted for consideration for a future semester
Example: A student deficient twelve (12) grade points at the time of the disqualification must earn at least six (6) All transferable college courses completed after disqualification at all institutions are averaged to determine excess grade points earned and reinstatement eligibility. Only grades of \(A\) and \(B\) earn excess grade points. Grades of A earn two (2) excess grade points per unit of course credit; grades of \(B\) earn one (1) excess grade point per uni
of course credit. Grades of \(C\) do not earn excess grad points and do not contribute to reinstatement. Grades of \(D\) and F reduce the number of excess grade points earned by

A and B grades at the rate of one (1) grade point per unit o \(D\) and two (2) grade points per unit of \(F\).
D and two (2) grade po
A student may petition to have all grades and units received during one or two semesters of undergraduate work disregarded in the computation of grade-poin average and academic standing. The work so disregarded no work taken daken at any collegiate-level institution bu satisfactory, may apply toward baccalaureate requirements. All grades and units attempted will remain on record. least five calendar years must have elapsed since the work in question was completed and the student must hav subsequently completed 15 semester units with a 3.0 grade-point average (or 30 semester units with a 2.5 or request for disregarding the course work.
Petitions for disregarding course work must be submitte to the Office of Admissions and Records. Fina determination will be made by the Vice President for Academic Affairs in consultation with the University Academic Appeals Committee. The petitioning student must certify that the work to be disregarded was no
reflective of his or her present level of academic performance. This certification must include a statement explaining the extenuating circumstances causing the substandard performance during the term in question. The student must also provide evidence that it would be necessary to complete additional units and enroll for one of more adareate degree if the request wor qually for the
Cheating and Plagiarism

\section*{Definition of Plagiarism}

Plagiarism is defined as the act of using the ideas or work of another person or persons as if they were one's ow plagiarism if it is ascertained that the ideas were arrived at through independent reasoning or logic or where the thought or idea is common knowledge.
Acknowledgment of an original author or source must be made through appropriate references, i.e., quotation marks, but are not limited to the following the submission of work, either in part or in whole, completed by anothe failure to give credit for ideas, statements, facts o conclusions which rightfuly belong to another; in written work, failure to use quotation marks when quoting directly from another, whether it be a paragraph, a sentence, o
even a part thereof; close and lengthy paraphrasing o even a part thereof; close and lengthy paraphrasing of about the extent of acceptable paraphrasing should consult the instructor.
Students are cautioned that, in conducting their research they should prepare their notes by (a) either quoting material exactly (using quotation marks) at the time they take notes from a source; or (b) departing completely from
the language used in the source, putting the material into their own words In this way, when the material is used in the paper or project, the student can avoid plagiarism
resulting from verbatim use of notes. Both quoted and paraphrased materials must be given proper citations. paraphrased materials mus
Cheating is defined as the act of obtaining or attempting to obtain or aiding another to obtain academic credit for work by the use of any dishonest, deceptive or fraudulent means. Examples of cheating during an examination include, but are not limited to the following: copying, eithe in part or in whole, from another's test or examination
discussion of answers or ideas relating to the answers on ans examination or test unless such discussion is specifically authorized by the instructor; giving or receiving copies of an examination without the permission of the instructor; using or displaying notes, "cheat sheets," or other information o devices inappropriate to the prescribed test conditions, as when the test of competence includes a test of unassisted other than the officially enrolled student to represent the same. Also included are plagiarism as defined and altering or interfering with the grading procedures.
It is often appropriate for students to study together or to work in teams on projects. However, such students should be careful to avoid the use of unauthorized assistance, and sitting apart from one another in examinations, presenting the work in a manner which clearly indicates the effort of each individual, or such other method as is appropriate to the particular course
- Faculty Responsibilities

In cases where a student is suspected of cheating o plagiarism, the faculty member should arrange for an possible. The purpose of the informal conference is to bring the persons involved together to discuss the issue informally and to discuss courses of action. At the conference the student shall be notified by the faculty member of the charge and supporting evidence. For a examination, see below for administration of an Incomplete examin
grade.
In cases where there is more than one individua suspected of cheating or plagiarism, the faculy member may decide to call the students to confer jointly as a group or as individuals, or both. If the faculty member should decide to confer with the students as a group, the students will have the option to also confer with the instructo separately as individuals
students and facmber wave the right to submit a that both the Academic Integrity Committee (discussed below) for written opinion on whether the accusation is supported by the evidence. All notes and discussions between the student and the faculty member are confidential, except as may be relevant to the Academic Integrity Committee or in
subsequent campus disciplinary proceedings. Neither the subsequent campus disciplinary proceedings. Neither the charge of cheating or plagiarism or any violations with reference to Individuals in the classroom before othe members of the class.

When the student cannot be contacted and therefore the informal conference cannot be held, as is sometimes the case after final examinations, a grade of "II" (Incomplete) additional test of competence (see 4.1, above). The instructor will have the agreement form for assigning an "Incomplete" sent to the last known address of the student. The agreement form will state the following in the forma indcated,
Under the provisions of the CSULB Policy Statement on Cheating and Plagiarism, an additional test of competency related to the (syllabus name of suspect demonstration e.g., Final Examination) is requested. (Explain what Pase competency.) You may decline to do so Please contact the instructor, the department office, or the University policy on cheating and plagiarism.
The instructor will indicate on the agreement form the grade which will be assigned, normally 120 calendar day following mailing of the Incomplete Agreement, if the student does not respond or, responding, the student does not agree to an additional test of competence. Charges of cheating or plagiarism cannot be brough against a student more than 120 calendar days atte plagiarized or that cheating may have taken place.
Notes and evidence will be kept by the department chal or program director for a minimum of five years after the case is settled.
- Academic Integrity Committee

The Chair of the Academic Senate and the Vice Presiden for Academic Affairs jointly appoint an Academic Integrity one member from the student body chosen by the Associated Students Government for a one year term of office; three members of the full-time, tenured of enure-track faculty, and one member of the Office o Academic Affairs, who will be Chair, voting only in case o ties.
The primary charge of the Committee is to receive the requests of students accused of cheating or plagiarism of
the requests of faculty accusing specified student(s) of cheating or plagiarism. Following its review of the evidence, the Committee will report its opinion to the student(s) and to the faculty member involved on whether the accusation is supported by the evidence. This opinion may not be appealed. However, when new evidence appears to so warrant, a faculty member or student may ask, in writing,
the Vice President for Academic Affairs or the Chair of the Academic Senate to request the Committee to reconsider case.
The Academic Integrity Committee has readily available the rules and procedures governing its operations
In all cases, a Report of the Committee is advisory to the tudent, with whom rests the presumption of innocence and the faculty member, to whom the decision on the A foculty member or sudent who reques
evidence in a case of alleged cheating or plagiarism mus make such a request to the Academic Integrity Committee
writing no later than 14 calendar days following the date of first notification of the student by the faculty member of the allegation. Except under extenuating circumstances, the student and faculty member will have no more than 14 additional calendar days to provide evidence to the Committee
To preserve the rights of privacy, the Committee meetings are closed. The Committee may request additional Report. The Committee is to provide a final Report within 21 calendar days of the submission of a request to it. Should addilional time be required, the reasons are communicated to the Vice President for Academic Affairs and the Chair of the Academic Senate as well as the student(s) and faculty - Academic Actions

One or more of the following academic actions are available to the faculty member who finds a student has been cheating or plagiarizing. These options may be taken by the faculty member to the extent that the faculy member considers the cheating or plagiarism to manifest the student's lack of scholarship or to reflect on the student's lack of academic performance in the course. These actions a Report from the Academic Integrity Committee.
(A) Review - no action;
(B) An oral reprimand with emphasis on counseling toward prevention of further occurrences;
(C) A requirement that the work be repeated;
(D) Assignment of a score of zero (0) for the specific demonstration of competence, resulting in the proportional reduction of final course grade;
(E) Assignment of a failing final grade
(F) Referral to the Office of Judicial Affairs for possible probation, suspension, or expulsion.
A student may appeal a final course grade the computation of which included an examination or other test of competence in which a score of zero was assigned for cheating or plagiarism, but only on the grounds permitted in the University Policy Statement on Grade Appeals.
An appeal of the final grade may include as written testimony the Report of the Academic Integrity Committee.

\section*{Policy for a Smoke-Free Campus Environment}

California State University, Long Beach has a safe working and learning environment Given the fact tha smoking is the most significant cause of premature and preventable death in the United States today, California State University, Long Beach is declared to be a smoke-free' campus in accordance with the Governor' Executive Order D-62-87, Government Code Section 19262.

This 'smoke-free' policy shall apply to all state-owned and University operated facilities regardless of location. This policy does not include public performances in which smoking is an integral and necessary part of those performances. Smoking is prohibited in all indoor areas including but not limited to: administrative offices, private
offices, laboratories, classrooms, conference rooms,
auditoria, lounges, theatres, lobbies, halways, stairwells, restrooms, libraries, clinics, waiting rooms, reception area service to indoor be designated and posted
For those employees and students who wish to stop smoking, California State University, Long beach shal cessation programs. The Employee Assistance Program at the Student Healin Center may be contacted for information and assistance. The Employee Assistance Coordinato may be reached by calling (310) 985-4771

\section*{Student Discipline}

Inappropriate conduct by students or by applicants for admission is subject to discipline as provided in Section 41301 through 41304 of Title 5, California Code se sections are as follows

\section*{Article 1.1, Title 5, California Code of Regulations
41301. Expulsion, Suspension and Probation of}

Following procedures consonant with due proces established pursuant to Section 41304 , any student of campus may be expelled, suspended, placed on probatio or given a lesser sanction for one or more (a) Cheating or plagiarism
(a) Cheating or plagiarism in connection with an
(b) Forgery, alteration or misuse of campus documents, records, or identification or knowingly furnishing fals information to a campus;
(c) Misrepresentation of oneself or of an organization to be an agent of a campus;
(d) Obstruction or disruption, on or off university property of the campus educational process, administrative process, (e) Physical abuse
person or property of or off campus property of the community or of members of his or her family or the threat of such physical abuse,
(f) Theft of, or non-accidental damage to, campu property; or property in the possession of, or owned by, member of the campus community
(g) Unauthorized entry into, unauthorized use of, of (h) On campus property
of dangerous drugs, restricted the sale or knowing possession narcotics as those terms are used in California statutes except when lawfully prescribed pursuant to medical o dental care, or when lawtully permitted for the purpose research, instruction or analysis
(i) Knowing possession or use of explosives, dangerous campus function without prior authorization of the campus president;
(1) Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function,
(k) Abusive behavior directed toward, or hazing of, a member of the campus community;
(l) Violation of any order of a campus president, notice of
which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, an which order is not inconsistent with any of the other provisions of this Section;
(m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or (n) For purposes of this Article, the following terms are defined:
(1) The term "member of the campus community" is defined as meaning California State University Trustees academic, nonacademic and administrative personnel on campus property or at a campus function;
(2) The term "campus property" includes: (A) real or personal property in the possession of, or under the contro of the Board of Trustees of The California State University and (B) all campus feeding, retail, or residence facilitie whether operated by a campus or by a campus auxiliar organization.
(3) The term "deadly weapons" includes any instrument sling shot, billy sand commonly known as a blackjack dirk, dagger, switchblade knife, pistol, revolver, or any othe firearm, any knife having a blade longer than five inches any razor with an unguarded blade, and any metal pipe of bar used or intended to be used as a club
(4) The term "behavior" includes conduct and expression a student organization or any pastime or amusemen engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical o emotional harm, to any member of the campus community but the term "hazing" does not include customary athletic events or other similar contests or competitions.
(o) This Section is not adopted pursuant to Education (p) Notwithstanding
(p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is
amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immediately prior to such effective date.

\section*{41302. Disposition of Fees; Campus Emergency
Interim Suspension}

The President of the campus may place on probation suspend or expel students for one or more of the cause such students for the semester, quarter, or summer in which they are suspended or expelled shall be refunded. It the students are readmitted before the close of the quarter or summer session in which they are suspended, no additional tuit

\section*{suspension}

During periods of campus emergency, as determined by the President of the individual campus, the President may
atter consultation with the Chancellor, place into immediate effect emergency regulations, procedures, or measures
deemed necessary or appropriate to meet the emergency o safeguard persons and property, and to maintain The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim the opportunity for a hearing within ten days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prio written permission of the President or designated epresentative, enter any campus of The California State University other than to attend the hearing. Violation of any expulsion.
41303. Conduct by Applicants for Admission

Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified of denied to any persons who, while not enrolled as students commit acts which, were they enrolled as students, would be the basis for disciplinary proceedings pursuant to
Sections 41301 or 41302 . Admission or readmission may be qualified or denied to any persons who, while students, commit acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

\section*{41304. Student Disciplinary Procedures for The
California State University}

The Chancellor shall prescribe, and may from to time revise, a code of student disciplinary procedures for The California State University. Subject to other applicable law this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302 , and for qualified authority of the campus President in such matters authority of the campus President in such matters;
conduct-related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a Hearing Officer; time imitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The Chancell
port to the Board actions taken under this section. the current University regulation on alcoholic beverages is Handbook published by the Office of Student Affairs.
Additional detailed information relating to student discipline is available in the Office of Student Affairs, and om the Office of the Vice President for Student Services

\section*{Administrative Action}

Procedures and sanctions of the Office of Judicial Affairs are under the administration of the Vice President for Student Services and are conducted pursuant to the
authority provided in Section 41301 of Title 5 of the authority provided in Section 41301 of Title 5 of the
California Code of Regulations. Copies of Section 41301 o Title 5 may be found in the University Bulletin and the

Campus Regulations available in the Office of Judicial Affairs. Copies of Chancellor's Executive Order 148, "Student Disciplinary Procedures for the California State University" are also available upon request.
Opportunities for appeal regarding the sanctions applied y the Vice President for Student Services are provided for students involved in the proceedings as outlined by xecutive Order 148.
The Vice President for Student Services shall report annualy to the President and the Chair of the Academic plagiarism brought before the Office of Judicial Affairs.

\section*{Judicial Affairs}
(East Library, Room 107)
The Office of Judicial Affairs provides assistance with the interpretation and enforcement of campus regulations. Complete copies of the CSULB Policies, Information and
Regulations Handbook, including a listing of infractions Regulations Handbook, including a listing of infractions Section 41301, of the California Code of Regulations, "Probation, Suspension and Expulsion of Students," are available in this office; also available are copies of Executive Order 148, "Student Disciplinary Procedures for The California State University." General assistance and aid in directing indiel may be obtained in this office.
Alleged violations are investigated primarily through informal office conferences with the involved students. The conferences which are held as a result of impending disciplinary action are: (1) to clarify the referral, the charges or the circumstances involved; (2) to prevent the incidence of, or further occurrences of violations; and (3) to educate consequences as a result of committing a violation. Discussion is centered on the cause/effect relationship of various courses of action and, when possible, alternate paths or solutions are explored.

\section*{The Federal Drug-Free Schools and Communities Act} Each student and employee of California State University, -ong Beach needs to be aware of the requirements of the new Drug-Free Schools and Communities Act Amendments notification to each student and employee of campus standards of conduct regarding the use of alcohol and ilicit drugs, the legal sanctions which apply, possible health isks, and available counseling and assistance programs. This law, like others the federal government has passed in the last two decades, is tied to eligibility for federal financial assistance. Thus, because California State University, Long guranteed student loans" the law applies to the University and we must comply with its provisions. Under PL 101-226 the Secretary of Education can terminate federal funding for ailure to comply and the University has the burden of appealing that decision to an administrative law judge. The ffective October 1, 1990
Any questions regarding this law should be directed to the Director of Student Administrative Services at 985-5587.

California State University, Long Beach is dedicated to the elimination of the use of illicit drugs and alcohol abuse. The University makes every effort to create an environment that promotes and reinforces good health. This includes responsible living, respect for community and campus standards and regulations, individual responsibility within
the community, and the intellectual, social, emotional ethical, and physical well being of all members of the campus community. To facilitate this process, the University provides a Student Assistance Program and an Employee Assistance Program
California State University, Long Beach complies with the requirements of the Drug Free Schools and Commun

The annual distribution in writing to each student
egardless of the length
a. standards of conduct that clearly prohibit, at a
minimum, the unlawful possession, use, or
distribution of illicit drugs and alcohol by students
nd employees on its property or as part of any of s activities;
inder local. State, or Federal law for the unlawful possession or distribution of illicit drugs and
alcohol;
. a description of the health risks associated with he use of illicit drugs and the abuse of alcohol;
and,
d. a clear statement that the institution will impose disciplinary sanctions on students and employees
(consistent with local, State and Federal law), and a description of those sanctions, up to and including expulsion or termination of employment and referral or prosecution, for violations of the standards of onduct. A discip inay sanclion may include th completion
Conducting a biennial review of the campus drug and alcohol abuse prevention program to
a. determine its effectiveness and implement
changes to the program if they are needed; and
b. ensure that its disciplinary sanctions are
consistently enforced.
The review is conducted by a panel consisting of the Provost and Senior Vice-President for Academic Affars of
designee, the Vice- President for Student Services, or designee, the Vice- President for Student Services, or
designee, the Vice-President for Administration and Finance, or designee, the Chair of the Academic Senate, or designee, the President of the Associated Students, or designee, and the Chair of the Academic Senate Student Affairs committee or designee
The review is conducted during the month of October in 1992. The report of the review panel is submitted to the President by December 1 following the October review period.
The following are members of the review panel recommended by the Academic Senate Committee on Committees for approval by the Academic Senate: a
member from the University Counseling Center, a full-time permanent or probationary staff member, an Associated Students Senator, and a member from the Student Health Center.

\section*{Campus Standards of Conduc}

Both productivity at work and the learning process are
significantly impaired by alcohol abuse and the use of significantly impaired by alcohol abuse and the use of illic drugs. Substance abuse among college students inhibit their educational development and is of serious nationwid Californ
Climination State University, Long Beach is dedicated to the elimination of the use of illicit drugs and alcohol abuse. The University is making every effort to create an environmen that promotes and reinforces good health. This include responsible living, respect for community and campus standards and regulations, individual responsibility within ethical, and physical well-being of all members of the campus community.
On campus property, the solicitation, sale, use or knowing possession of dangerous drugs, restricted dangerou drugs, or narcotics, as those terms are used in California statutes, are prohibited
Consumption of alcohol is prohibited in individual offices
classrooms, laboratories, or classrooms, laboratories, or generally accessible public or Information regarding campus policies consumption of alcohol may be obtained by calling the Office of Student Life and Development at 985-8668.
Pursuant to Titte 5 of the California Code of Regulations violations by students of the above regulations, when campus related, may, after due process, result in the student being placed on probation, being suspended, or
being expelled. Additionally, violations of laws committed on campus property, or at a campus event, will also be subject to referral and prosecution through off-campus authorities. Penalties by enforcement agencies fo violations of the law may include imprisonment, fines, o both; these are in addition to any administrative sanctions mposed by the University
More detailed descriptions of student regulations concerning drugs, or alcohol, may be found elsewhere in
the CSULB Bulletin, or in the Resident Hall Calendar and Handbook, or the Regulations for Campus Activities, Organizations and the University Community.
Pursuant to Education Code Section 89535, employees may be disciplined, up to and including termination, for the ollowing causes:
of drugs. of drugs
2.Appearing for work impaired by the use of alcohol and/or controlled substances.
.Adiction to the use of controlled substances.
More detailed descriptions of employee regulations concerning drugs, or alcohol, may be found in the Faculty and Staff Handbooks.

\section*{Don't Put Your Health at Ris}

To become dependent upon chemicals such as illicit drugs and/or alcohol is to put your health at risk. Chemica
dependency is a condition in which the use of mood altering substances such as drugs or alcohol is associated with problems in any area of life on a more or less continuing basis.
One does not, however, have to be addicted or chemically dependent to suffer health risks from the use of ilicit drugs or alcohol.
Alcohol and ilicit drugs (in all the many forms) may, and
often do, impair physical coordination and otten do, impair physical coordination and judgement
diminish control over impulsive behavior, and cause many short and long term health consequences.
Alcohol-related illnesses now represent the third leading cause of death in the United States exceeded only by cancer and heart disease, and medical research has established very strong evidence that alcohol abuse contributes significantly to cancer and heart disease. There 0 use of illicit drugs and alcohol by the mother during pregnancy.

\section*{If You Have a Problem, We Want to Help}

The California State University, Long Beach Health Center offers substance abuse programs for students, faculty and staff. These include: a Student Assistance Program for students; and Employee Assistance Program for faculty and staff; and an Athletic Assistance Program for student esting and eligibility requirements and conference affiliation rules for competition).
An experienced and specially trained therapist under the supervision of the Medical Director serves as the coordinator and counselor for these programs, and medica doctors, other heath professionals, and counseling with the Health Center and professional personel are confidential.
The California State University, Long Beach Health Center located at the corner of State University Drive and Merriam Drive. The telephone number is 985-477

\section*{RIGHTS AND RESPONSIBILITIES}

INDIVIDUALS AT CALIFORNIA STATE UNIVERSITY, ONG BEACH HAVE THE LEGAL RIGHT TO EXPECT THAT THEIR EXPERIENCE ON CAMPUS IS FREE FROM ANY KIND OF UNLAWFUL DISCRIMINATION BASED UPON
THEIR RACE, COLOR, NATIONAL ORIGIN REUGION AGE, GENDER, SEXUAL PREFERENCE, MARTTAL STATUS, PREGNANCY, DISABILITY, OR VETERAN'S STATUS. THIS LEGAL RIGHT EXTENDS TO STUDENTS, EMPLOYEES, AND MEMBERS OF THE PUBLIC
AS A STUDENT AT CSULB YOU HAVE THE RIGHT TO ARTICIPATE IN ALL PROGRAMS AND ACTIVITIES AT THE UNIVERSITY WITHOUT BEING SUBJECTED TO
UNLAWFUL DISCRIMINATION AS A STUDENT YOU HAVE THE RESPONSIBILTTY TO RECOGNIZE THAT YOUR FELLOW STUDENTS, EMPLOYEES OF THE UNIVERSITY, AND MEMBERS OF THE PUBLIC ON OUR CAMPUS HAVE HE SAME RIGHTS

THE UNIVERSITY VALUES DIVERSITY AND STRIVES TO CREATE AN ENVIRONMENT THAT FOSTERS MUTUAL ISCRIMINATION BASED ON RACE ETHNICITY SEX RELIGION, SEXUAL PREFERENCE, DISABILTY, AND
ondiscrimination policies.

\section*{EDUCATIONAL PROGRAMS AND ACTVITIES}

SEX: The California State University does not discriminate on the basis of sex in educational programs and activities conducted by the University. Discrimination on the basis of law. Titte IX of the Educational Amendments of 1972, as amended, and the administrative regulations adopted by ederal agencies under Title IX prohibit discrimination in SULB programs and activities including admission of students, provision of services and benefits, and employment. The Director, Affirmative Action has have questions regarding Titte IX and forms of prohibited discrimination on the basis of gender you may contact the
Iffice of Affirmative Action SS/AD 303, (310) 985-4128 Office of Affirmative Action SS/AD 303, (310) \(985-4128\). You may also contact the Regional Civil Rights Director, United States Depil 50 Nited Nations Plazi Room ederal Office Building, 50 United
DISABIUTY/HANDICAP: The California State University does not discriminate on the basis of handicap in ducational programs and activities conducted by the University. This includes admission or access to programs and activities, provision of services and benefits, and mployment. The Rehabilitation Act of 1973, Sections 503 and 504, and the Americans with Disabilities Act of 1990 egulations adopted by federal agencies providing federal nancial assistance to the University.
The Vice President for Student Services is the CSULB Coordinator for Section 504 of the Rehabilitation Act of 973.

If you have questions regarding Section 504, forms of reasonable accommodation and/or prohibited discrimination on the basis of disability/handicap you may 85-5587. You may also contact the Regional Civil Rights Director, United States Department of Education, Region IX, Ild Federal Office Building, 50 United Nations Plaza, Room 39, San Francisco, California 94102
RACE, COLOR, NATIONAL ORIGIN: The California State University does not discriminate on the basis of race, color, VI of the Civil Rights Act of 1964 as amended by the Civil Rights Act of 1987. No person shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination any program or activity of the University nor shall the University tolerate employment discrimination that may ause ols If you have questions regarding Title VI and orms of prohibited discrimination on the basis of race, color, and/or national origin you may contact the Division of

Student Services, SS/AD 377 (310) 985-5587, or the Office of Affirmative Action. You may also contact the Regiona Education, Region IX, Old Federal Office Building, 50 United Nations Plaza, Room 239, San Francisco, California 94102 . If you feel you have been subjected to racial harassment on the part of an employee of the University Affirmative Action, SS/AD 303, (310) 985-4128.
AGE, MARITAL STATUS, RELGION, ETHNIC GROUP IDENTIFICATION, SEXUAL PREFERENCE: The California State University does not discriminate on the basis of age, marital status, religion, ethnic group identification or sexual preference. Iyou have questions regarding forms prohibited discrimation on the basis of age, martal status, you may contact the Division of Student Services, SS/AD 377, (310) 985-5587
EMPLOYMENT
The California State University does not discriminate in employment on the basis of sex, race, color, national origin, ethnic group identification, age, marital status, ,eligion, Harassment on the basis of sex race, religious creed ancestry, national origin, marital status, and physical handicap is expressly forbidden in the California public employment law. If you have questions regarding prohibited forms of discrimination you may contact the Office Affirmative Action, SS/AD 303, (310) 985-4128.
SEXUAL HARASSMENI
Sexual harassment is a form of unlawful sex of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and California law. It is the policy of the Calfornia State University that all employees and students have the right to work and learn in an environment free from unlawful discrimination. This includes freedom from sexual harassment--unwelcome and unwanted sexual
attention. California State University prohibits sexual attention. California State University prohibits sex
harassment of its employees and students in any form.
Sexually harassing conduct by supervisors
non-supervisory employees, or faculty members, whether physical, verbal,or visual, is prohibited. Sexually harassing conduct includes repeated offensive sexual flirtation, advances, propositions, continued or repeated abuse of a sexual nature, sexually oriented humor, graphic verbal display in the work place or learning environment of sexually degrading objects or pictures, sexually threatening behavior, and any undesirable physical contact.
Sexual harassment is a violation of a person's privacy and dignity. It can create a hostile and intimidating work or learning environment. It is illegal. Overwhelmingly, victims of sexual harassment are women, however, men may be harassment also occurs.
For students, sexual harassment occurs when it indicated, explicitly or implicity, that sexual interactions will have an effect on grades, performance evaluations, letters of recommendation, customary referrals or references.

Sexual harassment can also be gender-related verbal or physical conduct that interferes with a student's academic or work performance or creates an intimidating, hostile, offensive
environment.
All employees, faculty and staff, have an ethical as well a legal responsibility to interact with students in a manner free from all forms of unlawful discrimination including refraining right to work in an environment free from unlawtul discriminatory behavior, including the right to work in an environment free from sexual harassment.
No supervisor shall threaten, or insinuate either explicity or implicitly, that any employee's submission to or rejection of sexual activities will in any way influence personne decisions regarding the employee's employment, condition of employment or career development.
The University has established a formal and informa procedure to deal with sexual harassment complaints. ersons raising complaints of unlawful sexual harassmen are protected from retaliatory actions or reprisals by state and federal law. Retaliation or reprisal against a ehavior. Such conduct may result in disciplinary action up to and including dismissal or disenrollment.

\section*{MYTHS ABOUT SEXUAL HARASSMENT}

MYTH: Sexual harassment only happens to women FACT
FACT: Sexual harassment can happen to anyone, no matter how she/he dresses.
wuld have stopped had only said ' \(N\) ' to the harasser, would have stopped immediately
FACT: Many harassers are told 'NO" repeatedly and ard as YES.
MYTH: If a person ignores sexual harassment, it will go away.

ACT: No, it won't. Generally, the harasser is a repea offender who will not stop on his/her own. Ignoring it may be seen as assent or encouragement.
MYTH: All men are harassers
FACT: No, only a few men harass. Usually there is pattern of harassment: one man harasses a number omen either sequentially or simultaneously, or both
who object have norassment is harmiess. Women or me FACT: Harassment is of humiliating
undermines University careers and often threatens economic livelihood. No one should have to endure humiliation with a smile.
MYTH: Sexual harassment affects only a few people fll furveys on campus show that up to 30 percent o armale college students experience some form of sexual harassment. Some surveys of women in the working worl have shown that as many as 70 percent have been sexual harassed in some way
Associaition of American Collopes, 1818 R Stroet, NW, Wasthington, DC 20009


\section*{WHAT SHOULD YOU NOT DO}

Don't blame yourself. Sexual harassment is no something that a person brings on one's self; it is actio that the harasser decides to take. It is not your faut
Blaming yourself only turns your anger inward and can lead o depression. You need to turn your anger outward against the appropriate person: the harasser
Don't delay If you delay action when someone harasses you, it is likely to continue. Also, if you intend to file charge against someone and put off doing so for a long time, you may find out that you have missed the time limit for doin so.
Don't keep it to yourself. By being quiet about sexual harassment, you enable it to continue. Chances are extremely good that you are not the only victim. Speaking up can prevent other people from also becoming victims. Additionally, not telling anyone encourages feelings of helplessness and can also lead to blaming yourself for the incident

\section*{WHAT SHOULD YOU DO?}

Do discuss the incident with a friend, colleague Do seek informal member whom you trust,
here are persons on campus who can assistance, and information
Students may contact the Director, Student Life and Development, located in the Dean's office of ever school/college, the Senior Director, Student Life and Development (USU 212, Ext. 4181); the Women's Resourc Center (LA3-105, Ext. 5466); the Office of Judicial Affairs LBe 106, Ext. Ext. 5270).
Employees may contact their union representative, their supervisor (ff appropriate), the Women's Resource Center, Do mate Alirmative Action.
All formal complaints by a student against another studen should be addressed to the Vice President of Studen Services, SS/AD 377. (310) 985-5587
All formal complaints by an employee or by a studen against an employee should be addressed to the Directo Do consider external remedies.
If you do not wish to make use of University procedures
II you do not wish to make use of University procedures,
or if you are not satisfied with decisions made by the University, you may exercise other options including:
- Utilizing the Collective Bargaining Grievance Procedure
- Filing a complaint with the US Equal Employmen Fair Employment and Housing
- Filing a civil suit
- Contacting the Office of Civil Rights, US Department o Education (or any other federal agency providing financial assistance to the University)
Contacting the California Commission on the Status of Women
 Programs, US Department of Labor

\section*{Policy on Sexual Assau}

Students, faculty, and staff who are victims of sexua assault committed at or upon the grounds of the University or upon off-campus grounds or facilites maintained by advised of specified information, to include treatment which nay be avalable California Education Code, Section 67385; California Assembly Concurrent Resolution 46 (1987]. This policy is designed to provide the written rocedures and information required
Rape is the most prevalent, serious violent crime
 not be tolerated by California State University, Long Beach Where there is evidence that campus-related sexua assault has been committed, severe campus disciplinay action will be initiated. Such campus disciplinary actio may include, after due process, the possibility of dismissa initiates criminal action, the perpetrator is subject to crimina penalties which may include fines and imprisonment.
SEXUAL ASSAUL
The term 'sexual assault' includes, but is not limited to ape, acquaintance rape, sexual battery, forced sodomy orced oral copulation, rape by a forigy object, or treat exual assalt Callo \(7385(\mathrm{~d})\)
Rape is a criminal offense. "Rape" is defined as or threat of force, viol intercourse. It may involve the use njury. Rape also occurs when the victim is incapable o ging legal consent, for example, when: a) the vicim has mental disorder, or is developmentally or physically disabled; or b) the victim is prevented from resisting the drugs); or c) the victim is unconscious of the nature of the act and this is known to the accused (Reference: California Penal Code, Section 261, and the following sections)
'Acquaintance Rape is forced sexual intercourse indertaken by someone the victim knows, against the will he victim or as a result of threats, force or fear. It ortimated that \(50-70 \%\)
"Sexual Battery" is defined as the touching of an intimate part of another person, if the touching is against the will of he person touched, for the purpose of sexual arousal exual gratification, or sexual abuse (heference. Callornia enal Code, Section 243.4).
"Assault with intent to commit a sexual battery" is defined an unlawful attempt, coupled with the present ability, to commit a violent injury (e.g. rape) on the person of anothe and following sections).
"Consent' is defined as positive cooperation in an act or attitude pursuant to an exercise of free will. The person must act freely and voluntarly and have knowledge of the nature of the adt or tansadion 200(C). Califonia Penal Code Section 261 6: 266 (c)

Unlawful Sexual Intercourse* is an act of sexual intercourse accomplished with a female not the wife of the perpetrator where the female is under the age of 18 years (California Penal Code, Section 261.5).
Any person who wilfully and lewdly commits any lewd or lascivious act upon or with a child under the age of 14 years wexual intent of arousing, appealing to or gratifying the sexual desires or passions of either the child or defendant is previous sentence with a person 14 or 15 years old, and the defendant is at least 10 years older than the child is guilty of a public offense (California Penal Code, Section 288). An person who intentionally persuades, induces, provides makes available to another a child under age 16 for lewd o lascivious acts is guilty of a felony, punishable by fine and
imprisonment [California Penal Code, Section \(266(i)\). Every person who annoys or molests any child under the age of 18 is punishable by fine and imprisonment (Calif. Pena Code, Section 647.6).

\section*{UNIVERSITY JURISDICTIO}

California State University, Long Beach views seriously obligation to uphold the laws of the larger community which it is a part. An association with the University does other imprese the additional obligation to abide by all the rules and regulations of the California State University,
A student charged with a sexual abuse violation which campus-related may be subject to prosecution under appropriate California criminal statutes, as well as being subject to student discipline under the Student Disciplinary Procedures for the California State University (Reference Procedures for the California State University": and Titte V California Code of Regulations, Section 41301-41304, "Student Discipline")
Employees charged with a sexual abuse violation which is campus related may be subject to prosecution under appropriate California criminal statutes, as well as bein subject to discipline under the Callomia Educalion Code employees may include demotion, suspension or dismissal.

\section*{CAMPUS REPORTING PROCEDURES}

Persons involved in, or possessing knowledge of a campus-related abuse violation are strongly encouraged to notity Public Safety immediately. Public Safety may be notified using the emergency number from a camp
telephone at \(9-1-1\), or may be called at ( 310 ) \(985-4101\).
Upon calling Public Safety an officer will be immediate dispatched. The officer will ensure, where indicated, that victim of sexual assault is promptly transported to a medic facility for medical care and collection of evidence. Should officer will remain with the victim until a friend or relative can be located. When requested, a female officer trained prevention of sexually related violations will be available.
With the consent of the victim, Public Safety may contact one or more or the following by telephone, memorandum or both. Atrernatively, the viclim may contact direlly be contacted
1) Associate Vice-President for Student Services
(310) \(985-5587:\) SS
)
2) Director, University Counseling Center
(310) \(985-4001 ;\) SS/AD 226
3) Director, Student Health Center

Director Staff Personnel Services
4) Director, Staff Personnel Service
(310) \(985-4031 ;\) SS/AD 335
5) Director, Affirmative Action
(310) \(985-4128 ;\) SS/AD 300
6) Senior Director, Judicial Affairs
(310)
\(985-5270\); East Library 10
7) Director, Women's Resource Center
(310) \(985-8575\) : LA3-105
(310) 985-8575; LA3-105

The respective units or persons contacted shall be responsible for reports, as may be required by law, to be filed for their respective unit, e.g., violations under the 'Child Abuse Reporting Law
The following are among the options available to a victim more than one option may be exercised by the victim

Criminal Prosecution: Public Safety
(310) 985-4101
Emergency: \(9-1-1\)
2) Civil Action:Consult an attorney.
3) University Disciplinary Process, where accused is:
a) Faculty, or Staff, Employee Relations

Administrator (310) 985-4128; SS/AD 300
b) Student. Senior Director, Judicial Affairs (310) 985-5270; East Library 10
4) Alternative Campus Housing Assignments:
5) Acal
5) Academic Assistance:
a) University Counseling Center
(310) \(985-4001 ;\) SS/AD 226
b) Women's Resource Center
d) Academic Advisia-
c) Academic Advising Center
(310) \(985-4837\); East Library 109

In the event there are requests for information from the press, concerned students, parents, and others, prudence shall be exercised, and when required by law, confidentiality shall be maintained. When appropriate, only the Department Director (for matters strictly within the Director's purview), or the University Director of Public Affairs (for Victims are advised , shall respond
dentify both the victim and the assailant in the course to investigation and hearings under University student disciplinary proceedings, as well as under employee disciplinary proceedings, or criminal prosecutions. In the case of student disciplinary actions against an assailant, the Judicial Affairs of the status of the proceedings, and the general terms of the disposition.

\section*{SUPPORT SERVICES}

Sexual assault violations often result in physical harm, psychological harm, or both. Even if the victim decides not
to report the incident to authorities, it is urged that the victim seek medical and counseling assistance for potentia diseases.
* * The University Counseling Center provides crisis
counseling as well as ongoing assistance to students who counseling as well as ongoing assistance to students who have experienced sexual assault; (310) 985-4001
* * The University Student Health Center offers routine medical examinations, including pregnancy tests and tests
for sexually transmitted diseases; \((310) 985-4771\) or sexualy transmitted diseases; (310) 985-4771,
video tapes, books, and brochures for both men and women, and referrals to community services are also provided; (310) 985-5466.
Additionally, referrals may be made to the Rape Crisis Hotline - Long Beach area (310) 597-2002; or (310) 33-1287 of the Sexual Assault Crisis Agency, which offers hotline
a) The Rape Crisis Hotline - South Bay area
(310) \(545-2111\) :
b) The Rape Crisis Hotline - Orange County
c) Rape Treatment Center - Santa Monica Hospital
(310) \(319-4000\);
d) The Victim Witness Assistance Hotine,
(714) \(957-2737\).

Also, the University Counseling Center, and the University Career Development Center maintain lists of referrals within the community which deal with the issues of rape and sexual assault crisis, including legal, medical, and therapeutic support services. The phone number for the Development Center can be reached at (310) 985-4152.

\section*{VICTIMS OF VIOLENT CRIME STATUTE}

A person who has sustained physical injury as a direct A person who has sustained physical injury as a direct
esult of a crime of violence, or is legally dependent for support upon a person who has sustained physical injury or death as a direct result of a crime of violence, (or, in the event of a death caused by a crime of violence, has legally assumed or voluntarily paid the medical or burial expenses ncurred as a direct result thereof) may qualify for indemnification by the State of California for the incurred as a result of the crime (California Government Code, Section 13959, et. sea.). Claims must be filed with the State Board of Control for the State of California. The Statute provides that, absent certain extenuating circumstances, a claimant has one year from the date of the For further information regarding this program, contact:
Jerry Prieto, Sergeant
Technical Services Division
Department of Public Safety
California State University, Long Beach
1331 Palo Verde Avenue
Long Beach, California 90840
OR

Victims of Violent Crime Program
State Board of Control
State Office Bldg. No. 1, Rm. 102
Sacramento, California 95814

\section*{Privacy Rights of Students in Education Records}

The federal Family Educational Rights and Privacy Act of 1974 ( 20 U.S.C. 1232 g ) and regulations adopted hereunder (34 C.F.R. 99) and California Education Code Section 67100 et seq., set out requirements designed to
protect the privacy of students concerning their records protect the privacy of students concerning theirate and egulations govern access to student records maintained by e campus, and the release of such records. In brief, the law provides that the campus must provide students access tunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise nappropriate. The right to a hearing under the law does not clude any right to challenge the appropriateness of a rade as determined by the instructor. The law generaly equires that written consent of the student be received belore releasing personally identiriable data about exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes policies and procedures may be obtained at the Office of Admissions and Records or the Office of Judicial Affairs. Among the types of information included in the campus tatement of policies and procedures are: (1) the types of student records and the information contained therein; (2) ecord; (3) the location of access lists which indicate persons requesting or receiving information from the ecord; (4) policies for reviewing and expunging records; (5) the access rights of students; (6) the procedures for hallenging the content of student records; ( \()\) the cost which will be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the been established by the Department to investigate and adjudicate violations and complaints. The office designated for this purpose is: The Family Educational Rights and rivacy Act Office (FERPA), U.S. Department of Education, 330 "C" Street, Room 4511, Washington, D.C. 20202. The campus is authorized under the Act to release
directory information" concerning students. "Directory information" includes the student's name, address, telephone listing, date and place of birth, major field of
study, participation in officially recognized activities and study, participals, weight and height of members of athletic ter dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. Currently, CSULB offices may release only the following types of information: name, received. The Director of Athletics may, in addition, provide information concerning participation of students in athletic events, including the height and weight of athletes. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specitying information
which the student requests not be be released. Written objections should be sent to the Director of Admissions and Records.
The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons are those who have responsibilities in connection with the campus's academic, administrative, or servico connected with their campus or other related academic responsibilities. Disclosure may also be made to other persons or organizations under certain conditions (e.g., as part of accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid

\section*{Career Placement Information}

The Office of Career Planning and Placement may furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or

\section*{Use of Social Security Number}

Applicants are required to include their Social Security account number in designated places on applications for admission pursuant to the authority contained in Title 5 , California Code of Regulations, Section 41201. The Social Security account number is used as a means of identitying records pertaining to the student as well as identifying the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other
debts payable to the institution. If the applicant does not have a Social Security account number, an identification number will be assigned.



Baccalaureate Degrees, Other Undergraduate Programs, and General Education

Degrees
The Bachelor of Arts and the Bachelor of Science degree programs are constructed of three interrelated areas: the breadth component, called the General Education
Program, which provides the basis for the baccalaureate degree because it offers training in general skills, methodologies, and habits of thought; the depth component, or major, which establishes an understanding undamental skills andy of knowledge, competence in the understanding and skill at an appropriate depth in one or more facets of the discipline; and the elective component hat provides the possibility for personal enhancement and development that can complement the rest of the degree program
California State University, Long Beach offers the ollowing Baccalaureate Degree Programs:
Bachelor of Arts Degree in:
American Studies
Anthropology
Asian Studies
Biology
Black Studie
Communicative Disorder
Comparative Literatur
Dance
English
French
Geography
German
Home Economics
Human Development
Industrial Arts
Interdisciplinary Studies
International Studies
Journalism
Liberal Studies
Mexican American Studie
Music
Physical Education
Physics
Political Science
Psychology
Radio-Televisi
Recreation
Rocial Work

Sociology
Spanish
Speech Communication
Theatre Arts
Sachelor of Fine Arts Degree in Art
Bachelor of Fine Arts Degree in Dance
Bachelor of Music Degree
Bachelor of Sclence Degree in:
Biochemistry
Business Administration
Botany
Chemical Engineering
Chemistry
Civil Engineering
Dietetics and Food Administration
Criminal Justice
Earth Science
Electrical Engineering
Engineering
Engineering Technology
Geology
ealth Care Administration
Health Science
ndustrial Design
Marine Biology
Mathematics
Mechanical Engineering
Microbiology
Nursing
Physical Therapy
hysical Therapy
Vocational Education
Zoology
Bachelor of Vocational Education Degree
Refer to specific departments in the courses of study section for detailed descriptions of each program. Double Major
You may complete two baccalaureate programs concurrently; however for both to appear on the diploma, both programs must be under the same degree designation, i.e., Bachelor of Arts or Bachelor of Science.
Only one degree will be conferred and only one diploma ssued. The fact that the requirements of another program have been completed will be noted on the transcript.
Additional Baccalaureate Degree
A graduated student who wishes to pursue an additional baccalaureate degree and maintain undergraduate status may do so by completing a minimum of 30 units afte
graduation, of which 24 units must be upper division courses and 12 units must be in the major
A second semester senior, with adivance approval of the Academic Appeals Committee, may earn a maximum of six units toward the additional degree while in residence for the first degree. Any courses to be applied to the additional degree must be specified and taken in addition to thos Certificate Programs

\section*{Certificate Programs}

California State University, Long Beach offers 51 Certificate programs normally require completion orticate. 27 units of course work. Certificate programs differ from baccalaureate minors and degree programs in the special overall emphasis given in them to practical and applied uses of knowledge in a specific area of human enterprise. award of the baccalaureate degree. Courses taken to fulfill the requirements for the baccalaureate may also be applied to Certificate requirements; only fifteen units may be so applied from graduate degree programs
If you wish to pursue a Certificate program you should review the course requirements given in the departmenta course listing of this catalog. You are to notify the relevant as soon as possible so as to receive early advisement on the program.
Certificates
Administration of Outdoor Recreational Resources
Administration of Volunteer Services
Administration of Travel and Tourism
American Indian Studies
Asian American Studies
Asian Studies
Asian Studies
Automotive Supervision
Biomedical Art
Black Studies
Cartography
Child Development
Community Physical Fitness
Computer Studies in the Liberal Arts
Corrective Therapy
Energy Conversion and Power Systems Engineering
Environmental Studies
Facilities Operations
Foodservice Systems Administration
Gerontology
Graphic Arts Supervision
Health Care Administration
Honors English
Industrial Plastics
Indernational Busics Processing and Design
Japanese
Latin American Studies
Legal Studies in the Liberal Arts
Medieval and Renaissance Studies Music Therapy
Nurse Practitioner
Pre-Athletic Training

Quantitative Methods
Safery Operations
Teaching English as a Second Language
Technical and Professional Writing
Therapeutic Recreation
Urban and Regional Studies
Waste Engineering and Management
Wilderness Studies

\section*{Minors}

A minor consists of a minimum of 18 units at least nine of which must be upper division. No courses in the major department may be counted toward the minor. Courses
outside the major department may count both toward the minor and toward requirements for the major. You should refer to the requirements of the department and College/School of your major to see whether a minor is required with that major. Even if a minor is not required, you may elect to complete requirements for one or more minors available and have that so noted on you
transcrip
Credential Programs for Public School Service
Candidates for public school service credentials at the University are advised to familiarize themselves with the programs appear in programs. Descriptions of credential Specific information and applications to individual programs are available in program offices of the Graduate School of Education and departmental offices through which they are in credential programs for student teaching and for field work semester and March 1 for summer session and fall semester.

\section*{Requirements for the Baccalaureate Degree}

General
- File a Request to Graduate form with Admissions and Records within stated deadlines prior to the semester of graduation. Include a completed and approved Program Planning Guide.
- Complete of an appropriate number and distribution of units for the degree.
24 - Complete of 30 units in residence at CSULB of which
24 must be upper division, and 12 in the major.
- Meet minimal scholarship requirements including an Writing skills evaluage
ns: EPT and WPE. Mathematical skils evalualion. ELM
- Complete of University 100, The University and Your
- Complete of the General Education program including equirements in United States History, Constitution and American ideals and English Composition.
- Complete of requirements for major (refer to specific epartments).
- Formal approval by the faculty of the University.
- Submit all required documentation prior to July 1 for May graduation, October 1 for August graduation, and February 1 for December graduation.
- Changes in degree/major sought, or in anticipated graduate date, are subject to a re-filing fee. Changes are not automatically accommodated.
- All incomplete grades must be resolved before students will be cleared for graduation.
These requirements and related information are described below:
Units
A minimum total of 124 units is required for the Bachelor of Arts and the Bachelor of Vocational Education degrees. Each must include a minimum of 40 units of upper division ork (courses numbered 300 to 499)
The Bachelor of Science degree, which requires from 124
132 units ( 135 to 140 for engineering programs) is designed for curricula where a more intensive major field of study is considered a requisite background for professional competence. The total number of units and individual subjects required to satisfy specific majors are described in the departmental sections of this Bulletin. In every instance, numbered 300 to 499) must be included.

\section*{Ten-Year Rule}

To assure that a student's preparation in the major is coherent and current, all upper division courses required for major must be completed within the ten-year period preceding award of the baccalaureate degree. Courses completed prior to this ten-year period can be revalidated by such demonstrations of competence or knowledge of he subject as may

\section*{Residence}

A residence requirement states that a certain number of units must be taken on the campus from which the studen expects to receive a degree. To fulfill the residence equirement at CSULB, you must earn a minimum of 30 semester units at CSULB. Twenty-four of these units shal be earned in upper division courses and 12 of the units cannot be counted toward fulfillment of the residence cannot be co

\section*{Scholarship}

In order to qualify for graduation with a bachelor's degree from California State University, Long Beach, a studen below
(1) The entire college record
(2) All units attempted at CSULB
3) All courses in the major
(4) All courses in the major completed at CSULB
(5) All upper division courses in the major completed at CSULB
The overall grade point average required for admission to eacher credential programs varies every two years, and is was received. See the Teacher Education or Single Subject Teacher Education Office

\section*{Faculty Approval}

Proficiency of a student in any and all parts of a curriculum is properly ascertained by the faculty of the student to be eligible to receive a degree. Faculty denials must be cleared by the student prior to the deadline to submit all required documents.

\section*{WRITING SKILLS EVALUATION}

\section*{English Placement Test (EPT)}

So that information will be available to help in the selection of appropriate course work in writing skills and to prepare of appropriate course work in writing skils and to erepare
for meeting the upper division requirement, all undergraduate students who will graduate from a CSU campus under the degree requirements of 1978-79 or a subsequent Bulletin are required to take the English ther specified tests or completed appropriate college ourses.
You must take the test at the first possible administration available after admission. EPT registration does not require a fee. Faliure to take the English Placement Test during the irst semester of attendance will result in a loss of future registration privileges. It may also lead to administrative attendance (Section 41300.1 of Titte 5, California Administrative Code and CSU Executive Order 186). The esults of the EPT will not affect admission eligibility. nformation regarding the EPT can be obtained from the Department of English, McIntosh Humanities Office , (310) 985-4006

\section*{Writing Proficiency Examination (WPE)}

All candidates for degrees and certificates must emonstrate competency in writing skills as a requirement for graduation. Every student under the 1977-78 or subsequent Bulletin must pass the Writing Proficiency Examination (WPE) to be certified proficient in written composition in English. Students under bulletin regulations earlier than 1977-78 are exempt from this requirement if Proficiency Examination is a junior year requirement. The est must be taken by the end of the semester in which you earn 75 or more units. You must attempt both portions of the exam before you will be allowed to register for your senior year classes. A request for deferment, for compelling reasons, can be filed at Testing and Evaluation Request to Graduate. The responsibility for acquiring the skills necessary to pass the examination is yours. Regular courses in writing are available in the University or through Extended Education. (Please see Supplemental Instruction, below.) Counseling and other assistance are available through the Learning Assistance Center, LIB E-112, and examination may be retaken as many times as necessary. Information regarding the administration of this examination may be obtained from the Office of Testing and Evaluation Services (SS/AD 216). To cover the costs of administration
and scoring, a fee will be charged each time you take the examination.

\section*{Suppiemental Instruction}

The University offers supplemental instruction for students who have experienced difficulty with the Writing Proficiency Examination or with certain courses which require intensive writing as a part of the course requirements. Students should contact the Learning Assistance Center for permission to enroll in these classes.
SI O50A-E. Preparation for the WPE (1) F,S
Non-baccolaureate-level course designed to prepare studertst for the Writing
Proficiency Examination (WPE). S-1 050 A is open to students who have not



\section*{Educational Opportunity Program (EOP)}

The Educational Opportunity Program identifies potential candidates, guides them through the admissions and financial aid process, and provides academic and personal advisement, and study skills instruction to all students admitted into the program to insure the maximum opportunity for success in the University.
All EOP participants are expected to enroll in EOP 100 during their first semester of enrollment.

\section*{EOP 100. EOP Orientation (2) F,S}

A introduction and orientation to ocolege life for students ftom background
tradtionally underrepresented within higher educuation. A review of campu and community resources avaliable to support students participating in the Educational Opportunity Program. Instruction in various accacemime surnive skilis that are necoessary tor colloge succoess. Areas of review inducde: tim
management, research methocology and term paer development
testitaking strategies, and decision-making. Tradtitional grading only.
Entry-Level Mathematics (ELM) Examination
All undergraduate students admitted to CSU in the Fal 1983 and after must take the Entry Level Mathematic (ELM) test otherwise exempt. First-time freshmen may qualify for an exemption on the basis of satisfactory performance on specified examinations (see p. 37). Transfer students may be granted an exemption based upon satisfactory examination scores (see p. 3 ) or by the successfu completion (with a grade of ' C ' or above) of a mathematics course that satisfies the General Education quantitative
\[
\begin{aligned}
& \text { reasoning requirement. } \\
& \text { Students who are not }
\end{aligned}
\]
the first semester of attendance. The take this test during not affect admission eligibility. Failure to comply with this requirement will result in a loss of future registration privileges and may lead to administrative probation and possible disqualification from future attendance (Section Executive Order 393) Executive Order 393),
Test will be mailed to all who are subiect to the req the ELM or they may be obtained from the Office of Admissions and Records. Further information regarding the test may be obtained from the Office of Testing and Evaluation Services
SS/AD 216, (310) 985-4006.

\section*{Special Course Requiremen}

\section*{UNIV 100. University 100 (1) F,S}

All undergraduate students who enter this university with fewer than 56 transferable semester units shall complete a one-unit (15 hour) course which includes instruction on the following topics: (a) history, missions, and structures o higher education (b) career planning (c) the use of the
University Library This course must be compled during the first or second semester on campus.
\[
\begin{aligned}
& \text { the first or second semester on campus. } \\
& \text { University } 100 \text { includes an introdu }
\end{aligned}
\]
npus
traditions, to current issues in introduction to university role of general education, global interconnectedness ethics); to academic freedom, tenure, and students' rights and responsibilities; and to services available at the
university throughout the student's university throughout the student's academic career (e.g. It also includes a self-instructed component on the use of the University Library.
University 100 is offered during the week before each regular semester, during the first five weeks of the semester, or as a two-day intensive class. Please consult the Schedule of Classes under 'University \(100^{\prime}\) fo information on class scheduling
first two semesters of enrollene the requirement in thei first two semesters of enrollment on campus will be
disenrolled from the university for their third regula semester.
UNIV 400. The University in Your Future - Student
Leadership (1) \(\mathrm{F}, \mathrm{S}\) Prerequisites: Solected by University 100 Director. Students assien
Univeritit focauly in presentation of course. May be repeated for a
meximum of 3 unitit.

\section*{General Education}

General Education is an important aspect of the baccalaureate degree and of your personal development. It is that part of your university program which encourages
you to develop or improve such basic life skills as creativity critical thinking, self-motivation, independence, an understanding of values, and a general philosophy by which to make decisions throughout life. Possession of these skills makes possible your continued personal growth and the further development of your creative and adaptive capabilites-qualities necessary for you to adjust to and learning, and it can increase your ability to be self-directing At California State University, Long Beach, courses approved for General Education credit provide
- Information: the raw material for thinking, analysis, reflection, and discourse:
- Methods of inquiry: direction and practice in several disciplines
Basic Skills: the ability to analyze ideas and data, to relate these to other materials, to develop arguments both logical and cogent, to reach conclusions, and to present the results of these processes with clarity and
style.

Qualities of Mind: a respect for data and unpleasant facts; an appreciation of the arts; tolerance, cumimitment, a taste for learning; creativity, pens a sensitivity to ethical considerations.
The present policy of the Board of Trustees of The California State University is that students graduating from a CSU campus must fulfill certain breadth requirements (Section 40405, Titie 5, California Administrative Code). Of division courses taken at the campus conferring the degree. Partial credit may be transferred from another institution; a participating, regionally-accredited institution may certify completion of 39 semester units.
Each campus in the CSU system may define which of its courses satisfy its General Education Requirements and determine which courses are transferable from other
institutions (except where a maximum of 39 units are certified). The campus may add requirements and enact other regulations.
General Education Requirements
Each Calfornia State University, Long Beach, baccalaureate graduate must have completed at least 51 semester units of General Education courses. Only courses specifically approved for General Education and so listed in the Schedule of Classes may be used to fulfill General Education units must be units taken at CSULB and after you achieve upper division standing (completion of 60 semester units). Of the nine upper division units, at least six units must be from among approved interdisciplinary courses (1-suffix). The 51 units of General Education course work include three units of work in U.S. History and three units in
U.S. Constitution and American Ideals, required by Section 40404, Titte 5, California Administrative Code. (See Category D. below.). Titte 5 provides that each student shall demonstrate competence by completing a course in these fields or by passing a comprehensive examination in them. These examinations are provided by the Departments of History and Political Science, respectively.
No course in your major may be used to satisfy G.E. Category A, Category B. 1 for life science majors, Category B. 2 for mathematics majors, Category D.1.a for history majors, Category D.1.b. for political science majors, and interdisciplinary courses (IC) for all majors.

General Education units must be distributed as

\section*{Category A:}

\section*{Communication in the English Language and Critical Thinking- 9 units to include}
(1) One approved course in written English;
(2) One approved course in oral communication or a
combination of oral and written communication, to
include an understanding of the process of
communication and experience in communication;
(3) One approved course in critical thinking, designed to
develop the ability to reason clearly and logically and to analyze the thinking of others.

\section*{Category B:}
hysical Universe-12 units to include:
(1) At least six units of inquiry into the physical universe
and its life forms to include one appoyed course in the life sciences and one approved course in the physical sciences; both must involve laboratory experience;
(2) At least three units of study in mathematical concepts and quantitative reasoning; approved courses foster an understanding of mathematical concepts rather than
(3) Anor three un es necessary selected from
approved courses, to achieve a minimum of 12 units.

\section*{ategory C:}
umanities and the Arts - 12 units to include:
(1) At least three units from approved fine arts courses;
(2) At least six units from approved courses to indude courses in at least two of the following areas
(a) literature
(b) philosophy, and
(c) foreign languages
(3) Another three units as necessary, selected from
approved courses to achieve a minimum of 12 units.
Category D
Social and Behavioral Sciences and Their Historical Backgrounds - -15 units to include:
(a) Three (3) units selected from courses in U.S. History:
(b) Three (3) units selected from courses in U.S

Constitution and Ideals (formerly Category F.)
(2) Social and Behavioral Science: At least nine (9) units
from approved courses in at least two disciplines:
(a) At least three (3) units selected from approved courses which concern world societies and cultures in an international context;
(b) The remaining units are to be selected from the general list of approved social and behavioral science courses (categories D.1.a, D.1.b, D.2.a
E.

Category E
elf-Integration-3 units
At least three units selected from approved courses which facilitate understanding of the human being as an organism


Credentials
Public school teaching and service credentials in the State of California are regulated by the State Legislature and administered by the Commission on Teacher Credentialing. developed to meet current requirements which are complex and continually being reviewed and changed by legistative action. Candidates for all credentials must meet lega requirements in effect when completing credentia
programs. It is the responsibility of the student, not only to programs. It is the responsibity of the student, not only to
be familiar with the program requirements contained in this catalog, but also to obtain current information from departments offering individual programs. For information on credentialing, pending changes and new legislation, as well as information regarding admission, academic equirements, and field program coordinator
Single Subject Credential basic teaching credentials. The specified subject-matter category. A teacher authorized for single subject instruction may be assigned to teach this subject at any grade level - pre-school, kindergarten, grades 1 through 12, or in classes for aduts. In practice departmentalized classes in junior and senior high schools. The Multiple Subjects Credential (usually for elementary schools) authorizes the holder to teach all subjects in a self-contained classroom. Instruction in this situation occur most frequently in elementary and early childhood education. A teacher authorized for multiple subject classroom - preschool, kindergarten, grades 1 through 12 or classes for adults.
Basic Credential Programs Offered by CSULB:
- Multiple Subjects Teaching Credential
- Multiple Subjects - with Bilingual Emphasis/Spanish
- Single Subject Teaching Credential - with Bilingua
- Single Subject NTE Waiver Programs:Art, English oreign Language (French, Geman, Spanish), Heali Education, Life Science, Mathematics, Music, Physical Education, Physical Science, and Social Sciences.

\section*{Specialist Teaching Credentials:}

Early Childhood, Reading, Special Education, Learning Handicapped, Learning Handicapped Internship (Bilingua) focus), Severely Handicapped, Resource Specialist Certificate of Competenc

\section*{Services Credentials:}

Administrative Services (Preliminary and Professional) Hory Media Teacher Senvices, Clinical Rehabilitative
ounseling, School Psychology

\section*{ther Credentials and Authorizations}

Designated Subjects: Adult, Vocational, and Designated Alon, Ada to Myolcal Education
Additional Authorizations for Elementary and
econdary Teachers:
Elementary and secondary teachers wishing to diversify heir teaching authorizations may do so by fulfiling certain authorizations. Further information may be obtained from coordinators of the credential programs or the Credential Programs Office, ED-1, Room 6
Obtaining a Credential
The current credentialing law provides for a two-step program for the basic teaching credential - Preliminary and Professional Clear. The Preliminary Credential is issued hen the candidate has met University requirements.
(1) A baccalaureate or higher degree in any subject ompleted in an accredited institution:
(2) A program of professional preparation approved by he Commission on Teacher Credentialing.
The Professional Clear credential is granted when the candidate has completed all remaining requirements which nust be done within five years after the preliminary is issued. A Prosession clear credoniar thequips a of 30 semester units beyond the baccalaureate degree in credential cannot be acquired by direct application, but must be recommended by the University. To obtain this institution's recommendation for the Professional Clear credential, the candidate must meet the requirements or equivalent of its approved credential program and complete SULB.
Entry Levels for Basic Credential Programs
Students may begin credential programs at three different evels:
(1) Junior Level - With a carefully planned program, initial education courses may be taken at the junior level with completion of the program within the four-year degree program, culminating with a preliminary five-year credential permits the teacher a maximum of five years to credential.
(2) Senior Level - Part of the credential program may be aken as an undergraduate to complete electives toward degree requirements and the remaining requirements then completed at the post-baccalaureate level. The preliminary five-year credential

Note: Post-Baccalaureate Credential Credit in Senior Yea - By petition only, up to six units of course work taken in or degree requirements may be counted as postgraduate credit toward fulfillment of the fifth-year program.
The petition must be filed prior to graduation. Petitions submitted after completion of the course will not be approved. Criteria and petition forms are available in the Graduate Studies Office, ED-1, Room 7
be completed Level - The entire credential program may requirements for the post-baccalaureate level, thus fuffiling credential.
Application to Credential Programs
Application to a particular credential program may be obtained from the appropriate Department or area offering the credential program. Students planning to enroll in credential programs must also file an application fo
admission to the University,

Application for Field Work and Student Teaching
Candidates for field work and student teaching for the fall semester and summer session must apply by March 1 Spring candidates must apply for field work and studen Appeal Process:
Appeal Process:
A student has the right to address an appeal to the appropriate committee with reference to any policy related preparation program continuation in a basic teache hardship. Petition forms and assistance are available through the credential program coordinator or the More
More Information
For further information on Single Subject Credentials refer to the Graduate School of Education - Single-Subject For further information this catalog Credentials refer to the Graduate School of Educabionts Teacher Education Department.
For information concerning Specialist and Service credentials refer to the appropriate department section.


\section*{Graduate Degrees and Other}

\section*{Post-Baccalaureate Studies}

Office of the Vice-President for Academic Affairs and Graduate Studies: Keith lan Polakoff

\section*{Graduate Studies}

Graduate study is primarily designed to inspire Graduate study is primarly designed to inspire
independence of mind and originality in the quest for knowledge, truth, and useful application. Candidates for a master's degree are required to demonstrate mastery in
their chosen field of study either through independent their chosen field of study either through independent esearch culminating in an acceptable thesis and/or throug successfully passing a final comprehensive examination. Graduate curriculum is designed to provide the student master's degree program, including those outside the majo field, must be graduate or upper-division courses approved by the student's graduate committee and department graduate advisor.
Proficiency of a student in any and all parts of a curriculum is ascertained by the faculty of the University. A eceive a master's degree.
A student who plans cademic preparation as have completed equivalen department and/or as determined by the appropriate completed undergraduate course work substantially completed undergraduate course work substantiaily Long Beach in the discipline of intended graduate study, of must be prepared to undertake additional work to make up any deficiency. Most graduate degree programs are based upon preparation in the discipine at the undergraduate evel. Undergraduate preparation is considered adequate in candidate has met the upper-divison equect matter are of the master's degree program. Refer to specific departments for detailed requirements of each degree program.
The following graduate degrees are offered
Clivil Engineer Degree
Master of Arts Degrees in:
Anthropology
Astian Studies
Communicative Disorders
Economics
English
French
Geograp

History
Home Economics
dustrial Arts
Interdisciplii
Linguistics
Music
Philosophy
hysical Education
Political Science
Psychology
Spanish
peech Communication
Theatre Arts
Vocational Education
Master of Business Administration
Master of Fine Arts
Art
Theatre Arts
Master of Music
Master of Public Administration
Master of Public Health
Master of Social Work
Master of Science Degrees in.
Biochemistry
Biology
hemistry
Civil Engineering
Computer Scien
Criminal Justice
Electrical Engineering
Engineering
Geology
Health Science
Health Care Administration
Interdisciplinary Studies
Methematics
Mechanical Engineering
Nursing
Nutritional Science
Physics
Pychology
Recreation Administratio
Education
Ph.D. in Engineering Mathematics
(awarded jointly with Claremont Graduate School)

Certificate Programs and Graduate Study Students, whether graduates of CSULB or another be awarded certificates while in graduate standints for and When certificate programs graduate standing. When certificate programs so provide, \(500 / 600\)-level of such certificates. Prerequisites for these courses must be completed prior to registration in \(500 / 600\)-level courses.
Courses used to meet requirements for the master's degree may also be used to meet certificate requirements
when the certificate programs so permit whall not exceed 15 units. Any certificate program that equires or permits graduate courses must receive approval of the University Graduate Council.
Certificates
Arts Management
Career Guidance Specialis
Honors in Business
Instructional Systems Technolog
International Business
International Business
Leisure Counseling
Mexican American Studies
Museum Studies
Public Management Analyst
Public Sector Employer-Employee Relations and Personne Management
Public Sector

Religious Studies
Russian and East European Studies
Teaching of Reading and Language Arts
Transportation
Transportation Policy and Planning
Urban Executive Managemen
Post-Baccalaureate Studies
Students with a baccalaureate degree who wish to
continue their education for personal continue their education for personal enrichment or to mee protessional needs may do so at CSULB either as administrative purposes, a post-baccalaureate student is one who has not declared a master's degree as an objective but who is nevertheless attending class and participating in academic work at the University beyond the baccalaureate degree. A graduate student is one who ha requested and receiled armal admission to a specific field many disciplines available at CSULB. Candidates for public school se University are advised to familiarize themselves with the requirements for these programs. Descriptions of credential programs appear in the Credential Programs section of this Bulletin and in the separate departmental sections of this Bulletin

\section*{Graduate and
Requirements}

Graduate and post-baccalaureate applicants may apply certificate program, or without a specific program objective.

Depending on the stated objective, CSULB will consider an application for admission in one of the four categories:
Post-Baccalaureate Standing - Unclassified
To qualify for admission in post-baccalaureate unclassified standing, a student must: (a) hold an accredited by a regional accrediting association or have completed equivalent academic preparation as determined by an appropriate campus authority; (b) have attained a grade-point average of at least \(2.5(\mathrm{~A}=4.0)\) in the last 60 good standing at the last college attended Admission to CSULB with post-baccalaureate unclassified standing does not constitute admission to graduate degree curricula. You may also qualify for
Post-Baccalaureate Standing - Classified
In this status you may be eligible to enroll in a credential or certificate program, provided that such additiona professional, personal, scholastic, and other standards, including qualifying examinations, as may be prescribed fo authority, are satisfied.
Graduate Standing - Conditionally Classified
In this status you may be eligible to enroll in a graduate degree curriculum if in the opinion of the a appropriate campus authority you can remedy any deficiencies by additional preparation.

\section*{Graduate Standing - Classified}

A student accepted by the campus in unclassified or conditionally classified standing may be admitted to an authorized graduate degree curriculum of the campus as a classified graduate student if he or she satisfactorily meets admission to the graduate degree curriculum, including qualifying examinations that the appropriate campus authority may prescribe. Only those applicants who show promise of success and fitness will be admitted to graduate degree curricula, and only those who continue to demonstrate a satistactory level of scholastic competenc Admission to the University
In order to be admitted to CSULB as either In order to be admitted to CSULB as either a post-baccalaureate unclassified student or as a graduate
student, the applicant must meet the following requirements:
(1) Have earned a baccalaureate degree from an accredited university or college
(2) Have been in good standing at the last institution
attended attendec
(3) Have at least a 2.5 grade-point average in the last 60 semester units attempted, independent of when the in which the 60 units began will be used in this calculation Lower-division courses or courses taken in extension (except in adjunct enrollment at CSULB in the uppe division), after obtaining the bachelor's degree, will be excluded from the calculation.
Students wishing to enroll in the University must follow the Students wishing to enroll in the University must follow the
instructions supplied by the Office of Admissions and

Records in the Admissions section of this catalog. NOTE: Graduating undergraduate CSULB students may not apply under the same conditions as non-CSULB undergraduates. Once applications are received, they will be evaluated at appropriate offices, and students will be advised whether or not they have been accepted into the University. Provisional admission is granted to applicants anticipating their baccalaureate degree prior to registration but subsequent to fling the application. Prool of the file) prior to the student's second semester of attendance. if it is not, provisional students will be prohibited from future enrollment until such proof is on file.
The student must request all institutions of higher learning attended (including CSULB) to send an official copy of transcripts directy to the Oe Department advisor of graduate studies. Transcripts presented to the Admissions Office by the student are not acceptable. Graduates of California State University, Long Beach must follow these same procedures when making application to a graduate degree program. All graduate and postbaccalaureate applicants, egardless of citizenship, whose preparatory education was demonstrate competence in English. Those who possess a bachelor's degree from a postsecondary institution where English is not the principal language of instruction must eceive a minimum score of 550 on the Test of English as a Foreign Language (TOEFL). Some programs may require a igher score.
Admission to a Department as a Graduate Student Students who have been admitted to the university at the order to pursue a credential or master's degree they must be accepted by the department or college/school offering the degree program. In some instances (see specific department listing) this process may require a separate application being made to the department o college/school. Following review the department of college/school will determine whether or not the studen Those students who meet all departmental and University requirements will be admitted as classified graduate students in that degree program.
Students who do not meet all requirements may nevertheless, be accepted by the department as a conditionally classified graduate student, subject to meeting equirements for classified status.

\section*{Special Action}

An applicant who does not qualify for admission under the previous provisions may be admitted by special action if in the judgment of the appropriate faculy of the department/college/school concerned and on exists acceptable evidence that the applicant possesses exists acceptable evidence that the applicant possesses suricient academic, professional, and other potenial action as shown through aptitude scores, recent academic

Grmance, and experiential background For declared majors, departmental and college/school standards for pecial action will apply.

\section*{econd Master's Degree}

A graduate student who holds a master's degree from this or any other accredited institution but desires to become a candidate for a second master's degre
different field is subject to the following regulations:
(1) All admission requirements of the University and college/school or department must be met (all general egulations listed in the Bulletin apply to the second aster's degree)
(2) Enrolment and approval of candidacy for the second completed and awarded;
(3) All requirements for the new degree must be completed;
(4) Atter awarding of the first master's degree, a minimum 24 units of graduate residence credit must be earned at his University including the minimum of \(500 / 600\)-series student is earning the second master's degree;
(5) No more than six units earned on the first degree may be applied to a second master's degree;
(6) Prerequisites for an advanced course must be completed prior to enrollment in the advanced course. An instructor may disenroll a student who does not provide vidence of adequate preparation:
(7) All prerequisites must be completed prior to (8) Two master's
(8) Two master's degrees cannot be awarded
(9) The area or discipline in which the second degree is earned shall be designated on the transcript and a second diploma awarded.

\section*{Graduate Study in the International Programs}

Students planning to participate and receive unit credit loward a master's degree in an International Program should consult with the graduate advisor in the department their major and college/school dean or director of graduate studies before entering the degree program. candidacy for a master's degree and who participate in the International Programs may, upon their return to California State University, Long Beach, petition to have six units earned as resident creait in the international Programs ncluded on their official student program for the master's degree. In no case may excess grade points earned in the Iternational Programs be used to bring a grade point equired 3.0 (B) average.
Students admitted to candidacy for a master's degree who plan to participate in the International Program of tudies must obtain permission, prior to beginning their study abroad, to have units earned abroad applied toward satisfaction of their degree requirements. A candidate's pettion to apply units earned abroad must be reviewed and specific courses to be taken on the foreign campus, thesis
esearch which is to be done abroad, or any other equirements such as examinations to be taken upon the program. Usually no more than six units of credit may be ransferred to apply toward the minimum 30 units for an advanced degree as a result of participation in the International Program of Studies, but a maximum of 12 units may be allowed by the Dean of Graduate Studies in consultation with the University Graduate Council in a special case
A copy of the candidate's graduate student program area, who must certify that any credit earned abroad is appropriate to meet graduate degree requirements.
Pending the faculty's evaluation of the student's work, a Report Delayed (RD) grade will be assigned all courses in which work was completed abroad and which are offered to atisfy requirements toward an advanced degre

\section*{hange of Objective}

Evaluation of credits transferred to the University is based in part upon the objective indicated on the application for
admission. Candidates desiring a change in graduate objective from that indicated on the original application must follow these procedures
(1) obtain a Petition to Change Objective form in the Records Office;
(2) obtain the signatures of the faculty advisor, the ean of the college/school or designee in which registration will occur; and (3) submit
(3) submit a graduate student program in the new

\section*{drawal from the Degree Program}

Students who have been admitted to candidacy for an advanced degree and who complete no courses at this
University within a calendar year will be withdrawn from the graduate degree program
If a student wishes to resume graduate study after withdrawal, a petition for readmission to the graduate college/school and be approved by the Dean of Graduat Studies.
University Regulations Governing the Master's Degree - General

The following regulations apply to all graduate degree programs. Specific academic and curricular requirements o individual degree programs are given in the departmenta listings of this catalog
All regulations involving a calculation of grade-poin average subsequent to admission to the University as a post-baccalaureate graduate student shall be based on the owning common practices and standards
calculated on all upper-division and graduate-leve coursework attempted by a student at this University after completion of a baccalaureate degree.
Grade point average standards calculated on the basis o a smaler range, grouping, or set of upper-division an graduate-level courses, for example, "courses in the major
or courses taken since admission to the degree program" presuppose that the student has met the minimum standard for any larger range, group, or set, including th
Overall Graduate Grade-Point Average, Overall Graduate Grade-Point Average
an Overall Graduate Grade-Point Averea must maintain an Overall Graduate Grade-Point Average of 3.0 (B)
Exceptions to the 3.0 (B) Overall Graduate Grade-Poin Average may be made only on the recommendation of the departmental faculty offering the degree, the college/schoo dean or designee, and approval by the University Graduat Counc
(2) At least a 3.0 (B) average must be maintained in the major.
(3) No course with a grade lower than "C' may be applied toward the fulfillment of degree requirements.
the master's indual course of studies (student program) for upper- division and graduate courses
Some degree programs require additional units. Please consult individual degree program requirements.
A minimum of sixty percent of the units required for the
degree shall be in the 500 - and 600 -level series and these shall be completed at this University, consistent with departmental requirements. Student teaching cannot be included in any master's degree program. All upper-divisio courses marked with an asterisk may be included in the master's degree programs of the department listing the graduate advisor, asterisk-marked courses departmen graduate advisor, asterisk-marked courses may also be appropriate. Normally, other non-marked courses are no used.
(5) A thesis and/or final comprehensive examination must be completed. A minimum of four and a maximum of six semester units shall be allowed for a thesis. Failure of the comprehensive examination or thesis requirement is failure examination may not proceed to the thesis option orsiv versa. Once a student has completed a semester of enrollment towards fulfillment of either the comprehensive examination or thesis option, the student may not change from one option to the other without the approval of the faculty concerned, the department chair, and the appropriate dean or designee
(6sidence at the University. The Dean of Graduate Studies may authorize department/college/school approved substitution of credit earned by alternate means for a part o the residence requirement. Units, including continuing education or extension units, accepted by transfer for application toward the minimum units required for a
master's degree cannot be used to fulfill the minimum unit master's degree cannot be used to fulfill the minimum unit
requirements in the \(500 / 600\) series. This \(500 / 600\) unit requirement must be completed in the major discipline and in residence at this University.
(7) All requirements of the degree program must be completed within seven years of the date the studen program was initiated, i.e., the date (semester) when the completed. An extension on the student program was
granted by the Dean of Graduate Studies if warranted by individual circumstances and if the outdated work is course or subject field work, or such other demonstration of competence as may be prescribed by the department and/or college/school.
(8) A graduate student who expects to receive a degree at the end of any semester or summer session must be enrolled during that semester or session and must omplete the Request to Graduate Form well in advance. must be filed by the preceding September 15; for Fall candidates, by the preceding February 1 at the Office of Admissions and Records. The names of candidates who file within these deadlines will appear
Commencement Program published each Spring.
ommencement Program published each Spring.
Note: Graduate Studies 700 may be used to fulilll the degree program coursework prior to the semester of graduation. All incomplete grades must be resolved before students will be cleared for graduation.
(9) Proficiency of a student in all parts of a curriculum is etermined by the faculty of the University. A favorable vote of the faculty is required for a student to receive the degree. The Program
A student must consult with the graduate advisor of the department or college/school to prepare a tentative degree equirements, the student must formulate an official student program and apply for advancement to candidacy
The department will assign the student a faculty advisor who must be consulted about preparing a degree program. The advisor should have an official evaluation of the Records, although transcripts provided by the student may be used to develop a tentative student program and discuss degree requirements. When the Admissions Office's evaluation and the results of tests are available, the aculty advisor can assist the student in drawing up a tudent program. Tous student program must be approved by the student's faculty advisor, hen doparmental graduate studies or, for Interdisciplinary Studies, the Dean of Graduate Studies. The student program must list the ollowing:
(1) Courses required for removal of undergraduate deficiencies;
(2) All courses taken prior to advancement to candidacy hich are to apply toward the 30 -unit minimum
(3) Required course
(4) Elective courses
ais for the Record program, when approved, serves as a equired before the degree can be granted. Students who have not been advanced to candidacy are subject to al changes as published in the Bulletin, Policy Statements, nd certifications.
Graduate student programs may be revised as the ludent advances toward the degree. Such revisions must
e departmental graduate advisor and the college/school dean or director of graduate studies or, for Interdisciplinary Studies, the Dean of Graduate Studies

\section*{Advancement to Candidac}

Advancement to candidacy is the next step after achieving classified status and signifies approval of a plan of study by the student's major department and college/school or, for Interdisciplinary Studies, the Dean of Graduate Studies. The prerequisites to advancement to andidacy are
(1) Classified status;

Proficiency Examination. Information is available in the Testing Office (SS/A-216);
(3) A minimum 3.0 overall grade-point average and a 3.0 grade-point average in all units undertaken for the student rogram (at least 6 units)
(4) Completion of all qualifying examinations;
(5) Enrollment in regular session.

Advancement to candidacy is to occur at least one in which the student expects to graduate. It must occur prior to a student filing the Request to Graduate form with Admissions and Records. Filing deadlines are the same as or baccalaureate degree candidates.
An approved graduate student program remains in effect A long as a candidate is making satisfactory progress. To insure minimum satisfactory progress toward the degree during any 12 -month period and complete all degree equirements within seven years after completion of the first course on the student program. The student may not change the graduate major without filing a new student ogram.
A student entering military service after having been advanced to candidacy will not be considered as having
withdrawn from candidacy, provided that the student is inducted, enlisted, or called to active duty during a semester in which enrolled or not more than one semester hereafter, and provided that the student enrolls for work oward a degree whin one calendar year of the date of lease from service.
Students who have been advanced to candidacy and Ssent themselves from the University on educational leave for an advanced degree, provided the terms of the educational leave are fulfilled. Such students must reapply when returning to the university, but the application fee will e waived
A department or college/school recommends a student for advancement to candidacy by forwarding a graduate director of graduate studies or the Dean of Graduate Studies. After the student's program has been processed and approved, a copy of the completed student program and a letter advancing the student to candidacy will be mailed to the candidate, with copies filed with the epartment or college/school and the Records Office. A student must be enrolled in the semester or summer
and this must occur no later than one semester or summer session prior to completion of course requirements advancement to candidacy after completing six units of graduate coursework for the graduate degree program with 3.0 grade-point average.

Election of Regulations
Graduate students advanced to candidacy will be held responsible for the regulations governing master's degrees
in effect at the time of advancement or at the time the last requirement for the degree is met, whichever is more conducive to the student's course of study. A change in master's degree objective or readmission to a graduate degree program following withdrawal requires that a new sudent program be filed under the current graduate - Educational Leave

Any registered student, undergraduate or graduate, in good academic standing may request an Educational eave. Students requesting an Educational Leave shall complete an Educational Leave Form in the semester heir reasons for seeking the leave and a statement of whe hey intend to resume academic work. The completed form to be submitted for approval to the student's department chair (undergraduate) or graduate advisor
The minimum initial leave will be one full semester; the maximum will be one calendar year. A student may request, writing, in advance, an extension of the leave. Under no ircumstances shall the total number of approved ducational leaves exceed two, nor shall the duration byond two calend
years.
Students returning from an approved educational leave are required to submit an application form but will not be equired to pay another application fee. Students returning an absence for which an educational leave was eapplication fee.
Graduate students who plan to enroll for credit at anothe institution of higher education during the leave period mus btain prior approval from the department graduat advisor, department chair, and the college/school dean or designee for the transfer of course credit to the student's program
The period of an educational leave is counted in the calculation of elapsed time under the regulations governing the maximum period for completion of degree requirements (seven years for graduate students)
under the Election of Regulations rule are preserved maintaining the right of students to elect regulations as they had maintained continuous attendance.
Students who fail to enroll in two or more consecutive semesters place themselves in jeopardy under the continuous enroliment provisions of the election o "advanced to candidacy (candidate)" status. Moss students who break residency and lose candidate status do not have a presumptive right to "reinstatement" of their
candidacy. These students will be required to go throug process of "readvancement."
An educational leave presupposes no expenditure of student during the period of the leave. In addition, no computer facilities, no library privileges, and no studen services are available to a student on educational leave.
- Comprehensive Examination

Each department or college/school requiring a fina comprehensive examination determines the content of the both. A faculty committee shall represent the department preparing questions, administering, and reading the examination. Through the comprehensive examination, the faculty provides an opportunity for the master's degre candidate to demonstrate analytic ability and knowledge of the discipline. Working with the department chair or dean of departmental graduate advisor usually assume responsibility for scheduling the examinations and for selecting the other faculty members to participate
Students may not enroll for courses in preparation for the comprenensive examination or take the comprehensiv examination unless they have been advanced to candidacy candidacy will occur in the semester in which the enrollment takes place.
During the first semester of residence, the graduat student should ascertain from the faculty advisor what study for the degree the candidate should semester th departmental graduate advisor to make arrangements fo taking the examination. The department or college/schoo passed or failed the final comprehensive examination. candidate who has failed will usually be allowed to take the final comprehensive examination a second time, and the departmental graduate advisor should be contacted fo speciitc procedures for the second attempt. To award results of the comprehensive examination must be reported to the Records Office prior to the end of the semester

\section*{- Theses and Project}

A student may enroll for Thesis (course 698 or 699) only when that student has been advanced to candidacy for the degree or when advancement to candidacy will occur in the semester of initial enrollment in Thesis,
Theses and projects submitted in partial fuffilment of the equirements por a graduate degree at his University sha the CSU
A thesis is a written product of the systematic study of a significant problem. It clearly identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendation. The finished product
evidences originality, critical and independent thinking, appropriate organization and format, and thoroug
documentation. Normally, an oral defense of the thesis will e required.
A project is a significant undertaking appropriate to the Ae and applied arts or to professional fields. It evidences organization, and a rationale. It is described and summarized in a written abstract that includes the project's significance, objectives, methodology, and a conclusion or oral defense of the project may be quired.
Students are responsible for understanding the definition format guidelines prescribed by the department in which the thesis is completed.

\section*{Thesis Committees}

A student's thesis committee shall consist of at least three members qualified in the areas relating to the thesis. At east two shall be full-time faculty members at CSULB, one hesis committee including the chair of a committee for an interdisciplinary studies degree, must be tenured or tenure-track from a department authorized to offer a graduate degree. Normally the chair of the committee also serves as thesis director, but this is not necessarily so. The hesis director must be a person qualified in the specific faculty member. The committee shall be responsible for the guidance of the student throughout the thesis effort. Any change in the composition of the committee requires ustification and must be approved by the appropriate department graduate advisor and college/school dean or director of graduate studies
Before agreeing to serve on a thesis committee, the
prospective members will review the thesis topic and prospective members will review the thesis topic and on such a committee, and that sufficient resources and materials exist and are reasonably available to the student support such a study
Thesis committee members will review the research competence of the thesis student before approving a thesis proposal.
committee members will advise and direct students in their thesis work and ensure that the thesis meets the standards and definition of a thesis specified

Thesis committee members will determine the grade to be awarded for completion of the thesis; and by signing the hesis signature page, thesis committee members certity
 When the thesois is not the chair of the committee, this person may be dentified on the thesis approval page as "Thesis Director." - Thesis Committee Chairs

Thesis committee chairs will determine that the student has the proper preparation in terms of course work and esearch skills to pursue the proposed thesis.
In departments where this function is not carried out by
graduate advisors, thesis committee chairs will advise the
sudent in the selection of other members for the thesis committee, ensuring that the other
appropriate to the proposed thesis effort.
Thesis committee chairs will be the major contact point with the student and will oversee the other committee members' work with the student.
Thesis committee chairs will assure that the editorial and format standards appropriate to the mechanical preparation of a thesis are followed
Thesis committee chairs will establish guidelines for the of the thesis in a reasonable time
Thesis committee chairs will arrange for the oral defense of the thesis when required
The thesis committee chair is responsible for canvassing he committee and reporting the grade agreed upon by its members. After the completed thesis has been reviewed by University thesis reviewer for conformance with prescribed format criteria and the approval page has been will be submitted.

\section*{Thesis Reviewe}

Students shall consult the University thesis reviewer for information, advice, and assistance on the mechanics of
亚 by the department or degree program and by the heses of the University.
All theses must be acceptable for deposit in the University Library

\section*{Academic Probation and Disqualification}
- Graduate Students

For purposes of determining eligibility to remain at the University, both quality of performance and progress toward he student's objective will be considered. Eligibility will be etermined by use of grade points and grade-point average.
Students who are enrolled in a graduate degree program in conditionally classified or classified standing will be verall grade-point average of at least 3.0 (as defined earlier under General Regulations Governing the Master's Degree) in all units attempted subsequent to admission to he degree program
Every graduate student who has been advanced to candidacy must maintain an overall grade-point average of applicable to the degree. Candidacy for an advanced degree may be revoked if a student's overall grade-point average falls below 3.0 at any time. Students who become subject to dismissal from an advanced degree program will e notified of the action taken by the college/schoul of graduate studies or the Dean of Graduate Studies disqualification if while on probation they fail to earn sfficient grade points to be removed from probationary status. Disqualification may be either from further
registration in a particular degree program or from further enrollment at the campus as determined by the appropriate - Other Post-Baccalaureate Stud

An unclassified student who fails to maintain a cumulative grade-point average of 2.5 on all units attempted at the University will be placed on probation.
A student on probation who, prior to the beginning of the next term, fails to attain a cumulative grade-point average of 2.5 on all units attempted at the University will be disqualified.
A student who is disqualified because of scholastic deficiency may petition the Academic Appeals Committee for readmission only atter an absence of two semesters or
upon successful completion of summer session courses which remove the grade-point deficiency.
Petitions for readmission must indicate the reason for requesting readmission and must include a statement of any academic work successfully completed since
disqualification or of any other activity which gives evidence in support of the petitioner's belief that readmittance is warranted. An application for admission and required transcripts, as well as the petition, must be submitted to the Office of Admissions before the dates established by the University for filing applications.
Grevance Drocedure
The steps required in a grievance are available from the

\section*{Academic Credit}
- Credit/No Credit Grading

A graduate student may take courses at the \(100 / 200 / 300 / 400\) levels under the Credit No Credit grading
policy: however, no course in which a grade of "CR" has been assigned may be used to fulfill the requirements for a master's degree, except the grade of "CR" may be permitted for master's theses or projects to a maximum of six units when the individual department has specifically
designated CreditNo Credit grading for the thesis/proiect designated Credit/No Credit grading for the thesis/project
course in the department and for field work, practicum and/or internship courses (maximum of six units).
For graduate students, courses
\(300 / 400 / 500 / 600 / 700\) levels require "B" level proficiency to merit award of the "CR" grade; at the \(100 / 200\) levels "C" level proficiency or better is required for award of the "CR" grade.
The option of Credit/No Credit grading for graduate
students on 100/200/300/400-level courses is specific regulations of the individual departments regarding their graduate students and regarding the authorization for this option intrinsic to the approved course. Otherwise, no limitation exists as to the number of courses taken under this policy.
- Waiver of Course Requirement and Credit by

No waiver of course requirements or credit by examination may be used to satisfy master's degree requirements. However, the following rules govern course waivers or credit by examination in satisfying prerequisites
for admission to candidacy in any master's degre program.
Any candidate for a master's degree who believes that previous training has provided adequate preparation in
certain area may request a waiver from the department concerned.
A candidate may also apply for course credit by examination, but only for prerequisite courses and not to satisfy any of the requirements for the master's degree Requests for such examinations must be made to the
department concerned and approved by the department chair. Credit by examination is restricted to course published in the current CSULB Bulletin. Please see Credit by Examination in the General Regulations section of this catalog.
All course credit by examination will be recorded as CR (Credit) and will not be included in calculation of grade-point averages; such credit may not be used to
remove a grade of \(D\) or \(F\) in a course already attempted nor may course credit by examination be granted for any course which is a prerequisite to one for which credit has already been received.

\section*{- Extension/Continuing Education and}

促
an advanced degree a atotal of or department offering an advanced degree, a total of six units of approved
extension/continuing education or transfer credit is acceptable on graduate student programs. Extension courses completed at campuses including California State University, Long Beach shall be acceptable within the six-unit transfer limit, provided the work can be properly evaluated and the course is acceptable as graduate work
for an equivalent graduate degree on the campus where taught. Extension/continuing education and transfer course material shall be evaluated and approved by CSULB faculty teaching in the topic area in conjunction with the department graduate advisor and college/school dean or director of graduate studies. Final approval/disapprova shall be the responsibility of the Dean of Graduate Studies. reduce the minimum units required in a discipline for a master's degree, that is, extension credit may be used to complete coursework required outside the discipline. Excess grade points earned in extension classes may no be used to offset a grade-point deficiency in the tota graduate record
Grades earned at another institution may not be used to offset grade-point deficiencies in courses taken at this
University. However, grades of \({ }^{\circ}\) ' earned at another institution in courses transferred to satisfy subject matter requirements for an advanced degree at this institution must be balanced by grades of ' \(A\) ' at this University to meet the required 3.0 (B) overall average.
Credit earned by correspondence or by examination cannot be used to satisfy master's degree requirements
- Graduate Studies 700

Registration in Graduate Studies 700 (GS-700) is
restricted to graduate students who have completed all restricted to graduate students who have completed al
other course work and who have been advanced to candidacy, have departmental and college/schoo
proval, and require additional utilization of University facilities to complete their thesis or comprehensive xamination. Although no unit creart is accosidered as one unit of concurrent enrollment credit for fee payment purposes. Application forms are available from and must be signed by department graduate coordinators. Students hust be familiar with the rules governing residency (see Academic Load
Eight graduate-level units per semester is a normal academic load for a full-time graduate student engaged in study toward a master's degree. For purposes of calculating 'full-time enrollment' for graduate students, a eighting factor of 1.5 is applied to each unit of enrollment in graduate courses (500/600/700-courses). If a candidate wishes to exceed this limit, it should be discussed with the graduate students working toward a master's degree is 16 units per semester. Students who are employed full-time should not exceed six units per semester.
Graduate students who wish to register for more than one unit of credit per week of attendance during the summer session must secure advance approval from the orms and information may be obtained in the college/school offices.

\section*{Honor}

\section*{- The Graduate Dean's List of University Scholar}

The Graduate Dean's List provides for Universty recognition of its most outstanding graduate students. coursework applicable to their graduate student programs at the University. The annual list is limited to one percent of the University's graduate enrollment. Those honored will be named in the Commencement Program and will receive a certificate from the Dean of Graduate Studies.
In recognition of outstanding graduate student achievements, departments may honor graduate studeng master's degree candidates by special recognition in the annual commencement ceremonies. Departmental graduate student honors are reserved throughout the University to two students (or a maximum of ten percent) from a department. Departmental graduate student honors are
usually restricted to students not otherwise recognized by University or college/school awards. These honors are normally conferred for excellence in and contributions to the discipline, including outstanding seminar papers, artistic exhibitions, special achievements in field work and in University committees and functions, as well as participation in scholarly and professional organizations resulting from student research.

Office of the Vice President for Academic Affairs Director of Undergraduate
Studies: Marilyn Jensen

University Programs is the
administrative designation administrative designation for programs that are interdisciplinary in nature. The Associate Vice President functions as Dean for these
programs. These programs programs. These prograams are broad program of liberal education appropriate for students wishing to teach in the primary schools or to over many liberal arts and sciences disciplines
The University Scholars Program, which provides eninde instruction for students who wish to pursue stud
leading to the General Honors Certificate or Honors in the major as they complete the baccalaure The Interdisciplinary Studies
Program, which offers students an opportunity to devise unique bachelor's or master's degree
programs in areas not specifically programs in areas not speci
addressed by the regular adaressed by the regular
departments and program The Ocean Studies Institute, which coordinates teaching, research, and The Cooperative Education Prosia (COOP), an academically related program of paid and volunteer internships and other work experiences of
campus
The Sports, Athletics, and Recreation Program provides opportunities
for students to participate in major sports competition as well as

\section*{Liberal Studies}

Program
Director: Kristi Slayman Jones rogram Office: Libray E Rm 111 elephone: 310-985-4228
achelor of Arts in Liberal Studies Bachelor of Ar
code 2-0300)
The Liberal Studies major provides a ich, rigorous and integrated cross-disciplinary liberal arts progra
of study to meet the dififering but elated needs of two distinct populations: (1) Those with professional aspirations in the field of elementary education and (2) Thos
with more varied professional spirations and career goals who would prefer a sound generalist program of study to one requiring
General Education and Liberal Studies Major
The general education requirements unique. By completing the Libe unique. By completing the Liberal
Studies major students also satisty General Education requirements. Partial completion of the maijor may or
may not satisty G. E. requirements may not satisty G.E. requirements
Students changing to another majo rom Liberal Studies will want to consult the Academic Advising Center The Liberal Studies Program The program of study for the Liberal Tue program of study or the Libe
Studies Major is composed of two parts: A Core and a Concentration. There are two program tracks in the own Core and related Concentrations. Track I of the Liberal Studies rogram is designed for thos individuals who seek the preparation for elementary schoo eaching consistent with the standards established by the
California Commission on Teacher Credentialing. See Track I overview and requirements on this page Track II of the Liberal Studies
Program is designed for those Togram is designed for thos
individuals who seek a rich, nonspeciaized, multidimensional and
a foundation for a wide range of academic and career opportunitie See Track II overview and Track I

The minimum unit requirement fo 117 units which includes both Core and Concentration. University General Education requirements are satisfied of this major.
The Track I Core consists of a minimum of 102 units distributed
across six areas: 1 . Language Studie across six areas: I. Language Studie (minimum 9 units); ill. Natural Sciences (minimum 14 units); IV. History and Social Sciences (minimum 24 units); V. Arts and Humanities
(minimum 15 units) and VI. Learn (minimum 15 units) and VI. Learning
and Well-Being (minimum 18 units). The Track I Concentration consists of \(15-16\) units of integrated course
work in a thematic area of inquiry work in a thematic area of inquiry
complementary to the Core and consistent with the professsional goals
of those in this track. Twelve of these of those in this track. Twelve of these
units will be at the upper division units will be at
\((300-400)\) level
Requirements For The Bachelor Of Arts In Liberal Studies

Track I-Core
A minimum of 102 units distributed as specified in Areas \(I, I I, I I I, I V, V\) and

Area I: Language Studies (minimum 22 units)

Group 1. Composition in English: a) Choose one course from ASAM 170, B/ST 170, ENG
104; b) ENGL 309
Group 2. Oral Communication in English. Choose one course from
SPCH 130,335
Group 3. Literature in English:
a) Choose one course from C/L
230, ENGL \(180,250 \mathrm{~A}, 250 \mathrm{~B}\)

230A, 370B: b) Choose
course from ENGL 481, SPCH 352

Group 4. Language Acquisition:
Choose one course from either
a OR b. a) C/D 329, 361, EDP 454, LING 329; b) CHIN 331A
331B, FREN 201A, 201B, GERM 201A, 201B, ITAL 201A, 201B, JAPN 331A, 331B, RUSS 201A 201B, SPAN 201A, 201B language competencies substitute appropriate higher level ianguage courses for those listed here.) Group 5. Integration and
Assessment: HUM 400

\section*{Area II: Mathematics
(minimum 9 units)}

Group 1. Real Numbers: MATH
110
Group 2. Higher Math: Choose
one course from MATH 111, 122
Group 3. Integration and
Assessment: HUM 402
Assessment: HUM 402

\section*{Area III: Natural Sci
(minimum 14 units)}

Group 1. Life Science: BIOL 200 Group 2. Physical Science: PHSC Group 3. Earth Science: GEOL
\(102+104\)

Group 4. Integration and
Area IV: History And Social
A. American History 24 units)

Group 1. U.S. History: a) Choose one course fro
Group 2. American Institutions:
Choose one course from POSC
100, 391, *326 (POSC 326 is
required of and limited to students who have met the U.S. requirement in a state other than
California and who must meet the Califormia and who must meet the Government requirement.) Group 3. Multicultural Dimensions: Choose one course
from AIS 319, AMST 319, ANTH 421, ASAM 319, B/ST 319, MEXA
319, SBS 320 SOC 445, WST 319 B. World History, Culture Society Group 1. Geography: GEOG 100 Group 1 . Word His CoG 100 Group 2. World History: Choose
one course from HIST 110, 111, one 112
Group 3. Cultural Anthropology: Choose one course from ANTH
120, 314,4121

Group 4. Integration and
Assessment: SBS 403
Area V: Arts And Humanities (minimum 15 units)
A. Visual and Performing Arts Group 1. Visual Art and Music: a) ART 300; b) MUS 180 Group 2. Dance or Theatre:
Choose one course from ChT 124, 3241, DANC 379, THEA 113, 122, 124, 3241
B. Humanities

Group 1. Ethics, Values and
Beliefs: Choose Beliefs: Choose one course from PHIL 100, 160, 203, 204, 305,
R/ST 100, 291, 485
Group 2. Integration and Group 2. Integration and
Assessment: HUM/COTA 404 Area VI: Learning And Well-Being (minimum 18 units) Group 1. Growth and Development: a) PSY 100; b)
Choose one course from EDP Choose one course from
301, HDEV 3071 , PSY 361 Group 2. Health and Well-Being:
a) HSC 411A; b) PED 476 Group 3. Access to Learning. a) Choose one course from ASAM 190, ENGL 200, HIST 201,
PHIL 170, PSY 230, SPCH 131, *USP 100 (USP 100 is limited to those students in the University Scholars Program), b) Choose one course from
450 , MATH 278

Track I-Concentration
A minimum of 15 units, 12 of which must be at the upper division ( 300 400) level, in one of the approved
thematic programs of study identified thematic programs of study identifi
below:
Bilingual-Spanish/English
Subject preparation for a Multiple Subjects Teaching Credential with bilingual, cross cultural emphasis
requires students to demonstrate equiciency in a targeted language and understanding of the culture history of a targeted group. This Con
centration focuses on the Spanish languation focuses on Mexican culture to b consistent with the chosen bilingual mphasis of the credential program at CSULB. The primary subject matter necessary language skills, although opportunity is provided for those students with demonstrated language puture studies. (The following CORE
courses are highly recommended for MEXA 319 in Area IV, Group A3; ANTH 412 in Area V Group B3: EDP 301 in Area VI, Group 1b.). Area 1. Language Foun
SPAN \(312,313,322\) With advisor approval, students
who can demonstrate Spanish no can demonstrate spanish language proficiency at the SPAN
313 level may have SPAN 312 and 313 waived as specific requirements, applying the units to additional culture study. MEXA
340 and 420 are recommended in addition to Group B in Area II for these students.
Area 2. Selected Upper Division Study: Choose either Group A o
Group B to complete six Group B to complete six units.
402, 420; ,
Gre course from (a) and one ourse from (b): a) Humanities: Choose one course from MEXA Choose one course from MEXA 300/HIST 470, MEXA 350/SOC 340.

\section*{Contemporary World}

We live in a complex world with
many problems of a goal global nature. This Concentration introduces students to the nature and problems confronted in the contemporary world and to major
issues in the social sciences from global (macro) perspective. (No more than 3 units of lower division \((100-200)\) course work may apply
toward the Concentration.) Area 1. Overview: Choose two courses from ECON 368, POSC 220,306 , SOC 100, 142, 327 Area 2. Development and from ANTH 3071, B/ST 304, GEOG 3071, 460, HIST 3071, POSC 4611
4941, SBS 3191, SOC 350, 4101 Area 3. Inequality and Social Change: Choose one course from
ANTH 3051, B/ST 404 , HIST 3031 438, POSC 303, 412, 455, SOC 420, 445, 450, W/ST 425 Area 4. Conflict and Deviance:
Choose one course from B/ST Choose one course from B/S 332, POSC 371, 483, PSY 3001,
SBS 3171, SOC \(345,423,4411\), 4611, 463, W/ST 430 (No more than one course from Areas 2, 3 , 4 may be taken in any one
department.)

Cultures, Values And Belliefs
Focus on humanistic study of
cultural traditions, both Western and non-Western, and the values and beliefs that have shaped them. Insigh orienting intellectual ideas that have given meaning to human life and structured human relationships. phical, religious and ethical perspectives. (No course used to meet the equirements ol he Core may be Concentration; no more than 3 units of lower division (100-200) course work may
tration.)
Area
Area 1. Western Culture: Choose one course from AMST 3501, 477A, 477B, CLSC 3101, C/LT
3491, 4201, HIST 3101, 331,335 349,4201, HIST 3101, 331, 335,
\(337,339,4001,4141,477 \mathrm{~A}, 477 \mathrm{~B}\) HUM 3501, MUS 3651, PHYS 400, R/ST 316
Area 2. Non-Western Cultures:
Choose one course from ANTH Choose one course from ANTH
\(321,323,324,331,332,333,335\)
 382A, 3828, 383A, 383B, 385, 431, 441, 461, MEXA 380, RUSS 410
Area 3. Values and Beliefs! Western: Choose one course from
HIST 438, 4821, PHIL 100, 203, 204, 330, 342, 352, 361, R/ST 111, 324,
4821,485 383i, 391, 396, 4251,
Area 4. Values and Beliefs!
Non-Western Non-Western: Choose one course
from AIS 320 ASAM 380 BIST trom A/S 320, ASAM 380, B/ST
353, PHIL \(306,307, ~ R / S T ~\)
152 331, 3411, 343, 344, 351
Area 5. Ethical Values: Choose
one course from HUM 3021. MICR 3021, PHIL 160, 360, 363

\section*{Foreign Language:}

Provides opportunity for students to gain access to advanced preparation selected language ond speaking a Provides insights into second language acquisition and the intimate relationship between language,
cognition and culture. (Students
select one languare. (studen
complete the following requirements. Area 1. Advanced Language CHIN 441A, 441B, FREN 312A. 312B, GERM 301, 302, ITAL 312A, 312B, JAPN 441A, 441B, RUSS 312,399, SPAN 312, 313
Area 2. Conversation: Choose one

GERM 305, ITAL 214, JAPN 405A RUSS 205A, SPAN 314 Area 3. Literature: Choose one
course from CHIN 370 . FREN 335, 336, GERM 315, 316, TAL 490, 336, GERM 315, 316, ITAL 490,
JAN 370, RUSS 310, SPAN 330, \({ }_{341}\)

Area 4. Additional Study: Choose one course from CHIN 490, FRE \(314,411,414\), GERM 303, 401,
TAL 314,490 , JAPN \(350,405 B\), TAL 314,490 , JAPN 350, 405B,
460, RUSS 314,499, SPAN 322 425

\section*{Health, Physical Education And \\ Life Management:}

Provides students with a breadth and depth of knowledge, attitudes the areas of health, physical education and fithess, mental health mphasis include substance use an abuse, family life/health and sexuality education, nutrition, violence prevention (including child abuse and and fitness, motor skills and stress management. (Credit in the Concentration will be granted for
either HSC 4251 or HEC 419, but not both.)

Area 1. Health: Choose one course from HSC 421, 423, 425
423
Area 2. Physical Education: PED 477
Area 3. Lie Management Skills: Choose one course from
232, 319, 419, REC 482
Area 4. Additional Selected Study Choose two additional courses
rom those listed in Areas 1 and above.
Historical Perspectives: Prepares students in the subjects
identified in the new History-Social dentified in the new History-Social Science Framework tor California
Public Schools which provides the ationale and coherence for this ourse work. Emphasis is upon histo cal perspective not only in terms of
Western/American tradition, but also estern/American tradition, but also people. (The following Core courses are recommended for students choosing this Concentration: : 1 is
110 in Area IV, B2; ANTH 314 in Area IV, B3 and either SBS 320 (or equivalent AIS 319, AMST 319, ASAM 319, B/ST 319, MEXA 319, W
or SOC 445 in Area \(V\) A3

Area 1. Peoples of the World:
Choose one course from ANTH
\(321,323,324,331,332,333,335\),

GEOG 3101, 3121, 316, 318, 3201, Area 2. Ancient World Civilizations Choose one course from AN1H
\(313,345,347\), AST 3001 HIST \(313,345,347\), AST
\(313,314,316,382 A, ~ P O S C ~\)
01 Area 3. U.S. Emerges as a Nation. Choose one course from HIST
\(372,373,375,477\) A 485 , W/ST 485 A
Area 4. California: Choose one
course from ANTH 322, 349 GEOG 303, 304, HIST 470, MEXA 300, POSC 326
Area 5. American Society Today: Choose one course from GEOG
306,466 , HIST 380,4741 , WIST 306,4
307
Human Behavior:
Provides an understanding of basic principles underlying human behavior Why do people interpret, believe, teel hink and act as they do? Basic issues
nclude: How people process informa tion and how they organize what they learn into knowledge structures;
processes in social learning: how people influence other people and people influence other people and
individual differences in ability and personality that affect behavior. These principles will be applied to
specific issues in courses selected rom a broad range of disciplines. Credit in the Concentration will be granted for either PSY
3351, but not for both.)
Area 1 Basic Princ

Area 1. Basic Principles: Choose
two courses from ANTH 3111. PSY 351, 356, 370, SOC 100, 3351 Area 2. Application/Race and
Ethnicity: Choose one course from ASAM 340, B/ST 310, 325, 410, W/ST 310
Area 3. Application/Gender Roles. Choose one course from ANTH 351, HIST 3091, PSY 352, 354,
PSY 366/HEC 358, SOC 325, W/ST 314, 325, 420
Area 4. Application/Social Environments: Choose one course
from ANTH 436, ECON 3091, HEC 3091, 410 . HIST 408 3091, HEC 3091, 410, HIST 408
HSC 421, POSC 428, PSY 381 SOC 320, 336
Human/Child Development:
Provides students with a background in the developmental adults within a family and social context. Specific areas focus on the biological, intellectual and socioemotional development of individuals
from birth through aging and the from birth through aging and the
effects of the near environment on
heir development. Factors which and development such as gender, amily, racial, ethnic and cultural differences will be explored. The
ollowing Core courses are REQUIRED for students selecting this Concentration: SBS 320 (or equivalent Group A3: ANTH 120 in Area IV B3 Area 1. Biological, Intellectual, Social Development: Choose one
course from A/P 400, EDP 305 , cours irom AP 400
Area 2. Adult Development: Choose one course from Gern 4001, HDEV 3571, PSY 365, SOC 464
Area 3. The Child In The Family:
Choose one course from ASAM Choose one course from ASAM
\(340, \mathrm{~B} / \mathrm{ST} 410, \mathrm{HEC} 319,412\). 413 , SOC 423
Area 4. Social Ecology Of Child Development: Choose two courses from B/ST 420, 425, CD 30, HDEV 401, MEXA 350/SOC
manities Through Literatur Provides study in humanistic thought as it emerges in vario questions raised are the followin How have great ideas found their wa into literature? How have societies
been defined by their are the connections between writers, their literature and the socienties for which they speak? Focus is on literan
forms, themes and traditions within cross-cultural and world perspective. Provides for greater understanding o various cuttures and their literature as as documentation of the highest aspirations of the human spirit. (No course used for credit in the Core may
be used for creditit be used for credit in the of lower division (100-200) course work may apply toward the

Area 1. English Traditions/English Literature: Choose one course
from ENGL \(363,455,456,458\), 462, 467A, 467B
Area 2. English Traditions/ American Literature: Choose one
course from ENL \(370 \mathrm{~A}, 370 \mathrm{~B}\), \(474,476,477 \mathrm{~A}, 477 \mathrm{~B}\) Area 3. World Traditions: Choose
one course from CHIN \(370, \mathrm{C}\). one course from CHIN 370, C \(\Lambda\) T \(234,330 \mathrm{~A}, 330 \mathrm{~B}, 403,440\), FREN
335,336, GERM \(315,316,470\)

JAPN
J30 34
Area 4. Other Voices And
Traditions: Choose one course
from AlS 340, B/ST 140, 343, C 404, ENGL 382, 498 (Images of Blacks in American Literature), 405, W/ST 382
Area 5. Other Forms And Genres: Choose one course from B/S 452, 453, ENGL 481, 482,
Language Arts:
Provides students with special and theiri relation to culture through study in three areas: Language perspectives, which involves the study of
anguages (and/or language) and languages (and/or language) and al patterns; theory and/or criticism which provides the theoretical tools fo relationships and language process which involves addititional practice in he creative and technical aspects of following Core courses are highly ecommended for students selecting his Concentration: SPCH 335 in Area
Group 2: ANTH 4121 in Area VB Group 3; PHIL 100, 160, 203, 204 or 305 in Area VB, Group 1; and ENGL 00 in Area VI, Group 3a. No more 200) course work may apply toward he Concentration.)

Area 1. Language and Culture: 413,470 , ANTHW/ST 475, B/ST 180, ENGL 423, 426, HUM 363 SOC 4851, SPCH 309, 451 Area 2. Language and Literature: AST 320, B/ST 140 from AIS 34 \(403,404,410,440,453\), CHIN 370, CLSC 291, ENGL 382, 43 REN 335, 336, GERM 315, 316, 470, JAPN 370, MEXA 405, RUSS
310, SPAN 330,341 , WIST 382 Area 3. Language/Theory and Criticism: Choose one course Criticism: Choose one course 410, 484, PHIL 361,484, R/ST
301, RTV 318 , SPCH 306, 333, THEA 426
Area 4. Language and Process. Choose one course from B/ST 406, 417, SPCH 331, 358, THEA 80, 480
Area 5. Additional Study: Choose one additional course from thos
isted in Areas \(1,2,3\) or 4 above.

\section*{Mathematics:}

Provides advanced study of philosophy of the California Framework in Mathematics and the tandards of the National Council of Teachers of Mathematics for the mathematics content taught through Core courses are REQUIRED selections for students choosing this
Concentration: MATH 122 in Area II. Concentration: MATH 122 in Area ll, 3b.) Area 1. Calculus: MATH 123 Area 2. Geometry: MATH 355 Area 3. Additional Selected Study. Choose three courses from
\(* 3110,311,317,340, * 341\) (*Especially recommended fo those considering adding on a Single Subjects Mathematics Credential at a later time.) A division mathematics course may be substituted for one of the courses in Area 3 with advisor's

\section*{Natural Sclence}

Assures a broad knowledge base across the natural sciences with focu
upon areas importance and humiate scientific especially relevant to those who seek to become elementary school teachers. Will provide students win fundamental skills and an ability to deal confidently with a wide variety of
scientific viewpoints applied to variou important issues, as well as concrete and significant examples of scientific chemistry as taught by chemists to molecular or microbiological (micro) systems, the biology of large scale (macro) systems and to physics.
Students should complete all low division Core requirements in Area III, Groups 1, 2, 3 and in Area Il, Groups 1 and 2 prior to entering upper
division Concentration work.)

Area 1. Foundation Chemistry:
CHEM 200
Area 2. Micro-Systems: Choose one course from
MICR 3001, 301
Area 3. Macro-Systems: Choose one course
BIOL 328
Area 4. Physical Science: Choose
one course from PHSC 331, 491 Area 5. Additional Selected Study Choose one course from GEOL

NSC
U.S. Multicultural Studies Students should learn from their composed of people whose backgrounds are rooted in cult from around the world, and they should develop respect for the dignity of all people and ways of life. Th
Concentration will helo potential teachers to recognize that the history of community, state, region and nen and women of different racial religious and ethnic groups in our pluralistic society. The following Core
course is a REQURED selection for students choosing this Cencentration: SBS 320 (or equivalent AlS 319 , AMST 319, ASAM 319, B/AT 319
MEXA 319 , W/S 319 ) MEXA 319, W/ST 319) in Area IV. lower division (100-200) course work may applied toward the Concentration.)
Area 1 Educ

Area 1. Education in an Ethnic
Perspective: Choose one
course from AIS 361, ASAM 310, B/ST 420, MEXA 340
Area 2. Multicultural Perspectives
Choose one course from AN
4121,421 , HEC 336, HDEV 401
HIST 469, SPCH 451, W/ST 4011
Area 3. Ethnic Studies: No more than one course may be
department. Choose three
\(320,340,420\), ASAM 220, 340 ,
345,357,
\(345,350,370,381\), B/ST 1110,
\(180,370,40,41,42, ~ M E X A\)
180, 370, 400, 410, 422, MEXA
300/HST 470, MEXA 310, MEXA
350/SOC 340, MEXA
341, MEXA 390l, 400
Visual And Performing Arts:
Allows students to develop skills in
responding to the arts as well responding to the arts as well as in
creating and performing. Courses will creating and performing. Courses will
also examine the history of traditional Western fine arts as well as the role the arts play in another cultural radition. All four components of the
California Framework for the Visual and Performing Arts are addressed Aesthetic perception, creative expression, arts heritage and
aesthetic valuing. (if DANC 379 was taken in the Core, students should select ART 302 and MUS 385A and a Area 1. Perception, Expresssion,
Antre
Heritage, Valuing: Choose two
courses from ART 302, DANC
courses from AR
379, MUS 385 A

Area 2. Fine Arts History: (If a Theatre course was taken in the
Core and DANC 379 not taken in Area 1, include at least one Dance course here.) Choose two courses
om ARTMUS 3751, ART 401. \(408,409,410,416,417,423,424\), \(425,426,427,436,437\), IT/THEA 4211, 4221, DANC 435, \({ }_{346}\) MUS
Area 3. Multicultural and Ethnic Arts: Choose one course from AIS
320,420, ART \(335,455,456,457\), 20, 420, ART 335, 455, 456, 457, \(466,467,468,469,470\), B/ST
\(346,360,361,363, \mathrm{C} / T \mathrm{THEA}\) \(346,360,361,363\), C/LT/THEA
325,326, DANC \(318, ~ M U S ~\) 90

\section*{Track II}

Students in this track are equired to complete a Core Program ( 87 units 27 units). A minimum of six units of iterdisciplinary course work (courses with an I suffix) must be completed in Concentration or a combination both. Course work used to meet the specific requirements of the Core may liso be used to meet the specific naximum of 12 units of such "double counting". (Although one course may me, the units earned apply to the otal units required for the degree only once.) Minimum units for the Liberal Studies major, Track II, could vary General Education requirements are General Education requirenents
satistied upon completion of this \begin{tabular}{l} 
major. \\
The \\
\hline
\end{tabular}
The Track II Core consists of a
minimum of 87 units distributed across seven areas: I. Language/ ommunication Studies (minimum 18 Mats); II. Natural Science and National and World Citizenship ninimum 18 units); IV. Social and minimum 9 units): V. Literary, Visual and Performing Arts (minimum 12 nits); V. Cultures, Values, Beliefs minimum 9 units) and vi. Hea minimum 3 units)
The Track III Concentration consists of \(24-27\) units of course work in a of the Concentration units will be in upper division ( \(300-400\) ) course work with the exception of the Biology, Geology and Mathematics

Concentrations where only 12 upper Requirements For The Bachelor O Arts In Liberal Studies:

\section*{Track II - Core}

A minimum of 87 units as specified

\section*{Area I: Language And}

Area I: Language And (inimum 18 units)

Group 1. Composition in English: a) Choose one course from ASAM
170, B/ST 170, ENGL 100, MEXA 104; b) Choose one course from B/ST 450, ENGL 101, 205, 206, \(300,317,407,417,418\), THEA 38 Group 2. Oral Communication in
English: Choose one course from 331, 334, 335
Group 3. Language and Critical Thought: Choose one course from ASAM 190, ENGL 200, HIST 201, PHIL 170, PSY 230, SPCH 131,
*USP 100 (*USP 100 is limited to students in the University Scholars Program)
Group 4. Foreign Language Study Complete a two semest sequence in one language from
CHIN \(221 A-B, 331 A-B\), 101A-B, 201A-B, GERM 101A-B.
\(201 \mathrm{~A}-\mathrm{B}\) GK 221A-B, 331A-B, TTAL 201A-B, GK 221A-B, 331A-B, ITAL 101A-B, \(201 \mathrm{~A}-\mathrm{B}, \mathrm{JAPN} 221 \mathrm{~A}-\mathrm{B}\)
331A-B, LAT 221A-B, 331 A RUSS 101A-B, 201A-B, SPAN 101A-B, \(201 \mathrm{~A}-\mathrm{B}\) (tudunts
more advanced language appropriate higher level language appropriate higher level language
courses for those listed here.) Area II: Natural Science And Mathematics (minimum 18 units) Group 1. Mathematics: Choose
two courses from MATH 103, 112 wo courses from MATH 103,112 123
Group 2. Natural Sciences: a) Choose one course from A/P,
\(107,207, ~ B I O L ~ 200, ~ 206, ~ 210 A, ~\) MICR 100; b) Choose one course from Astr \(100+1\) 100L, 101,
CHEM 100, 111A, 200, GEOL 102 +104 or 105, PHYS 100A, 104, 151, PHSC 11
Group 3. Additional Study in Science or Math: Choose two
courses, at least one of which is the upper division (300-400) level, from any of the courses listed in

Area ll, Groups 1 and 2, not completed above, or from: APP
\(3081,400,401\), ASTR 200A, BIOL 201, 210B, BIOL 308/PSY 346, GEOL \(160,160+160 \mathrm{~L}, 163,190\), 191, 340, MATH 224, 233, 247, 310, 317, 330, 340, 341, 355, MICR/HUM 3021 , NSC1 3751, 376 377, PHYS 100B, 152, PHYS/HIST 4001 , PHSC 33

\section*{Area III: National And World}

Grup 1 Besio Studies:
Cooose one course from HIST 172, 173, 300; b) Choose one ( \(*\) POSC 326 is limited \(100,391, * 326\) ho have completed a U.S. Government course in a state meet Title V state and local overnment requirements); (c) 300, 303, 368
Group 2. U.S. Diversity: Choose ne course from AlS 319, AMS 10319325 HIST 359, B/S 19, 319, 325, HIST 469, MEXA
340, 352, 445, W/ST 319
Group 3. National Citizenship: 381, GEOG 466, HIST 4741, POSC 308, 327, 328, 420, 482, 486, PSY

Group 4. World Citizenship:
Choose one course from ANTH
3077, 314, B/ST 304, GEOG 307)
70. HIST 3071, 478, PHI 351

OSC 215, 220, 306, 348, 371,
ea IV: Social And Behavioral Science Foundation
Group 1. Psychology/Sociology Choose one course
100, SOC 100, 142
Group 2.
Geography/Anthropology: Choose
one course from ANTH 120, course fro

\section*{Area V : Literary, Visual And} Performing Arts
minimum 12 units
Group 1. Visual and Performing Arts: Choose two courses from
two different arts from AIS 320

ART 110, 112A, 112B, 113A 113B, 335, ART/MUS 3751, B/ST 155, 160, 346, 363, DANC 200, 4351, MUS 190, \(290,3631,3641\),
MUS/PHIL 378, MUS 390, 490, MHS/P HIL 378, MUS 390, 490, 3241, 4211
Group 2. Literature: a) Choose one course from B/ST 140, C \(\Lambda\) T 230, 234, ENGL 180, 184, 250A,
250B, MEXA 205; b) Choose one course from AIS 340, B/ST 343, CHIN 370, C/T 330A, 330B, 342 346, 401, 403, 404, 430, 440, ENGL 363, 370A, 370B, 382, 385 , 386, 470, JAPN 370, JOUR 315 , MEXA 4O5, R/ST

\section*{341, W/ST 382}

\section*{Area VI: Cultures, Values, Bellefs}

Group 1. Western Tradition
Choose one course from either (a) or (b). a) AMSTHIST 477AA 477 B CLSC 3101, C/T 349/HIST 4141, MUS 365I, R/ST 316; b) PHIL 100 160, 203, 204, 330, 352, 360, 361, 363, R/ST 111, 324, 3831, 396,

\section*{R/ST/HIST 48}

Group 2. Non-Western Traditions: or (b). a) ANTH 321, 323,324 . 331, 332, 333, 335, 336, AST 3001, 3011, 4951, HIST 341A, 341B
\(382 \mathrm{~A}, 382 \mathrm{~B}, 383 \mathrm{~A}, 383 \mathrm{~B}, 385\) 386, 431; b) ASAM 380, B/ST 353 PHIL 306, 307, R/ST 152, 3311, 3411, 343, 344, 351
Group 3. Additional Study:
Choose another course from any
of those listed in Area
of those listed in Area VI,
\(1 \mathrm{a}, 1 \mathrm{~b}, 2 \mathrm{a}\) or 2 b above.
Area VII: Health, Well-Being, Life Management (minimum 3 units) Choose one course from ANTH 150,
ECON 308, 3091, EDP 191, 357, HSC ECON 308, 3091, EDP 191, 357, HSC 4201, 422, 423, 4251, 427, 429, HEC
232, 1321, 323, 42, HDE 3071, 3571, TED 388, NRSG 4811, PED 151, REC
320, 340, SW 330, 331, , SOC 135 ,
Track II — Concentration:

A minimum of 24 units of which 15 must be at the upper division (300-400) level (with the exception of Biology and Mathematios where only
12 units at the upper division are 12 units at the upper division are programs below

\section*{American Indian Studies:} Area 1. Foundation Study: Choose two courses from AlS 100, 101,
Area 2. Selected Area Study hoose four courses ( 3 units each) from AlS 320
\(420,490,497,499\)
Area 3: Additional Support and Area Study: Choose two additional courses from any of those in
reas 1 or 2 not completed or
ART 456, 457, HIST 372, MEXA 380, 420

\section*{American Studies:}

Area 1. Foundation Study: AMST
Area 2. Emphasis: Choose five Area 2. Emphasis: Choose five
courses from one of the following groups:
Group A) History: Choose from
HIST 172, 173, 174, 372, 373
HIST 172, 173, 174, 372, 373,
\(375,376,378,379,471,472,473\)
\(375,376,378,379,471,472,473\),
\(4741,4774,4778,478,479,485 \mathrm{~A}\), 485 B ;
Group B) Political Science: Choose from POSC 100, 314,
\(315,322,327,391,412,423,482\), 486;
Group C) English: Choose from
NGL \(370 \mathrm{~A}, 370 \mathrm{~B}, 474,475\) N77A. 477B, 478 , 474, 475, 476
Anthropology:
Area 1. Lower Division Foundation tudies: ANTH 110, 120
Area 2. Additional Lower Division Study: Choose one co
ANTH 140, 170, 202
Area 3. Upper Division Foundation Study: ANTH 313, 314 Area 4. Biological Anthropoogy: Choose one co
\(318,363,435\)
Area 5. Sociocultural
Anthropology: Choose one course rea 6 Comparative 421,436 Area 6. Comparative Cultures: 321, 322, 322, 324, 331, 332,333
\(335,336,345,347,349\) 355, 336, 345, 347, 349
Art/Art History Emphasis:
Area 1. Foundation Study: Choose 112B, 113A, 113B
Area 2. Principles and Practices: Choose one course from
Area 3. Western Att: Choose one
\(410,416,417,423,424\),
\(427,436,437,438,439\)
Area 4. Non-Western Art: Choose one course from ART 455, 456, A, Area 5. Additional Upper Division
Study: Choose two additional Study: Choose two additional or 4 above.

\section*{Art/Studio Emphasis}

Area 1. Foundation Study: ART Area 2. Selected Lower Division Study: Choose one course from ART 131, 187
Area 3. Art History: Choose one
course from: ART 436, 437,438 , course
439
Area 4. Selected Upper Division Study: Choose four courses from
either group A or group (Choice of groups depends upon Area 2 prerequisite course):
Group A: Choose from ART 327A 3278, 328, 354A, 354B, 355A, 355B, 356, 357A, 35;
\(377,378,379,381\); Group B: Choose from ART 327A
\(327 \mathrm{~B}, 348 \mathrm{~A}, 348 \mathrm{~B}, 370,376,377\), 378, 379, 381, 385A, 387, 388, 38 Asian American Studies.
Area 1. Lower Division Foundation Study: ASAM 200, 220
Area 2. Upper Division Foundation
Study: ASAM 345,380 tuay. ASAM 345,380 Choose four courses ( 3 inis Study: each) from ASAM 310, 330, 340, 350, 370, 490, 499
Biology:
Area 1. Low
Foundation: BIOL 210A, 210B
CHEM 111A;
Area 2. Selected Upper Division Study: Choose three or four courses as needed to meet 12
unit minimum from A/P 335,336 unit minimum from A/P 335, 32
BIOL \(313,314,315,316,324\), \(332,333,351,360,413,417,421\),
\(423,424,425,427,429,438,439\) 450, 453, 460
Black Studies:
Area 1. Introduction: B/ST 110 Area 2. History: Choose one
course from B/ST 120, 121 Area 3. Selected Lower Division Study: Choose one course from B/ST 155, 160, 200, 210 Area 4. Humanities: Choose two
courses from B/ST \(340,343,346\),

Area 5. Social Studies: Choose three courses from B/ST 304, 325,
\(330,332,335,337,400,410\)
Comparative Literature: Area 1. Foundation Study: C/T 261
Area 2. Folklore, Mythology, Fain Tales: Choose one
C/L \(232,452,453\)
Area 3. Theatre and Drama Choose one course from
CLTTHEA 124, 3241, 325, 326, C/TT/THEA 124,
Area 4. Literature and the Other Arts: Choose one course from C \(/ T\) 250, 410, 4111, 4121, 4131 4201,4511, HIST 310
Area 5. Literatures: Choose one course from C/LT 330A, 330B, 432, 437, 438, 440
Area 6. Additional Selected Study: Choose three additional courses rom any of the above or from an ther Comparative Literature course.
Area 1. Lower Division Foundation tudy: ECON 201, 202 Area 2. Upper Division Foundation tudy: ECON 308, 36
rea 3. Additional Selected Study: hoose four additional upper xclusive of ECON 3091 which may not be taken for Concentration credit. (With CON 300 and an additional 4 unit Economics course may be unit
substit
202.)

\section*{English/C}

\section*{mphasis:}

Area 1. Foun
184, 370B
Area 2. Introductory Study:
Choose one course from ENG
55, 206
Area 3. Advanced Study: Choose
two courses from ENGL 405, 406, \({ }_{407}^{\text {two }}\)
Area 4. Additional Selected Study Choose two courses from ENGL 370A, \(384,385,386,459,467 \mathrm{~A}\),
\(467 \mathrm{~B}, 469,474,475,476,477 \mathrm{~A}\), 477B, 479, THEA 380, 480 to a ninimum total of 24 units in the oncentration

English/Language And Area 1 ition Emphasis. Area 1. Foundation
Area 2. Literature: Choose one course from ENGI 250A, 250B Area 3. Additional Selected Study: Choose two courses from
\(300,317,410,423,426\)
English/Literature Emphasis: Area 1. Foundation Study: ENG 184, 363
Area 2. American Literature Survey: Choose on
ENGL 370A, \(370 B\)
Area 3. British Literature: Choose one course from ENGL 451, 452, 467A, 467B, 468
Area 4. American Literature: Choose one course from ENGL
\(474,475,476,477 \mathrm{~A}, 477 \mathrm{~B}, 478\) Area 5. Additional Selected Study: Choose two additional courses from those listed in Areas 2,3 or 4
above or from C/LT 330A, 330B above or from 250 \({ }^{\text {E }}\) 330A, 330, 481, 482 (One course must be at the upper division ( \(300-400\) ) level.) English/Technical Writing mphasis:
Area 1. Foundation Study: ENGL
Area 2. Report Forms: Choose two Arses from ENGL 417, 418, 491 Area 3. Language Study: Choose
one course from ENGL 320,325 Area 4. Additional Selected Study: Choose two additional courses
from ART 307, 309, CE 305, ET 300, ENGL 303, 384, 405, 406, 407, 419, 423, 498 (Science as Literature), HIST 400I, NSCI 3761, S 301, 305; RTVF 204, 380, 404
One course must be at the upper division (300-400) level.)
French:
Area 1. Foundation Study: FREN , 312B, 314, 411
Area 2. Additional Selected Study: in French at least one of which is at the upper division ( \(300-400\) ) level. (Lower division (100-200) courses are only appropriate if
taken prior to FREN 312 A or its equivalent.)
Geography:
Area 1. Lower Division Foundation Study: Choose three courses fr
\begin{tabular}{|c|c|}
\hline Area 2. Methods and Technique GEOG 380 & 473, 4741, 475, 477A, 477B, \\
\hline Area 3. Systematic Geography: a) Choose one course from GEOG \(460,466,470\); b) Choose one & Asian Area: Choose from HIST 382A, 382B, 383A, 383B, 385 386, 406, 407, 488 \\
\hline course from GEOG 440, 442, 444, 452, 455, 460, 466, 470 ( No course used to satisfy Area 3, Group (a) may be used to meet Group (b).) & Area 3. Additional Selected Study: Choose an additional course from any of those listed above or from any History Department offering. Human Development: \\
\hline Area 4. Regional Geography: a) Choose one course from GEOG 304, 306; b) Choose one course from GEOG 304, 306, 3101, 3121, 316, 318, 3201, 326 (No course used to satisfy Area 4, Group (a) may be used to meet Group (b).) & Students choosing this Concentration must complete the following courses in the Core: AP 107 or 207, ANTH 120, PSY 100, or complete them as prerequisite units to the Concentration and elective units toward the degree. \\
\hline & \\
\hline Students choosing this Concentration must select the & Area 2. Foundation Methodologies: HDEV 250, 320 \\
\hline Math 122, 123, PHYS 151, or complete them as prerequisite units to this Concentration and elective units toward the degree) & Area 3. Area Study: Choose two courses from one area. Biological Foundations Area: Choose from A/P 400 or ANTH 319, AP 401 \\
\hline Area 1. Foundation Study: GEOL 102, 104, 105, 340, 341 & chological Foundations Area: \\
\hline Area 2. Additional Selected Study: Choose four to five additional courses to a 12 unit minimum from GEOL 321, 324, 372, 373, 431, 433 & PSY 331, 332, 333, 336, 337, 34 345, 351, 356, 370, 438, 463; Sociocultural Foundations Area: Choose from ANTH 352, ASAM 340, B/ST 410, HEC 3121, 412, \\
\hline \begin{tabular}{l}
German: \\
Area 1. Foundation Study: GERM 301, 302, 315, 316, 401
\end{tabular} & \begin{tabular}{l}
413, MEXA 350, SOC 100, 320 345, 464; \\
Child Development Area: Choo
\end{tabular} \\
\hline Area 2. Additional Selected Study: Choose additional German courses to a minimum of 24 units. (Lower division (100-200) courses are only appropriate if taken prior to GERM 301 or its equivalent.) & \begin{tabular}{l}
from HEC 311, 3121, 314, 411, 412, 413, 433; \\
Gerontology Area: Choose from A/P 401, GERN 4001, SOC 464 Italian: \\
Area 1. Foundation Study: ITAL 312A, 312B, 314
\end{tabular} \\
\hline Area 1. Foundation Study: HIST 301 & Area 2. Additional Selected St Choose five additional courses \\
\hline \begin{tabular}{l}
Area 2. Area Study: Choose two courses each from three different areas: \\
World Area: Choose from HIST 110, 111, 112, 492; \\
European Area: Choose from HIST \\
131, 132 313, 314, 316,317, 118
\end{tabular} & minimum of two at the upper division (300-400) level from Italian Department courses. (Lower division (100-200) courses are not appropriate unless completed prior to ITAL 312A or its equivalent.) \\
\hline зз2, ззз, зз5, 3з6, з37, з39, 341A, 341B, 4111, 432, 433, 437, 438, 441: & \begin{tabular}{l}
Japanese: \\
Area 1. Foundation Study: JAPN \(331 \mathrm{~A}, 331 \mathrm{~B}, 405 \mathrm{~A}, 441 \mathrm{~A}\)
\end{tabular} \\
\hline \begin{tabular}{l}
British Area: Choose from HIST 151, 152, 351, 353, 356, 357, 451 Latin American Area: Choose from HIST 162A, 162B, 362, 364, 462 . 463, 466; \\
United States Area: Choose from HIST 172, 173, 300, 372, 373 , 375, 376, 378, 379, 380, 469, 472.
\end{tabular} & Area 2. Additional Selected Study: Choose three courses, at least one of which is at the upper division (300-400) level, from departmental offerings. (Lower division (100-200) courses are only appropriate if completed prior to JAPN 331A or its equivalent.) \\
\hline
\end{tabular}

GEOG 380 Area 3. Systematic Geography: a)
Coose one course from GEOG 460, 466, 470; b) Choose one
course from GEOG 440, 442, 444 422, 455, 460, 466, 470 ( No
Group (a) may be used to meet Group (b).)

Choose one course from GEOG 304, 300; b) Choose one cours
\(3121,316,318,3201,326\) (N
course used to satisfy Area 4,
Group (a) may be used to mee
oup (b).
Students choosing this
Concentration must select the Math 122, 123, PHYS 151, or nits to this Cas prerequisite In
102, 104, 105, 340, 341
Area 2. Additional Selected Study: oose four to Ive addititional om GEOL \(321,324,372,373\)
rman:
301, 302, 315, 316, 401: GERM Area 2. Additional Selected Stuc courses to a minimum of 24 (Lower division (100-200) courses are only appropriate if taken prio istory

A01. reas:
\(0,111,112,492\)
European Area: Choose from HIST
31, \(132,313,314,316,317 ~ 318\), 32, 333, 335, 336, 337, 339,

38, 441
Bitish Area: Choose from HIST atin American A5, 356, 357, 451; IST 162A, 162B, 362, 364,462 .

United States Area: Choose from \(375,376,378,379,380,469,472\)

473, 4741, 475, 477A, 477B, 478, 4., A, 482, 486, 489, 382A, 3828, 383A, 383B, 385 Area 3. Additional Selected Study Choose an additional course from any History listed above or from Human Development: centration must complete the following courses in the Core: AP or complete them as units to the Concentration and Area 1. Foundation Study: HDEV ,

Methodologies: HDEV 250, 320 Area 3. Area Study: Choose two Foundations Area: Choose from ANTH 318, PSY 241 Choose from C/D 361 EDP Area: PSY 331, 332, 333, 336, 337, 341 340, \(51,356,370,438,463\), Choose from ANTH 352 ASAM 340, B/ST 410, HEC 3121, 412,
413, MEXA 350, SOC 100, 320, 345,\(464 ;\)
Child Deve

Alea: Choos 412, 413, 433;
A/P 401, GERN 4001, SOC 464 312A, 312B, 314 Area 2. Additional Selected Study minimum of two at the upper Department courses division ( \(100-200\) ) courses are no appropriate unless completed

\section*{apanese:}

331A, 331B, 405A, 441A Area 2. Additional Selected Study: one of which is at the upper departmental offerings. (Lower only appropriate if completed prio
to JAPN 331 A or its equivalent.)

Latin American Studies: Area 1. Language Study: SPAN 201A, 201 B
Area 2. Discipline Emphasis: Choose two courses from one department from ANTH 323, 324
345 , HIST 162A, 162B, 362,364 POSC 358, 359, 459, 4611* (*Only those semesters when content emphasizes Latin American evelopment.) One course must
be at the upper division ( \(300-400\) ) level.
Area 3. Breadth Study: Choose wo additional courses from two Additional departments from those in Area 2 not
Area 4. Additional Selected Study: Choose two additional courses from those in Area 2 or 3 or from \(312,313,314,341,430,441,445\), 491, 492

\section*{Mathematic:}

Area 1. Lower Division Foundation Area 2. Upper Division Foundation 44, 380
Area 3. Additional Selected Study: Choose two courses from MATH
\(310,317,340,341,355,361\) A, 381 Mexican American Studies: Area 1. Foundation Study: Choos hree courses from MEXA 100

Area 2. H
Area 3. Social Sciences: Choose wo courses from MEXA \(300 / H I S\) 470, MEXA 340, MEXA 350/SOC 40, ME

\section*{Music:}
tusic: Concentration must demonstrate MUS 120 P , MUS 120B, voice proficiency instrument proficiency equivalen to MUS 125 or complete the equivalency courses as elective units toward the degree. Area 1. Foundation Study: MUS 300, 390, 49
Area 2. Selected Foundation Study: Choose one
MUS 3631, 391,393
Area 3. Additional Selected Study Choose additional courses to a minimum of 14 units from those isted in Area II or from MUS 300
\(320,322,325,350\), MUS/ART

3751, MUS 421, 425A, 450, 460, 461, 463, 464, 495
Area 1. Foundation Study: Choose two courses from PHIL 342, 363,

Area 2. Historical Focus: Choose one course from PHIL 413, 414, 421, 422, 423, 42
Area 3. Movements and Perspectives: Choose one cours
from PHIL 416, 417, 418, 419 Area 4. Additional Selected Study Choose four additional courses from any of those above or from other Philosophy Department ofierings.
Area 1. Lower Division Foundation Study: PSY 100, 200, 210 Area 2. Basic Processes: Choose one course rrom PSY 331, Area 3. Personal and Social Processes: Choose one course Area 4. Processes/Additional Selected Study: Choose one additional course from any listed in Area 2 or 3.
Area 5. Applications: Choose one
course from PSY 310 course rom P9 354, 359, 366, 370, 375, 378, 381, 473 ,
Area 6. Additional Selected Study: Choose one additional upper division ( \(300-400\) ) level course offerings
Religious Studies
Area 1. Foundation Study: Choose two courses from R/ST 100, 152, 291
Area 2. Western Religious Traditions: Choose one course from R/ST 311, 3121, 314,3151, 4111, R/ST 4721, 485, 490, 494 Area 3. Eastern Religions: Choose 344, 351
Area 4. Selected Upper Division Study: Choose two additional courses from those in Areas 1,2 or 3 not completed or from R/ST
\(301,375,376,3831,396,4251,487\) Area 5. Additional Selected Study: Area 5. Additional Selected Study from any in Areas \(1,2,3\) or 4 not completed or from ASAM 380 .

CLT 342, HIST 333, PHIL 330

\section*{Russian:}

Ausslan 1 Poundion RUSS A10, 312, 314
rea 2. Additional Selected Study Choose five additional courses from offerings in Russian. (Lowe division ( \((100-200\) ) courses are Only appropriate if taken prior
RUSS 310 or itsequivalent.)
Soclology:
Area 1. Foundation Study: SOC 100, 142, 3351
Area 2. Statistics: Choose one ourse from SOC 250, 255, C/S
Are
rea 3. Ethnic and Gender Issues: Choose one course from
\(325,340,426,445,4851\)
Area 4. Deviance and Social Control: Choose one course from 423, 4411, 448 Area 5. Social Change and Global SOC 327, 350, 420
Area 6. Additional Selected Study hoose an additional upper division (300-400) level Sociology ourse

\section*{Spanish/Spanish Ameri}

Area 1. Basic Language Study:
Area 1. Basic La
Area 2. Foundation Study: SPAN
341, 445
Area 3. Selected Literary Study: 410, 441, 491
Area 4. Additional Selected Study: hoose two additional Spanish ourses are only divion (100-200) ompleted prior to SPAN 312 or ts equivalent.)
Spanish/Spanish LInguistics And Culture Emphasis: Area 1. Basic Language Study
SPAN 312,313 SPAN 312, 313
rea 2. Foundation Study: SPAN 425, 426
Area 3. Selected Studyl Linguistics and Culture: Choose two cours
430,445
Area 4. Additional Selected Study hoose two additional Spanish: courses are only appropriate if completed prior to SPAN 312 or

\section*{Spanish/Spanish Literature} Emphasis:
Area 1. Basic Language Study:
SPAN 312, 313
Area 2. Foundation Study: SPAN 330, 430
Area 3. Selected Literay Study: Choose two course
\(410,439,491,492\)
Area 4. Additional Selected Study: Choose two additional Spanish
courses. (Lower division (100-200) courses. (Lower division (100-200
courses are only appropriate if completed prior to SPAN 3120 its equivalent.)
Speech Communication:
Area 1. Lower Division Foundation
Study: SPCH 130, 131, \(210+\) 210W
Area 2. Upper Division Foundation
Study: SPCH 300, 301, 309 Area 3. Selected Upper Division Study: Choose one course from SPCH 331, 335
Area 4. Communication Strategies: Choose one course
trom SPCH 436, 437

University
Scholars
Program


Phone: 985-4706
The University Scholars (Honors) group of qualified students with a unites the committed student and elationship in which each has the Program seeks to accomplish these goas in two ways: first, it broaden
students intellectual horizons by encouraging them to explore areas of maior fields of stucy related to their allows students to work in their major
Helds in greater depth than would b possible in a conventional course satisfies, in part, the University's is directed toward the first objective. he work of the Junior and Senior study experiences and a senior thesis, objective
The University Scholars Program is designed so that students will not 0 master a substantial amount of udgment and the powers of Students will be immersed in the earning process and therefore must o do intense and often self-directed le thal work as well as a desire to available in the University. e requirements of the University Scholars Program will receive a as a person of intellectual demonstrated a disciplined curiosity knowiedge.
Avaliable within the Universiy alternatives designed to meet the 1) General Honors; pecial Interdisciplinary) Maior
(3) A combination of the above for which both the course work prescribed for General Honors and the departmental requirements for
Honors in the Major are successfully satisfied.
General Honors
General Honors is a special approach to the General Education
Requirements of the University which enhances and builds on them. It is a program of carefully selected course
and specially designed and specially designed, a student chooses a minimum of 30 units, most of which are applied
toward the 51 units of Geneal Education courses required for graduation of all students. Those courses designated for General
Honors credit encourage student Honors credit encourage student
participation on an academic level not generally possible in the usual
curricular offering.
The objectives of General Honors
within the University Scholars Progr \(\begin{aligned} & \text { within } \\ & \text { are: } \\ & \text { to }\end{aligned}\)
to provide highly motivated students an exceptional educational opportunity to challenge and expand
their intellectual capacities, especially in terms of increased breadth and depth;
to deepen the students' intellectual experiences by stimulating and
guiding their own curiosity to encourage freedom of initiative; to provide an academic and cultural activity throug hispies creative activity through close working
relationships with distinguished faculty to advise students in their academic planning to meet the University's
General Education reat General Education requirements program of study:
to prepare students to write an
Honors Thesis that is a genuine preparation for advanced study, and a demonstration that the student has acquired the intellectual confidence and academic independence that are
indicative of the maturely educated

Admission Requirements for
General Honors
There are three ways a student may qualify for General Honors in the
University Scholars Program By invitation: incoming students are Honors on the basis of high schoo class standings, ACT composite
score, and/or SAT scores. Normally,
students should be in the upper ten ercent of their high school classes,
and have a composite ACT score of nd have a composite ACT score o 100 , and a GPA of 3.3 or better. Students who meet the requirements or the Program must submit an application to the Director. Howeve
if not all of these criteria are met, a combination of them may be evaluated in addition to a letter ecommendation and a personal
iterview with the Scholars Program Director.
By university achievement: Any
student who maintains a 3.2 or better overall GPA at California State University, Long Beach in 12 or more units of coursework is eligible to participate in General Honors with a
etter frecommendation from one of her/his instructors and a personal interview with the Scholars Program or above in 12 or more units at California State University, Long Beach normally will be granted automatic acceptance into th
By petition: Students not meeting the designated criteria may metition for admission to General Honors, dents are required to submit letters instructors familiar with their work (or it the case of incoming freshmen, from two high school teachers of their
senior year). These exceptional cases will be reviewed by the Director and the University Scholars Council. Students are encouraged to pettion meeting the basic requirements and/or a strong motivation to General Information

\section*{General Information \\ Transfer students may enter General} Honors in any of these three ways
provided they have a minimum provided they have a minimum
equivalent of a 3.2 average in all course work at the accregited institution from which they are transferring.
Qualified students may enter year. A waiver of some of the renior year. A waver of some of the required
Honors credits (not more than 6) may be granted by the Director and the University Scholars Counci Requirements for the Certificate in Scholars Program
Every student electing General
Honors in the University Scholars Honors in the University Scholars
Program must rogram must complete al
university-wide graduation requirements, and the requirements
for a major. General Honors is itse not a major. A student becomes following specified requirements: A student must be enrolled as a
member of the University Scholars member of the University Scholar
Program for a minimum of four Program for a minimurs and a
consecutive semesters and minimum of 30 units taken specifically for Honors credit;
A student must maintain an overall
GPA of 3.00 or better in Honors and in all University courses attempted; Freshmen may earn not less than 2.85 their first semester, and must meet the 3.0 average by the end of program;
Students will normally be withdrawn from General Honors who have failed to enroll in courses for Honors cred
for two consecutive semesters: A University Scholar who withdraws from the University during any semester will also be withdrawn from the program. The student may apply
for readmission at the beginning of any semester in which he/she plans to enroll;
GPA onts who attain a minimum GPA of 3.54 will graduate with Program."
A University Scholar who chooses General Honors would normally
complete 30 units in the Program offerings distributed as follows: 15 units of University Scholars Program
courses which will serve partially to courses which will serve partia
fulilil the University's General Education requirements. (These will be listed in the Schedule of Classes bulletin each semester under USP
offerings. In addition: USP 100, Angles.) of Vision (3); USP 200 Angeside Forum ( \(1,1,1\) ); USP 499, Synthesis (3); and at least one
independent learning experience Undependent learning experience, i.e Participation (3) or USP 497, Directed Studies (3)
Thesis (3)

\section*{Honors in the Majo}

A few departments at California State University, Long Beach offer Honors programs for outstanding for students admitted to the University Scholars Program who have indicated a particular desire to pursue Honors the Major.
In consultation with a Departmental
Honors Faculty Advisor, a University Honors Faculty Advisor, a University
Scholar can plan an enriched course of study in an academic major. This opportunity for program flexibility
makes it possible for a University xciting to elect the most relevant offered by the department. Although students will construct programs or the major, they also may choose alternative courses especially suited to their interests, needs and abilities
Such flexibility is as valuable to professional and pre-professiona students as it is to those primarily terested in a liberal arts degree. Program styles and requirements idependent study, seminar course high levels of performance, senior rojects or theses culminating in a noad knowledge of subject matter. Major is available in the University Scholars Program Office and in Admission Requirements

\section*{Please contact the departme} Please contact the departmen
office or the University Scholars Program Office for information egarding admission. Normally, a with at least sophomore ( 30 units) tanding.
equirements for the Certificate of onors in the Major:
(1) Completion of the requirements department chair and the epartmental Faculty Honors Advisor uust be obtained to change any of (2) Completion of 15 hours of courses in the major for which Honors edit has been designated, ncluding: 12 units which may includ
units of Honors Research participation or 3 units of Honors dependent study; and 3 units of or its equivalent;
(3) Completion of the 3-unit apstone colloquium USP 499, Synthesis, as partial fulfillment upper-division interdisciplinary units (1) (4) A minimum overall GPA of 30 and of 3.3 in the major at graduation. Check with individ
(5) Students who have failed to nroll in courses for Honors credit for wo consecutive semesters will
normally be withdrawn from the program;
(6) A University Scholar who withdraws from the University during ny semester will also be withdraw
apply for readmission at the beginning of any seme
interdisciplinary Honors Majors This alternative within Honors in the Major is open to students who have been admitted to full-time status in the heir junior year. A course sequence eading to a major not routinely offered in the University may be
arranged through the Interdisciplinary
Studies Program In some cases the Studies Program. In some cases the student may design an interdisciplinary combination of courses to detine a major area which
could be unified by a chronological, geographical, or thematic rationale, or any other logical, pedagogically
sound, and cohesive program of sound,
study.
A proposal for an Interdisciplinary Honors Major should give careful of the modes of inquiry, methods, heoretical perspectives, research, and literature, etc. , from the
disciplines within which the interdisciplinary theme is broadly cast. The interdisciplinary major is not a mechanism to achieve a double majo After consultation with the
Interdisciplinary Studies Advisor faculty willing to sponsor an interdisciplinary Honors program, interested students should submit Program Director at least two months before the pre- registration period for the second semester of the junior
year. This will ensure that all proposals year. This will ensure that all proposas
will be acted on in time for pre-registration. The proposal must (1) Title of the Interdisciplinary (1) Titte of the
Honors Major;
(2) A two- or three-page statement
(a) a definition of intended major and explanation of how it bring more departments into a unified course of study:
(b) explanation for the validity of the proposed major:
(c) description of the kind of
synthesizing senior project under
(d) description of possible future plans once the major is comple (3) A tentative list of all courses
planned for completion of the major; (4) A copy of all University
(5) Statements signed by advisors which they ditate that they have read and approved the interdisciplinary tudies proposal. Final approval of an
Iterdisciplinary Honors major resides interdisciplinary Honors major resides with the University Scholars Progra
director and University Scholars Council.
Graduation Requirements The General Education Hequirements for the Interdisciplinary other major programs; however, in
satisfying General Education Requirements, the student should henever possible, choose those ourses that are most appropriate a major concentration. The GPA and ther requirements for the merdiscipinary Honors Major are the same as.
Majo."
Combination General Honors and Honors in the Major
Students who qualify for General of attending classes with challenge qualified and motivated students may wish to continue this unique field by applying for admission to field by applying for admission to
Honors in the Major

\section*{Courses (USP)}
100. Angles of Vision (3) F,S This course emphasizes the kind of anayyical creative thinking. The courre coancontratese on the
development of seminar exchange of viewpoints in discussion, dop essays and oral examination of explicit modeles and techniques of reasoning, conceptualization of research
problems, and witing a documented paper. This course will be taught by at least two instructors trom two separate disciplines. The course will Contier readit in General Eduaation Category
This course is required of all USP students.
200. Fireside Forum (1) F,S

Studidnts must take this course for a total of three
unis coonsecutivel dduring the first three
and semesters in the Program. Students meet with
guvests who ectur) and lead discussion on topics
of special interes. Thd of special interest. The course will confer creoditi in General Education Category E .
olloquium (3) F,S Studies of selected interdisciplinary topics,
porblems or sisues with a view toward integration
of the areas of stucy of the ereas of study involved in lower-division
curses. 496. Undergraduate Research Participation (3) ARR
Prerequisite: Permission of the Director of the
Students asosist taculty in the conduct of memberech.
projects, parcicipaing in tho dovilopment experimental design
verification of evidence
497. Directed Studies (3) ARR Prerequisite: Permission of the Director of the
program and the supenising faculty member program and the supenising faculty member.
Indopondent sthudy under the superision of a
facuity member. facuity member.
498. Senior Thesis (3) ARR Prerequiaite: Permission of the Director of the
program. Presentation of a thesis procosal to the program. Presentation of a thesib proposal to the
USP Governing Committee and Upon apporial witing and presesentation of the thesis. 499. Synthesis (3) F,S Prerequisite: Perrisssion of the Director of the program. This "capstone" course is required ed
all USP students and is normaly taken atter complition of allo other Geoneral tevucation equirements. The course is intercilisiblifinary and
conceerned with the shaping of the modern mind. Consideration in given to how each of the Participating diociplifines impinges on an evolving human beings in the universe. The courso explorers the sourcese of modoer mentality in ocio-economic, payychological, biologogical, and Shysical sciencos. The course will confer General
 nly. Cerifit may be taken in General Education Other
Special honors sections of regular GE courses in various departments as Program' to be found in the curs schedule of Classes.

\section*{Interdisciplinary Studies}

\section*{Director: Margaret Costa}

Price: Library East
Bachelor of Arts in
Interdiscliplinary Studies (code -0405
The interdisciplinary studies major
or the bachelor of arts degree allow selected students to engage in an ndividualized baccalaureate program when legitimate academic and accommodated by existing academic programs or combinations of such programs (i.e., majors, minors, studies major consists of a closely
correlated correlated program of study in two o more departments developed in
conference with faculty members
the respective departments who hav the academic and professional expertise necessary to support the
individualized course of study. The interdisciplinary studies major is not a means of bypassing normal graduation requirements nor a mean graduate who have failed to gain admission to impacted programs or
to complete a degree major in which they are currently enrolled. they are currently enrolied.
Consequenty, a candidate must apply for approval of an
interdisciplinary studies interdisciplinary studies major when: academic work ( 30 units) rem be completed to meet minimum graduation requirements;
(2) At least \(2 / 3\) of the upper-division
(300-400) units in the propsed course of study remain to be completed at the time the application is submitted for approval. An interdisciplinary studies program academic, and/or professional goals commensurate with the broader mission of the University in
baccalaureate education. Interdisciplinary studies majors are considered on a case-by-case basis Approval is determined on the basis
of the academic merit of the proposed course of study, the proposial rationale, the applicant's potential for successful completion o
the program, and on the ability of the University to to support the proposed program. Goals should be carefully
reviewed before proceeding with an reviewed before proceeding with

\section*{Procedures}
(1) Prepare a written statement:
(a) Identifying the kind of interdisciplinary course of study
you seek and your reasons for you seek and your reasons for
seeking it in seeking it in terms of your
(b) Explaining why these cannot be met through an existing major combined with other academic programs such as minors and/or
certificate programs; and
(c) Listing the courses at CSULB appropriate to your goals.
(or initial review to the Interdisciplinany Studies Director from whom guidelines, recommendations, and
forms necessary for the following steps may be obtained if the proposal s determined to be promising; (3) Seek out a faculty advisor from
each discipline in which substantive course work will be undertaken. These
faculty must have the expertise study you propose, must find merit in your proposal, must agree to meet together with you and all other faculty
advisors to develop a program of acvisors to develop a program of act as your program advisors; (4) Arrange a meeting of the faculty
advisors for the purpose of advisors tor the purpose of developing the list of specific courses developing the list of speciric courses
that will constitute the interdisciplinary studies degree program. Any
modification of this program modification of this program after it
has been officially approved by the has been officially approved by th
Interdisciplinary Studies Director requires the concurrence of all faculty advisors and must be the result of advisory meeting. Faculty advisors sign the official Interdisciplinary Studies Program form and any
subsequent Program Addendum subsed
(5) Submit the Interdisciplinary faculty advisors, to the departmental chairs of each department in which
substantive work is projected. Their signatures on your program form
indicate they have reviewed its indicate they have reviewed its program, and are granting you the same priority status for enrolliment in courses in their departments as that
accorded departmental maiors;
(6) Return your program with all signatures to the interdisciplinary Studies Director along with your typed interdisciplinary studies proposal and
transcripts from all Schools attended including a current set of transcripts from CSULB. Completed programs Interdisciplinary Studies Director and will be filed in the Interdisciplinary Studies Office and the Records approval of your interdisciplingary studies program you proceed with projected course work at your own

\section*{risk. \\ Requirements}
(1) An interdisciplinary studies major consists of a maximum of 12 units of
\(100-200\) (lowerdis) \(100-200\) (lower-division) level courses
and a minimum of 24 units of \(300-400\) (upper-division) courses. The interdisciplinary nature of the major,
however, usually requires a total of units, with 36 units at the
(2) A minimum of 12 upper-division (2) A minimum of 12 upper-divisio disciplines (departments) of the interdisciplinary program. Exceptions
cases where an interdisciplinary program is based on a thematically ohesive core of classes involving ignificant work in more than two disciplines. A rationale for such
exceptions must accompany the program and be signed by the faculty advisors when the program is ubmitted to the interdisciplinany
(3) Courses taken to satisfy General ducation requirements, while they may relate to the interdisciplinary studies program, may not be used
neet interdisciplinary studies unit equirements.
Master of Arts and Master of Science Degre
ode 6-040
The Master of Arts or Master of Studies permits students to earn an iterdisciplinary master's degree when heir special needs or interests cannot SULB graduate degree program. he interdisciplinary studies master egree is not a degree divided cohesive program of studies which integrates the methodologies, morspectives, and content of two of studies master's degree must be stified by legitimate academic goals. Acceptance of an applicant to an rogram is based on the academic merit and rationale of the proposed neurse of study, the applicant's potential for successtul completion of
master's program, and the ability of a master's program, and the proposed study with faculty, curricula arefuly assess goals before arefuly assess goals before degree program is administered by eoffice of the Interdisciplinary Studies Director, Academic Advising Center, Library East 111
Prerequisites
(1) A bachelor's degree from a
accredited college or university.
(2) A minimum of 24 upper-divisio (2i) A Ainimum of 24 upper-division
units (i.e., CSULB \(300-400\) courses or heir equivalent at another institution) of preparatory course work reated
he disciplines in which graduate program work is projected. An Ingerdisciplinary master's program
requires demonstration of potential for equires demonstration of potential
success in each of the disciplines elevant to the proposed degree work. The purpose of prerequisite course
applicants for advanced study and to Applicants should be aware that 24 units is a minimum and that the individual's graduate advisory
committee may determine that additional preparatory work in one or more disciplines is necessary to support the advanced degree proposal. An individual's graduate appropriate prerequisite courses; these are listed on the Prerequisit Sheet that accompanies the
Application for a Master's Degree in Interdisciplinary Studies.
(3) A 3.0 GPA (on a 4-point system) in the last 60 units of upper-divis
and/or graduate course work completed at an accredited college o university and a 3.0 GPA in all prerequisitit course work listed on the (4) No more than 9 units of program course work completed at the time the program and attendant application materials aras submitted to
the Interdisciplinary Studies Director the interdiscil
for approval.
Acceptance to the Program Those students who meet all program and University prerequisites for graduate stucy and whose
interdisciplinary studies master programs have beeen approverd by the
Interdisciplinary Studies Director will Interdisciplinary Studies Director will
be admitted as Classified graduate students in the Interdisciplinary Studies program. Students who have not met all program and University prerequisites but who demonstral
potential for their immediate and successful completion may be accepted as conditionally classifie graduate students in the Conditionally y classified graduate students will be closely monitored and hose making no progress toward
completion of prerequisites will be declassified.
Procedures
(1) Prepare a typewitten Statement
of Purpose:

> Purpose (a) Cleary identifying the
interdisciplinary program of study
interdiscippinary program of stuady
in which you wish to engage by
title (i.e. Sopecial Master's Degree
title (i.e., Special Master's Degree in (30-space limit)) and
descriotion;
description
(b) Explaining why this course of
study cannot be pursued within
study cannot be pursued within
one department with electives
from other departments
(c) Explaining how this program
relates to your educational and career goals;
(d) Indicating your background,
both academic and experiential
ooth academic and experientia
or undertaking this study; and
(e) Listing the CSULB course
appropriate to your goals.
(2) Make an appointment to mee with the Interdisciplinary Studies Director in the Academic Advising Center, Library East 111; bring your
Statement of Purpose for initial review and consultation. It the proposal is found promising and University acilities can support the proposed Studies Directory will provide yisciplinary the forms and guidelines necessary to proceed with application to the program as outined in item 3 below.
Additional procedures are identified in Handbook for the Interdisciplininary Studies Master of Arts and Master
Science Degrees, available from the Sciende Degrees, available from
Interdisciplinary Studies Director;
(3) To complete your application fo Scceptance to an Interdisciplinary (a) Secure the agreement of faculty in the disciplines related to your proposed special program to erve as members of your Iterdisciplinary Studies Graduate consist of no less than three enured/tenure-track, full-time aculty members at CSULB. The
chair of the committee must be a nember of a department approved to grant a graduate egree
(b) Convene a meeting of your
Interdisciplinary Studies Graduate Committee. At this meeting your committee will: review your documents (i.e., transcripts from
all institutions attended Statement of Purpose, etc). identify the appropriate preparatory course work
completed or to be completed (see item 2 , under Prerequisites
above) to list on the Prerequisite Check Sheet for the Master's Degree in Interdisciplinary Studies apprise you of any unique guidernes or requirements of the develop with you the academically sound program of graduate study
related to your Statement of related to your Statement of
Purpose and to be identified
the Student Program for the

Master's Degree in Interdisciplinary Studies; (c) Secure signatures on your
Student Program for the Master's Degree in Interdisciplinary Studies from the following: your Interdisciplinary Studies Graduate or Chair of the committee chair's department; the Dean or designee (i.e., the Director of
Graduate Studies or the Associat Dean) of the committee chair's School;
(d) Submit the Statement o Purpose, the Prerequisite Check Interdisciplinary Studies, the Interdiscipininary Stualies, the
Student Program for the Master's Degree in Interdisciplinary Studies and copies of transcripts from all institutions attended, including a the Interdisciplinary Studies Director. These materials Master's Degree in an Interdisciplinary Studies. These materials are erviewed by the Interdisciplinary Studies Director
whose signature on the Student Program for the Master's Degree in Interdisciplinary Studies signals acceptance of an applicant to the program in either a Classified or
Conditionally Classified capacity, Subsequent modification of an approved Student Program requires approval of the
Interdisciplinary Studies Graduate Committee and the
Interdisciplinary Studies Director
on an official Change of Program orm to be obtained from the

\section*{Advancement to Candidacy} Advancement to candidacy come Grith the approval of the Dean of Program for the Master's Degree in students are apprised of their advancement or failure to be dvanced by the Dean of Graduate Student Program after advancemen to candidacy requires the approval of e Interdisciplinary Studies Graduate Studies Director, and the Dean of Graduate Studies on an official hange of Program form to be Studies Director.
The Interdisciplinary Studies Director
will submit an Interdisciplinary Studies
graduate student's program for advancement to candidacy when th following conditions apply:
(1) Classified status (i.e., prior
acceptance to the Interdisciplinary
Studies Program): (2) Successful completion of the University Writing Proficiency Exam (WPE);
(3) Satisfactory completion of al prerequisite course work with a Prerequisites above) as well as any additional prerequisites (i.e., departmental qualifying exams);
(4) Completion of a minimum of six (4) Completion of a minimum o
units of graduat-level (5000-60) program work with a 3.0 GPA; (5) Approval by the Interdisciplinary Studies Director of the completed
Application for Thesis and Committe Application for Thesis and Committ
Form for thesis option programs; (6) Resolution of all incomplete grades (l) on the record; (7) A cumulative 3.0 GPA in (8) Current enrollment in University

Requirements for the Master of
Requirements for the Master of Arts in Interdisciplinary Studies are as
follows: foliows:
graduate (500-600) and upper division undergraduate ( \(300-400\) )
course work course work. The unique nature of an
interdisciplinary program of study may interdisciplinary program of study may number of course units in order to assure acadumie integrity.
Interdisciplinary Studies Master degree programs frequenty total 38 or more units).
(a) No fewer than 18 units shall b (a) No fewer than 18 units shall be at the 500-600 level. These must
be done in residence at CSULB Extension \(500-600\) level courses are not acceptable on the Interdisciplinary Studies graduate program
(b) No less than 15 units shall be completed within a primary
department The department is normally the degree-issuing department
(c) No more than six units in any
one or combination of
eocomonation or:
(1) Approved CSULB extensio
(no extension class credit
earned dat another insteditution
may be used to satisty deg
may be used to satisty degree
requirements nor may
extension credit be used to
offset a grade-point deficiency
in the graduate program):
(2) Transfer credit (transter
(2) Transfer credit (transfer
credit units may not be used to credit units may not be use
fulfill the requirement for 18
unt (d) No more than three units a
(d) No more than three units of

Thesis on a minimum 30-unit
program. Exceptions to this
(1) Up to six units of
(independent study in addition
to Thesis may be permitted in
to Thesis may be permitted in
minimum 30 -unit pregrem
minimum 30 -unit program
when the projected studies are
not to be taken in the same
department and when the
focus of each projected
tocus of each projected
distinct from the other (as
evidenced on the
evidence on the independen
Study Agreement). Forms to be submitted with all other
materials constituting the materials constituting the Degree in Interdisciplinary
Studies (see item 3, under
Stucies (see item 3, und
Acceptance Procedures
Acceptance Procedures
above), and when each
independent study is justifi
independent study is justified
by the student's graduate
by the student's graduate
committee as programmatically commitiee
(2) In excess of six units of
independent study in addition
to Thesis may be permitted
only in cases when an
Interdisciplinary Studies
graduate program exceeds the
minimum 30 units; when the focus of each porpected study
is clearly distinct from any is clearly distinct from any
others (as evidenced on the Independent Study Forms as
identified in 1. . 1 above); and
when each study is justitied by
the student's graduate
committee as programmatically
essential. Programs with more
than six units of independent
study will be referred to the
Interdisciplinary Studies
Advisory Board for final
Advisory
approval.
2. Successful completion of a
Thesis or Comprehensive Thesis or Comprehensive
selection of the Thesis or Comprehensive option will be made by the Interdisciplinary Studies Graduate Committee in consultation
with the student at the time the program is developed (see item under Acceptance Procedures above). Students electing to write a
thesis must enroll for thesis credit in the department of the Graduate Committee Chair;
3. All requirements of the degree
even years of the date when the program was initiated (i.e., no course program was initiated (1.e., no cours
on the program at the time of graduation may be more than seven ears old)
4. A favorable vote of the faculty of Comprehensive Chair, and the Graduate Advisors in the departments epresented on the student's
Iterdisciolinary Studies Graduate Committee.

\section*{Requirem}

The requit
The requirements for the Master of Science in Interdisciplinary Studies
shall be the same as the Master of Arts degree in Interdisciplinary Studies the primary department is required

\section*{Cooperative}

\section*{Education}

\section*{Coordinator: Saly}
telephone: (310) 985-5553
ooperative Education
The Cooperative Education Office erves as a link between the
University's academic program hose public and private employers terested in the Cooperative Education program (Co-Op), th
ducational Participation in Communities program (EPIC), and he Summer Internship program. Each of these programs is designed
to offer students academic credit for participation in monitored part-time or ullt-time practical and professional Work experience that is directly related
to their academic maior or career goal A fouth program, Human Corps, is Also provided by the Cooperative Education Office in order to assist students with volunteer community
service interests. These programs are ervice interests. These programs are The programs offered by the Cooperative Education Office are also designed to assist students in gain
a deeper understanding of the elationship between theory and practical application. Through on-the-job experience, students can
assess their capabilities, clarity values, and explore career goals. The accompanying Co-Op internship courses (see below)
elective academic credit based on the work experience and required course
assignments. Course disurssions assignments. Course discussions include relevant topics such as, work
ethics, communication skills, confict resolution, and employer-employee resolution, and employer-employee
relations. Written assignments enable
students students to review and process the earning that takes place
hands-on environment.
Cooperative Education (Co-Op) Internships
Cooperative Education internships
offer students paid work experience in offer students paid work experience in business, industry, government and
the non-profit sector. Co-Op student may choose from two types of work experience. Students may alternate
full-time work periods with full-time ful-time work periods with full-time
academic periods or they may work part-time while simultaneously attending the University. Both lower-
and upper- division Co-Op courses and upper- division Co-Op courses
are available for up to 6 units of elective academic credit.
Educational Participation in
Communities (EPIC)
The Educational Participation in
Communities (EPIC) program Communities (EPIC) program
provides volunteer internship opportunities for students who wish to
participate in career-related field participate in career-related field experiences that complement their
classroom study. EPIC internships are available with organizations and agencies in the not--for-profit sector.
Both lower- and upper-division Co-Op Both lower-and uper-division Co-Op
courses are available for up to 6 units of elective academic credit. Human Corps
Established in 1987, the Human
Corps program provides students with the opportunity to become involved in local community service activities. Students may volunteer in non-profit agencies in order to
combat social problems and the quality of community life. Typical community service areas include. health care, literacy, child care,
services to the eldery, substance abuse, and programs for the disabled. The Cooperaritue Education
office can assist both individual office can assist both individual
students and student organization students and student organization
seeking community sevice work. Summer Internships
The Summer Internship Program offers students the opportunity to gain
career or academically related work experience during the summer months. Summer placements are paid, fuill-time positions and are
available locally and nationaly to all available
majors.

\section*{Curriculum}

Lower Division
HHS 292. Career Exploration (1-3)
Prerequisitite: Consent of instructor or coop
Office and a minimum GPA of 2 Pronder Oftudent with a career-elated experience b allowing the studeraent to wolated experience prualtying may work his or her malor. Studerit career-related volunteer or paid assignment in private industry, a non-proft agencoy, or a public agency. In addition to the practical experience deosigned to complement this fierd experiemence by EDEL 292. Exploring ducation (1-3) F,S
Perequaistes: Consent of instructor or \(\mathrm{C}-\mathrm{Op}\) as an elementary school teacher's aide, and minimum GPA of 2.0 . Students who are a accopted school to engage in paid work whilie ennrolled in lieminaminar course. Through a series of 1 eminars, students will focus on specific aspection
of classroom
operation and on the esponsibilitites and activities of toachers in the
elementary school. Twelve to eighteen hours of diementary school. Twelve to eighteen hours of paid experience per

Field Experience ( \(1-3\) ) F,S
Prerquisites: Consent of instructor or co.0 bifice. Qualifing students will be placed in
majo- or tareer-felated, community-based
 Nraate industry or in a public agency. An
organize plan utiking a series of seminars and arning agreementsts is required, accompanied
BA 493. Busines
(1-3) F.S
\(\square\) rerequisites: Status as classified business malor
and consent of instructor or \(C\) Coop Office ualified students will be placed in career-relitated Lusinessees. An organized plan utilizing a series seminars and learning agreements is required. along with
asoignmenta

Ocean Studies Institute

\section*{Director: Murray D.Dailey}

Location: Peterson Hall 1 Room 114 Telephone: 985-5343
The Ocean Studies Institute was
teaching rese to coordinate service in ocean studies on member campuses. Members include Beach, Loz Angeles Aullerton, Long Pomona, and San Diego The Institute does not offer degrees, but it serves as an administrative liaison to tacilitait degree program
campuses. campuses
research vessel for teaching and research purposes, obtains research grants and contracts, perform
research, and is responsible for curriculum planning and facilities acquisition. Presently the Institute campuses. Thises
The courses and research in which applied approach of iftert the broad
mission-orien mission-oriented projects in harbors
and the Courses (OSS)
Upper Division
300. Introduction to Aquaculture (3) F, Odd Years

Prerequisites: BIOL \(210 \mathrm{~A}, \mathrm{~B}\) with grade \({ }^{\circ} \mathrm{C}\), or
better. Introduction to water systems citieria, nutrition, feedingotion trowth, reperoroduction, breedining organisms. Required field trip(s). Tradition grading only. (Leecture: 3 hours.) 460. Oceanographic Techniques (3) ,F,S

Prerequusites:
interdisipinanay
Consent of instructor. An Inierisciplinary survery of instructor. An data in the fields of biococgy. chemistry. and physics. Students will beecome taniliar with ccaanygraphic equivment and methondorlogies
which will emphasze onthe job traning oboad which will emphesize on-the-job trating aboarc
ship and in the laborator. (Leeture: : 1 hourtion
laborator and field. Latobatoty and Field 6 hours:c clases meets one
day per week). Tradtional grading only. 490. Special Topics in Per ween Studles (1-3) F,S,SS, EXED Pretequiste: Consent of instructor. Topics from
selected areas of Ocean Studies. Course content selected areas of Occan Studies. Course conten mil vary from section to section. May be repeeteo credit for OSS 490 and/or 490 Llinited to six nits. Topics to be announced in the Schedule

490L. Laboratory in Special F,S,SS,EXED
Prerequisite: Consent of instructor. Topics from selected areas of Occan Studies. Course contern will vary from section to section. May be repeated
for credit with the consent of instructor. Meximu credif for OSS 490 and/or 490 L limited to six nits. Topics to be announcod in the Schedule od
is in Ocean tudies (1-3) F,S,SS
Prerequisite: Consent of director. Research in peocifo aspect of bilology, water quality, geology, Micribiliogg, or coean engineering. This course io
designed to allow students working on specifio bepiciced tacoaso to students working on speoificion
tilization of the reearal material through Utilization of the research vessel Yellowin.
Idividuals using the vessel would do so as cuest of the crev's beader on a reguilary of three units.

\section*{Sports, \\ Athletics, and Recreation}

The University sponsors a complete Sports, Athletics, and Recreation is e administrative unit responsible for athletic programs; the intramural program; the sport club activities, and
recreational fitness for students, eculty, and staff.
The department sponsors a divers rogram of intercollegiate athletics fo men and women. Both programs National Collegiate Athletic Association and the Big West Conference, maintaining membership varsity sports are basketball, golf cooss-country, tennis, track, and field sports are basketball, basensll varsity and field, cross-country, water polo, volleyball, and golf. Students enrolling in intercollegiate Athletic
programs must meet all NCAA eligibility requirements.
The intramural program offers all students the opportunity to play in a wide range of sports and activities. activities. To receive credit for this class students must participate in a
minimum of 3 different intram minimum of 3 dififerent intramural alternative to direct participation,
students can earn class credit by
officiating 15 intramural games per officiating 15 intramural games p
semester. Team activities are semester. Team act
scheduled at varied times. Leag competition is available in 16 of the activities for men, women and
co-educational participation.
Students may participate in any of club sports activities sponsored by the Associated Students inc. Department. These sports are crew, rugby, archery, badminton, fencing, saliling, judo, soccer, snow skiing, surfing, water skiing, aikido, cycling,
karate, kung fu, surfing, triathlon, women water polo, and Hwa Rang Do. Students registering for SAR 210 must attend regular practices and
compettions, assist the club with fund raiser and adhere to the rules and regulations.
Students may apply no more than lower-division SAR courses baccalaureate degree within the 20 -unit maximum on activity units generally, except that the combined
total of lower-division SAR and PE activity units must not exceed 12 units. Upper Division SAR courses
may be taken one time only and not in may be taken one time only and not
conjunction with the lower division conjun
SAR.

All SAR courses are taught on Credit grading basis.
ourses (SAR)
. Intramural Activities (1) F,S
210. Sport Clubs (1) F,S

Compoetition in sport clubs as conducted under subiect to approval of the coach. of the sport. Ahietes enrolled who tali to qually for the squad ust withdraw from the course. May be repeatad roditit grading only.
260-299. Intercollegiate Sports (1)
, S
Compettion in NCAA-regulated maio and mino ports. Enrollment subiect to approval of the yalify for the squad must withraw from the ourse. May be repeotad for crodid toa max
261. Women's Softball (1)
262. Men's Baseball (1)
263. Women's Basketball (1)
264. Men's Basketball (1)
265. Women's Track and Field (1)

\author{
266. Men's Track and Fieid (1) \\ 268. Men's Football ( 1 ) \\ 269. Women's Volleyball (1) \\ 272. Men's Volleyball (1) \\ 274. Men's Spring Football (1) \\ 275. Women's Golf (1) \\ 277. Women's Tenn \\ 278. \\ 279. Women's Swimming and Diving \\ Divin \({ }^{\text {I }}\) 's Swimming and 201. \\ 98. Wom's Cross-Country (1) 283. Fencing (1) \\ 319. Theory and Practice of Minor Intercolleglate Sports (2) \\ 320. Theory and Practice of Majo Intercolleglate Sports (2)
}


heir first semester on campus. The EESL results place students in English American Language Institute or equivalent courses in the American Language Program. These courses are required for graduation and must oportunity; course loads may need be adjusted accordingly. Ameri modified only by proving proficiency within the class or by appeal to the merican Language Petitions elsewhere cannot be substituted for merican Language requirements.

\section*{Courses (ALI)}
024. English Pronunciation (3) F Prerequisites: Appropiate EESL score. Spoken
English skills
development emphasking the sound system of American English, including ocurate perception, production, and prediction
 equired. Four class hours per weok. (No credi
or students. with crodit in ALP \(124 \mathrm{~A}, \mathrm{~B}\). eecture-Antrivity CrediriNo Creadit prading onhy
epeatable to a maximum of 6 units.
025A,B. American Language -
F,W,S,SS
No prerequistites. Intensive English as a Seconc
 peaking, and listening skills. Emphasizen oral
communication
and
cuturual
orientation Twenty-five hours per week.
030A,B. American Language -
wactory II (non-credii)
,W,S,S
Prereauisite: Appropiate American Language
nostiute (AL) Placement Teet score or successhil ompletion of AL O25B. Intensive academic nelish as a seccond Language, focuaing on
deverelomenent of speaking, 1 istening, reacing, and
 English, indluding study skills, language
functions,
and
vocabulay
ncceosary luchions, and vocabulary necessary tor
academic coursewrk. Twenty-fve hours per
weok. week.
35. American Language intermediate I (6) F,S Pretequisit: Appropiate placement teos score or
succestril completion of ALI 030 B . Semi-intensive academic study of English as speaking (incluading promunciation) and listening comprehension skills development in context current interest topics. Emphasizes basic ostudents with credit in ALP 135. Twelve clas hours per week.
040. American Language -

Prerequisites: Appropriate EESL score or suc
 grating reading, witing, speaking (Incuuding pro
nunciation) and
listening compretenension skilg runciation) and listening comprehension skile
development presented in context of current in terest topics. Emphasizes proceoss of paragrap
development. Not open to students with creait development. Not open to students with crodit
ALPPAL 140 or ALP 121 . Twelve class hrs per \(w\).
126. Cross-Cultural

Communication Skills (3) F Prerequisites: Appropiate EESL score and
succosstul completion of ALPALIL 040 . Spoken Encolish hkililo devevoloment emphaszing crose
cuilural
communication, including American communicative expectations, batriers to in intercultural understanding, and interpersonal oral
communication skilis in a variety of contexts,
 students ul understand cultural difterencoes in
comunicative strie and behavic. Four communicative styie and behaviver. Fuir clase
hours per weok. (No credit tor students with credit
in ALPAU 125) hours per week.
in ALPAL 125.)
127. ALP Public Speaking (3) S Prerequisites: Appropiate EESL score and
succoessul completion of ALPPAL 040 . Spoken English skilis development emphaszing public speaking, including effective oral presentation techniques, audience analysis, and speean
organization. Students leann to prepare, presen organization. Sudenitis eam io prepare, preseent
 128. Employment Communication Skills (3) F
Prerequisites: Appropiate EESL score and
succocstul completion of ALPALAL 040 . Spoken
 employment communication, including interview ing. conflict resolution, and negotiation
techriques tot the non-mative English speaker in techniques tor the non--ative Engligh speaker in
the workplace. The course focues on the skills
necossary tor successtul interpersonal and necossary for succoestul) interpersonal and
professional communication for career entry and mobility. Four class hours per week. (No credit for
145. Amicrean ALALI 125),
145. American Language
Advanced । (3) F,S

Preerequistes: Appropriate EESL score or
successtul completion of ALPALL 040 with a
 including interertial reading compietenension and
vcoabulary develoment and esoentian of
paragraph and shot essay organization. pararapaph and short essay arganization. Not
open to students with creodit in ALP \(122 / 123\). open to students with
Three class hours per week.
150. American Language Advanced II (3) F,S Pretequistes: Appropiate EESL score or
succosstul completion of ALPAL 145 whit a
and
 expository witing, with emphasis on longer
essayy. Anaysis and practive of standard
thelorical modes of essay development. Thiee thetericial modes of
class hours per week.

\section*{Courses (ALP)}
024. Engllsh Pronunclation (3) Prerequistese Appropriate EESL. Scoroe. Spoken
English skills dovelopment emphasking the sound system of American English, including accurate perception, production, and prediction
of speech sounds in context and increased oral of specch sounds in context and increased oral
fluency. Indidudual language laboratory work required. Four class hours per week. (No credit
for students with credit in ALP 124 A, .) for students with credit in ALP \({ }^{124 A, B, \text {.) }}\) (Lecture-Activity) CreditNo Credit grading only. Repeatable to a maximum of 6 units.
035. American Language
Intermediate I (6) F,S

Preerequisite: Appropriate placement test scor Preerequisite: Appropiate placement test score or
sucoessul completion of AL
semi-intens. Semi-intensive academic study of English as a
Second Language, integrating reading, witing. Secondd Language, integratitg reaaing, writing,
speaking (induring prounciation) and listering Compreenension skills development in context of current interest topics. Emphasizes basic
expression of ideas and relationships. Not open to students with credit in ALP 135. Twete clase hours per week.
040. American Language -
Intermediate II (6) F,S

Prerequisites: Appropriate EESL score o
 grade of "C" or better. Semi-intensive academic
ESL integrating reading, witing, speaking ESL integratity reading, writing, spoaking
induding
pronunciation)
and comprehension skills development presented in context of current interest topicsen. Emphasiens
processs of paragraph deveroppent . Not open to students with crevit in ALPPALL 140 or ALP 121
Tweve e llass hours per weak Twelve class hours per weok
Communication Skills (3) F
Preerequisites: Appropiate EESL score and
succeasstul completion of ALPALI 040 . Spoken succeastul completion of ALPALAL 040 . Spoken
English
skillis
develompment
emphasizing cross-cultural communication, induding
American communicative expectations, bariers American communicative expectations, bariiern
to intercultural understanding, and interpeosonal oral communication skills in a variety of contexts. particumuly in inatrutuoto-student interactions at the college level. This course is designed to help communicative style and behavio. Four class
hours per week. (No credin for students sith credin hours per week. (No
in ALPALI 125.)
27. ALP Public Speaking (3) S Prereauistes: Appropriate EESL score and English skills development emphasizing pubbirín echniquees, auciencoe analysyis, and speeech organization. Studentit learn to prepare, , pevesent.
and critique academic speeches and understand and cirtique academic speeches and understand culturally appropriate spoech styles for an
academic setting. Four class hours per week. (NO
credit for students with credit in ALPALIL 125 ).

\section*{128. Employment Communication}

Skills (3) \(F\)
Preerequisites: Approppiate EESL score and
sucocostul completion of ALPALL O40. Spoken
Encleter English skills deevelopment emphasizin re-employmment communication, including coniques fort the non-native English speakere in he workplace. The course fousues on the skilis octessional cormmunication for corereer entry an Mbility. Four class hours per week. No creditita
udents with creodit in ALPALAL 125.)
145. American Language -
Advanced I (3) F,S

Preerequistes: Approppiate EESL score or rade of "CC" or better. Uninersity-level ESL rradue of """I" or better. University-level ESL ocabulary deveviopment and esosentials of paparaph and shot essayy organization. Not
open to totudents with creait in ALP \(122 / 123\).
150. American Lang.
150. American Languag
Advanced II (3) F,S

Prerequisites: Apropriate EESL score o Preerequisites: Appropiate EESL score or
successul completion of ALPRAL 145 with a
grade of "C" or better. University-tevel ESL grade of "C" or better. University-vevel ESL inducting critica/anaxtyical reading and
expository writing. with emphasis on longer
essaye. Analysisis and practice of standard essoays. Analysis. and practice of tannder
thetorical modes of essay dievelopment. Three class hours per week.


Graduate Center for Public Policy and Administration

Dean: Mel D. Powell oordinator, Student Affairs: Assistant to the Dean William C. Manes Telephone: (310) 985-4177

\section*{The Department}

Public administrators today are becoming increasingly aware of the eople's business. They are challenged to be both effective and efficient. They believe that people end to support what they help to create. Working with citizens, they
have brought the practice of public nanagement to its highest lev without giving up the desire to onstantly change and improve. The ervants are recognized and ewarded in personal and material ways, making the study of public
policy and administration a highly desirable career option.
The Graduate Center for Public
Policy and Administration offers the Master of Public Administration degree; Options in the degre rogram in Public Works and graduate certificate programs in Urban Executive Management, the ublic Management Analyst, mployer-Employee Relations and Personnel Management, Public Transportation Policy and Planning and Law Office Administration. The enter's graduate level progal emphasis and a recognized need to e student's competency and he student's competency and
perspective of the public administrative processes and analysis. The Center's curriculum
also designed to emphasize the student's ability to apply new knowledge, skills, and leadership echniques to the solution of public

Admission applications are
encuraged from persons with
wish to pursue, part-time or full-time, graduate program designed to prepare them for new opportunities in
public service or to expand or extend their capacities in a present position. The Center provides education in public policy and administration to professional persons in such fields as
public works, social services, public health, community development, criminal justice, educational administration, recreation
administration, finance, person administration, finance, personnel,
policy analysis, urban and regional planning, systems analysis and urban administration.
A detailed summary of and procedures for the Master Public Administration degree
program, the Options in Public Works Administration and in Urban Affairs, and the graduate certificate programs are contaided student hanabooks avaiable trom the Graduate Center
Public Policy and Administration. Program Standards and Requirements
Admission
Students seeking admission to one of the Center's programs should have an undergraduate degree in pub
administration, or equivalent preparation for graduate study in public administration. A student mus
have an undergraduate grade point have an undergraduate grade point
average of 2.75 or better. A student whose overall undergraduate average is less than 2.75 , but who presents acceptable evidence of profess
potential shown through recent academic performance and experiential background, may be
admitted by special action of the admitted
Students applying for admission to one of the Center's programs are required to subm
a. A completed Center Application
Form for the specific degree or certificate program.
b. Official transcripts of all course work completed in higher education c. Two letters of recommendation profession under whom the applicant has studied, or from persons in positions of administrative leadership
under whom the applicant has worked d. a one or two page statement concerning the applicant's reason
and plans for pursuing a career in public administration. Following admission to the University and acceptance in one of should formulate a Program Prospectus, or learning plan, in
coniunction with a Center faculty conjunction with a Center faculty
advisor. The objective of the prospectus is to assist the student in prospectus is to assist the student in
developing an effective course of study to meet individual career needs provide advice to the student on program course requirements and elective opportunities, and couns the stud
area.
Advancement to Candidacy
The following are requirements for the degree and certificate programs (1) Satisfaction of the general
University requirements for University requirements for
advancement to candidacy (2) Completion of all degree or program prerequisites; (3) Approval of the candidate's
program by a fuculy and program by a faculty advisor and th Dean of the Graduate Center for
Public Policy and Administration; (4) Completion of six units of course work at this University toward the egree or program objective: all graduate work completed at this University, or transferred from other sources, to meet degree or program requirements.
Students Credit Sraduate certificate program in the gublic Management Analyst, mployer-Employee Relations an ersonnel Management, Public ransportation Policy and Planning, or aw Office Administration, may the certificate program to be aplied to the Center's Master o ublic Administration degree program. The student must apply to candidate
Students who have completed the academic requirements for the Master oapplying for admission to a

Craduate certificate program in the Center, may apply up to 6 units of
credit earned in the MPA program for the required or elective courses in a certificate program.
Master of Public Administration (code 7-9550)
professional graduate program of studies leading to the degree of Master of Public Administration. The
36 -unit program is designed with 36 -unit program is designed \(w\)
professional emphasis and a recognized need to provide students with an increased competency and adsininistrative processes of the analytical and
ad government. The MPA degree is sufficiently flexible that students may
select a program of elective course oriented toward a generalist program of studies, place emphasis on a staff specialization such as personnel, or
permit a focus on a specific public program field such as criminal justice administration. In all cases, a common grounding in the core areas of public but beyond this, considerable freedom of choice enables students o select subjects which fit their
particular backgrounds or caree particuliar ba.
Requirements for the Master of
Public Administration:
1. A minimum of 36 course units in
graduate course work, with a graduate course work, with a
minimum of 21 units of \(500 / 600\) leve courses in public policy and
2. Satisfactory completion of PPA
\(500,510,650,660,670\) and 696 ;
3. Completion of approved internship program (PPA 585) as equired course work beyond the 36 -unit minimum, or waiver of the
iternship requirement based on professional experience;
4. Additional elective course work elective fields to meet the 36 -unit minimum
5. Successtul completion of a and PPA 697 Directed Research. University Courses Acceptable for Master of Public Administration: Graduate course descriptions are
ound in the department listings in which they are offered. Graduate courses applicable for the degree are:
ANTH 516: C E \(506,522,560,564\) 565: CRIM 512, 541, 521, 581, 621,
\(622,623,624,640,641,690\) : ECO \(622,623,624,640,641,690 ;\) ECON
\(500,510,511,636,650,670,686 ;\)

EDAD 541, 544, 580, 647, 648, 649, GEOL 574: HCA 505. HEC 541; GEO; 574; HCA 505; HEC 541; HIST
568, HRM \(500,652,655,657\); IS 500 MGMT 542, 645, 646, 647; OCST 501, 502, 503, 504; P ED 5211; POSC
640; PPA \(512,514,515,517,520\), 640; PPA 512, \(514,515,517,520\),
\(521,522,523,525,526,527,530\),
\(535,540,54,54,54,54,545,546\),
 521, 571, 595; SFA' 520, 610 . with an Option in Urban Affairs (code 7-9551)
The purpose of the Option in Urban Aftairs within the Master of Public
Administration degree is to provid students who have particular interests in urban problems and processes wif the opportunity to expand their kedge and awareness in the field. In this broadly based interdisciplinary program, students can develop an
understanding of the systemic nature understanding of the systemic nature
of the urban environment and the interrelatedness of many urban problems. The program is designed
to provide urban managers with ideas to provide urban managers with id
and techniques for dealing with
various urban situations. Requirements for the Master of Public Administration Degree Option in Urban Affair 1. A minimum of 36 semester units
in graduate course work with a minimum of 24 units of \(500 / 600\) level
mith courses in public policy and administration
2. Satisfactory completion of PPA
\(500,510,610,650,660,670\), and 696 , 3. Completion of an approved internship program (PPA 585) a required work beyond the 36 -unit
minimum, or waiver of the internship requirement based on professional experience:
4. Completion of 12 units of elective
course work selected trom. PPA

5. Successtul completion of a written Comprehensive Examination
and PPA 697 - Directed Research. Master of Public Administration option in Public Works Administration (code 7-9552) The Master of Public Administration
Degree Option in Public Works Administration is designed to provid advanced knowledge to practitioners and pre-career students in the growing field of public works management. Course work prepare administration and specialized public works management activities, subjects such as air and wate ollution, water supply, waste isposal and managagement, energy, housing, and transportation. Progra government issues and responses. Admission
The general standards for he Master of Public Administration degree program. An applicant must demonstrate a background of related nits, or significant mark of twe and/or staff experience in public administration. For this degree ption, the experiential background
would be targeted to the public works and infrastructure sector. Requirements of the Master of Public Administration Option
1. A minimum of 30 .
in graduate course work with a minimum of 27 units of \(500 / 600\) courses in public policy and
administration and civi 2. Satisfactory and civil engineering 2. Satisfactory completion of PPA
\(500,510,554,650,660,670\) and 696 ;
and C E 556; and C E 556;
3. Completion of an approved
internship program (PPA 585) as internship program (PPA 585) as
required course work beyond the 36 -unit minimum, or waiver of the internship requirement based on
professional experience professional experience;
4. Completion of 9 units of elective ourse work selected from: PPA 51,
\(520,522,527,530,535,540,544\),
\(545,547,549,550,551,552,553\), \(544,547,549,550,551,5422,544\),
\(555,560,565,590 ;\) C 504,506, \(555,560,565,590\); CE 5
\(520,522,564,565,602 ;\) 5. Successful completion of a
written Comprehensive Examination, written Comprehensive Examination,
and PPA 697, Directed Research, or
C E 697, Directed Studies.

Graduate Certificate in Urban

\section*{Executive Mana
(code 1-9050)}

This program is designed to serve he post-graduate executive vomen in aspiring to top level positions in city and county governments. The goal of thi program is to provide urban nowledge of strategic planning rocesses; dynamics of human lations; strategies for implementing
policies; consensus building
echniques; and economic and
nancial forces impacting on local governments
genereal adisite: In addion requirements applicants for the graduate certificate UUrban Executive Management management experience in Public Administration, or a Masters Degree in
Abic Administraiona a minimum esponsible management experience in government.
Requirements for the Certificate in
rban Executive Managem
1. A minimum of 18 units in
graduate course work, including
required and 3 elective courses;
2. Satisfactory completion of PPA
2. Satisfactory co
3. Satisfactory completion of 3
elective courses selected from PPA
elective courses selected irom PPA
\(512,525,530,535,545,550,565\),

\section*{and 575 .}

\section*{Graduate Certificate in Public} (code 1-9010)
This program is designed for men
and women who work or desire to work in budgeting, policy formulation inancial management, or program agencies. The program prepares candidates with suct skills as defining a problem; conducting cost benef echniques; conducting behavioral//oolitical analysis; preparing and presenting reports; learning the and political skills necessary for success as an analyst in government. Prerequisite: In addition to the students should be employed in public service or related activities, or have a goal of public service-felated

Requirements for the Certificate in
Public Management Analyst
1. A minimum of 18 units in
graduate course work, including graduate course work, including 5
required and 1 elective courses. 2. Satisfactory completion of PPA 3. Satisfactory completion of elective course selected from PPA 522, 523, 527, 540, and 560. Graduate Certificate in Public Sector Employer-Employee Management (code 1-9020) This program is designed for public sector managers and those aspiring to enter public service whilities required to deal effectively with the critical area of public sector employee The primary goal of this program is to provide the necessary training for public managers to effectively utilize potential in coniunction with the need of the public organization. Requirements for the Certificate in Pubiic Sector EmployerEmployee Relations and
Personnel Management
1. A minimum of 18 course units in graduate course work, including 3 2. Satisfactory completion of PPA
3. Satisfactory completion of 3 elective courses selected from PPA Graduate Certificate in Public Graduate Certificate in Public (code 1-9030)
The Public Sector Financial Management Certificate Program is designed for public managers and understanding of governmental financial management concepts, functions, techniques, and issues. The program is designed to amiliarize
students with financial management problems and the techniques available for solving them. An emphasis is placed on how to
recognize, evaluate, and utilize financial information in decision making.
Requirements for the Certificate in Public Sector
Management
(1) A minimum of 18 units in graduate course work, including 3
(2) Satisfactory completion of PPA
(3) Satisfactory completion of 3 elective courses selected from
\(520,522,527,540\) and 560 .
Graduate Certificate in Transportation Policy and Planning (code 1-9040) The purpose of this certificate
program is to provide instruction in skills and knowledge appropriate to professional activity in transportation policy and planning for urban transportation. Key support are
include urban planning, policy include urban planning, policy
analysis, environmental policy intergovernmental policy, personnel
policy, and grants administration. policy, and grants administration. Requirements for the Certificate in
Transportation Policy and Planning 1. A minimum of 18 units in graduate course work, including
required and 3 elective courses; 2. Satisfactory completion of PPA 3. Satisfactory completion of 3 elective courses selected from PPA 535, 540, 545, 575, 670; C E
52,\(52 ;\) ECON 636, 690.
Graduate Certificate in Law Offic
Administration (code 1-9000)
The Graduate Certificate in Law Office Administration is a six-course program concentrating on the subject of administrators in the field of law office administration. The program is specially designed for mature, mid-career professionals who have success in the practice of law office administration. Particular areas of ubjects as management organization, financial management strategies, budget planning and recasting, personnel management processing systems.
Requirements for the Certificate in
Law Office Administration aw Office Administration
A total of six courses ( 18 semester
nits) is required as follows: PPA 591 . units) is required as follows: PPA 59
592,593 , 594 , and 595 . Students must also complete PPA 597 (for students currently emp
office administrators)

Courses (PPA)
500. Foundations of Public Policy concopts of Concopts of the discoipline: ffundamentalas of
public organization theor, popicy formulation and
analyis, and adminitatito processes; managemement of the public interest and ettics in in governmen
510. Public Administrative/ nalysis of public ocesses (3) F,S procosses from the perspective of the public xeecutive. public finanace and budgeting, pubbic
 uusiness, and the role and use of organization and adminind
abjections.
12. Urban Executive Management (3) \(\mathrm{F}, \mathrm{S}\) Sudents will be provided an overiew of the
various types of problems contronting today' urban administratar aror and the pososibibe means of solving some of these presing problems changing society; new strategies for managing Loal government; new strontiegies in planninaging and controlling financial resources
514. Municipal Law for
Administrators (3) F,S
ramination of the major laws and legal issues Hfecting local government today. The basis powerss corpoorate (sercicee) powers, taxation and minent domain will be studied. This coursa will anaysis, and will explore the new parameters and changing standards in a litidious society
coking for 'doeper pockets,' slower growh, and rreater oitizen invervomemetst in locoal growerth, and Solected areas of study will include the impacat of cgulation: Califormia Rededevelopment Agency aw: municipal tort liability, includuring personconal
 'Buncill meeting and hearing procecdures; the
 515. Administrative Report Writing (3) F,S
Preparation of witten documents required of
pubbio diministrators. Not open to stucuents with
creodit in PPA 590 - Administrative Repoot Writing.
517. Analytical Skills Development
(3) F, S
(3) \(\mathrm{F}, \mathrm{S}\)

This course is designed to develop or improve the
skilis needed to pertorm analytical work in the public sector. There will be a duual emphase
wherein both quantitative and behaiora/ political Whereien both quantitative and behanioral/ political
apsects of analysis in govermment ase explored. Cost-beneffit analysis, and report preperation and
peesentation will be covered.
520. Governmental Administrative An exces Analysis (3) F,S An examination of the nature, purposes, , uses 521. Managemecomputer Administrators (3) F, S
A seminar for public administrators focusing on
the design, development, and management of microcomputer systems and applications public organizations. There is a dual emphasis the course: analysis of critical concepts and
tssues reitating to the management of miracomputer systems, and hands-on cont putee
laboratory experiecice in the design development laboratory experienco in the design, develiopme
and use of microcomputer applications. 522. Automating Governme Administration (3) F,S
An examination of the use of computers to assist government management, with special emphasi
on the automation of services such as financo polive and library depaertments. The course wi provide an introductory background in computer and flies for non-computter spevecialists.
523. Urban Informatio
Systems for Public

Systems for Public
Management (3)
Management (3) \(\mathrm{F}, \mathrm{S}\)
A seminar for public administatars in urban

subystems and components that make up the
municipal information system. System planning manageement and constel.). as waltem pas system
measurement and evaluation will the coll measurement and evaluation, will be covered
Coos benefts and cost effective sytems will be discussed.
525. Human Services

Administration (3) F,S
Examination of social services agencies in the pubbic sector and the unique administrative
practices. policies and problems associateo
therein 526. Qu
526. Quantitative System

Preequuisites: Completion of PPA 696 Research Prerequiuitese Completion of PPA 696 Research
Methods in Public Administration. This cours
povides an intuduction to provides an introduction to advancod quauntutatis nd analytical tecciques used in the publio n systems theor) and operations reesearch
Specifict topics and tecchniques indude theories peecifif topics and tecchiquess include theories
Isytem design, network planning and analysis
 and simulation, and forecasting. Emphasis in the
courrese is placed on booth undertsanding the appropriate cuses of anatlyical techniques and
their
application to common public secto
527. Productivity in Loca
Government (3) F,S

This course will identity and develop a concept of vaious approaches to managecement orrasinations will bee toxamined tonageoementint of
relationship to productivity. The application of
behavioral science to productivity will be
considered to determine its
maignifificance. Finally,
magement techniques and methods will be management techniques and methods will be
reviewed to provide some knowedge of reviewed to provice some knowledge of
substantive approaches to the increases of
poructivity.
530. Manpower Planning fo Public Sector Organization
xamination of manpower programs and practioss in the public socotor programs amphasis on
federally subsidized programs and their
 Anaysis of the functions of the mannowwer
planner as they pertain to local market planner as they peetain to local market
intormation: program monitoring and evaluation;
and the human sencice deliven and the human service delivery system.

\section*{535. Intergovernmental Relations
(3) FS \\ (3) FS}

This course will present fundamental concopts
and
Usiuses of intergovernmental felations in the Undited States. Titopgice coverental inclations history of
the field, intergovernmental revenues and the field, intergovernmental revenues and
expenditures, state and federal legislative
procese
 interargan
issues.
540. Grants Administration and Management (3) F,S
Study of the various types of financial and
technical asaistances to ocoal public and quasi-public agencies; the strategogese for or ocating
and obtaining grant programs support; and the development of effective project systems for externally funded projectsts. Not open to studdents
with credit in PPA 590 - Grants Administration with credid in PPA
and Management
542. Emergency Planning and
Management (3) Management (3) \(F, S\)
Students will study the
Students will study the planning and in large scale emergencies. The natuer of noturual
and technological risk and emergency will be
 assessed

\section*{543. Coastal/Marine Resource}

Students will study the policy processes as applied to coastal/ Marine resourcos. Theses course
will review the uses, insues and conficict suthin will review the uses, bssues and conflicts within
the coastal and exclusie ecconomic zone, and the coastalic encector revpsonsosemic to bone, and and
development and presenation demands via devevopment and
policy mechanisms
544. Strategic Planning and Management in the Public Sector
(3) (3) \(\mathrm{F}, \mathrm{S}\)

Study yo strategy formulation and implementation in public sector or oranizations and in
public/private strate
strategic
endeavors
 and analtical techiqiques explored through case
studies. Intigration with tradtional management studies. Integration v.
processes assessed.
545. Urban Planning Policies Processes and Techniques (3) F, Historical development of urban planning
concopts and practices; general plan formution; general plan housing and conservation dements; ;eneraal plan open spacae and seiesmic ighway elememits; general plan satety and mental impoct analysis; development of Southern California's infratructure; governmentral pro-
gram infuentiong Southen Calfornia planning
(ederal grams infiuencing
(Federat, State):
southerm California.
546. The Urban Crisis and the
trator (3) F,S
A surver of the history of urbanization, the
titeratue of or orban power retalions and
decision-making, and the
 tefface with urban agency representatives wil a malor focus of this course.
547. Local Government Economic detailed discussion of the nature, goals and detailed discussion of the nature, goals and
toceosses of locally based economic development programs. Dofinition of goveremvestment. A thorough explanation of propertytiated reverues from both the public and privite 48
48. Housing Problems and th
Urban Administrator (3) F,S An overiew of housing problems in horease thy public adminitstatot's avarenenses o dministration and housing problems, and laciltate the public a
549. The Municipal Community

Development Process (3) F,S
An overiew of the municipal community evelopment Process with particular emphasis on housing, social senice, and redevelopmen unctions. The cuurse will explorere basicic concepts of each function, their interrelationships and
administrative practices. Emphasis will be given the impact of fideoreal Eommunity divelopment
hock grants and the local proceas. lock grants and the local process
and Planning (3) F,S
Examines the status of urban transportation Lamintes and needs today and discusporses the hearas and long-term options fort the future.
Anayzzes locol. state. foderal policy and
nter-govermental system; Los Angeles ubian Anter-governmental syate, leederal policy and transportation development,
51. Transportation Regulatory Public Policy (3) F,S
 nowedge of intermodal seninices. in international knowledge of intermocal sentices in international.
national and Southern Cailitian context; special
emphasis upon deregulation movement since empha
1980.
552. Airport Policy and

Airport management, policy and planning: key Airport management, policy and plamning: key
management and staft tasks for commerial an geneceal aviation operations, including ground acceses and facility managementt: specializei capital facility design, construction, operation
and funding, coctinuing
management, operations, licenning, board, batety,
 transportation modese, passenger
553. Seaport Policy and
俍 Seaport management, policy and planning: key nanagemment and staft tasks for cargo handline storing, intermodal transter, facility operation
planning and construction, funding: specialize Planning and construction, tunding: specialized
Unctions include forceasing demand, capitial
acciliy design, comstrution, operation and facility design, construction, operation ant
unding: coordination with public and privato agencies, licensing, satety, environment and
inter-elationships with other transportation hodes. 554. Infrastruc

The course will provice a study of public infastructura essential to urban communtion trom the perspective of the urban administrato Students will examine infrastructure maintenance
and expansion needs assessment, and and expansion needs assessment, and
intergovernmental financing with concortation
on water and wastewater, transportation, solid on weter and wastewater, transportation, solid
waste, and public facilites, induding schools. 555. Local Government Budget Skills (3) F,S
Detailed exploration of the various budgel syytems avalalation to bocal ovevermentsts. Strees will be on building detailed knowiedge and skilis
techniques of relating reverues expenditirus, procram ubudget design and anaysisis and relating burgeting to the political proceses. Metrocds of balancing citizen demands
with revenue limations within
consumer-oiented sciety and
 50. Public Techniques and Issues (3) F,S The course will provide an undertanding of
current governmental financial management echniques and issues. Financial problem contrionted by a number of government
organizations has stimulated considerable organizations has stimulated considirabie
nterectint in financial management and a record for mproved methods of managing fficalal affairs This course will provide an introduction to
mportant financial management issues and to new analticical techaniquases which are being used improve financial decision making. 565. Local Government Finance kills (3) F,
Detailec examination of the local government kills to be applied by the executitie or middifle management person in olocal government.
Specific subbects will include accounting and its usee: cash and debt management: public debi
instruments; operating and capital budgeting
administration of property; sales, income,
business and exceise texes; enterpise and miscollaneousu revenue esourcos, ocoterporise devices,
systems and techniques; and state superivision of syctel finance.
567. Basic Governmental (Fund) Accounting (3) F,S
The course provides a basic introcuction to the
unique characteristics of governmental and unicuuvercharacteristics of governmental and
commercial accounting. Diffierencess between
governmental goverrmental and commercial acoocunting are
explained. Governmental accounting terminolcogy explained. Governmental accounting terminology
basic and principlipes are discussed. Information is basis and principipes are alicusused. Intirmation is methods of classitying and recording accounting
information. Types of financial reports and interpertation of financial statements are scussed. Parkculaer emphasis is focused on the relationship between accounting and budgeting,
financial reporting, auditing and other financial management activites for governmental and
nen-profit agenciea.
570. Negotiating Dynamics:
Strategies and Skills (3) F,S

Examination of negotiating strategies and skills
based on the teated use of power and based on the tested use of power and
peychological prinioples in negotiations. Different
 under varying levels of cooperation and
571. Leadership Skills and
Strategies in the Public Sector (3)

S .
Increasingly, urban governments are being
criticised for a llack of leadership and an inablity to move their bureauucracierssip toward solutions to complex problems. This curse examines the
theocies of adminintrative leadership and the
and strategic application of leaderaship skills in an
urban government onviromment. Students will urban government environment. Sudents
also review current approaches to
ergantizational excellence and its applicability to urban
575. Public Secto
Employer-Employee Relations

Analysis of prevailing practices and techniques of
colective bargaining and its continuing Coliective bargaining and its continuing
ramification on the economic, pootitial and organization structure in the public sector.
Emphasis is placed on a review of the entie Emphasis is placed on a review of the entire employe relations frield including the tinancial resolution including binding arbitration. job action
and strike contingency planning. contract administration, worker compensation and public
retiement symem. ninturtion alsoprovided on
negotiation techniques through mock negotiation negotiation
577. Publlc Sector Personnel Administration (3) F,S The historical development of the civil
senicee/merit system and how this impacts public senisonnel systems: laws which aftect the
poper operation of a persoonnel system; analysis of the various components of a personnel system;
impact of labor negotititions on persomnel systems; importance of witten policies and
procedures; and role of the personnel system as \({ }^{2}\) a change agent.
578. Management Rights: Managing In a Union Environment
(3) \(\mathbf{F , S}\) (3) F,S
and skilise which are neecenory to maximize the managerial infuence in employee-manag relations in public sector agencies. Topics
include how to gain and maintain managemert
 employees; thow to avoid grievances; handling
insurordination and abuse of tick leave= and
effective liaison with associations and union insubordination and abuse of sick leave:
effeetive liason with associations and un
representatitives.
580. Affirmative Action (3) F,S Analysia of the historical, social and legal base
for equal employment opportunity and affimative action laws and programs. Course will review the impact of Civil Rights legisation and
entorcement by compliance agencies and the courts. Attention will be given to basic data
collection and analysis for planning and collection and analysis tor planning aid
reporting, affirmative action program planing reporing. afirmative action program planning
and dimpememtation, developing and vevaluating a
model affimative action plan, discriminination complaint handling, montiontoring, and evaluating an affirmative action program. Institutionalizing process as well as current and tuture issues in equal employment
582. Citizen Advocacy and Public Policy Making (3) F
\(\qquad\) how it impacts upon policy formulation and
publio administration. The course involves clavups, legisistators, public administratorors, with interaction by the student.
585. Public Policy and

Administration Internship (3-12)
F,S
Prerequisite: Consent of the instructor. A
learning experience designed to provide an expovurur to and anderstad oring of of the
governmental environment. Students seeking the Governmental environment. Students seeking the experience in government are required to
patticipate in the Internship program. May be participate in the internship program. May be
Tepeated for up to 12 units of credit. Academic credit earned for the internship program is
beyond the 36 units required for the MPA degree.
590. Special Topics in Public

Policy and Ad inistration (3) F,S by the instuctort that is of current interest to the field of public policy and administration. May be
repeated up to nine units.
591. Administration of the Law Office (3) S
The course will examine the nature, organization
and functioning of a law office. Technicuos of
operation will be examined on a general office operation will be examined on a general ofice
management level as they apply specially to law offices. Techniques sthodied will incluwe
organization and methods of organization, and methods of operation.
timekeeping, bliling and collection, functioning of legal libraries, space planning and utilization, and
592. Financial Management for

Law Offices (3) S
The course will provide the Law Officice Manages
with fundamental skills to understand basio with fundamental skills to understand basic
financial manaegment. The student will lean to
fapply the skils appoly the skills to a financial model of a law
office. The course will include accounting office. The course
systems for law offices. 593. Personnel Administration in the Law Office (3) S
persomnel administration, inclucing emplocyment persoonnel administration, incluering asppoctsment, training, effective divcipiline, motivation,
compensation, and benefts. The course also
disounae peneral discusses general princililes of management staffing, and cortsolling, as they relate 94. At or Survision in Law 594. Art of Su
Offices (3) S

The course will examine the human organization, eadership, and organizational management as applied to logal organizations. Specific
echriques include understanding of an ndvidual's behaviore, motvoatistand of that individual management styles. communication, and
management by obiective. The course will focus on how to transfer organizational management 595. Electronic Age in the Law office (3) S
This course will examine the recent electronic
 appication to production of the law office
 597. Directed Studies (1-3) F,S frerequisite: Consent of instructor. Independent sudy in pubblic policy and administration. 610. Sem
(3) F,S
intercisciplinary course which A broadly based interdibciplinary course which
will give students an opporunity to develop expanded avaereness of the interielationstipe
between various urban problems in the urban systemic envirionment.
624. Development Policy
anagement and Planning 3) \(\mathrm{F}, \mathrm{S}\)
seminar approaching the problems of development from the perspective of formulation
and implementation of public opolicy, with special emphasis on the bureaucratic proceass in terms o its relatio
stuctures.
630. Pubic Works and
nfrastructure Management (3)
The course examines the nation's infrastructure Cond course examines the nation's infrastructure
condion and needs of oppyical palant and
equiph as water supply, waste management, energy transportation and buildings. The focus is upon Southern Cal
within the state and national policy context.
650. Seminar on Issues Administration (3) F,S
Sunvey of various issuus and topises critioal to Suney of vanous ssues and topics critioal to
effective public administrition in
contemporay United states including the social contemporary United Statases incluving the sociel
and poltical context of contemporary publii and poltitaal context of contemporary pubbii
 ete.). responsibilities and obligations of public
serants in contemporary governments and
selected issues of public management 00 . Seminar in Organizatio Theory and Behavior (3) F,S
Organizational change, effectiveness and allocation processes in publicesessencies
Theoretical models of open systems. rationalist
confict, coaltion and decision-making theories Conflity, coaltition and decisison-making theories unified set of propoositions aboun 670. Seminar in Public Policy Analysis (3) F,S
Problems of tormulating and evaluating public
policy. Examination of how officials have deatt with policy questions in various governmental
contexts and the strategic environment of such analysis. Critical survey of various
for imestristion
impowing public policy and public policy anaysis, focusing in particular on the
mplications of reform for govermment expenditures.
696. Research Methods in Public Administration (3) F,S
Appication of relevant research techniques to the problems of publio sector management an policy formulation. Topics incluce legal research
methods. the development of legistative
procoals proposoals, elemental benefficoost analysis
techniques of evaluating programs, and gener lechniques of evaluating programs, and general
application of the above skills to policy formation application or the above skilis
and
organizations. organizations. Examination of methods to
critially ovaluate research deosigne, researh
evidence, sampling procedures and statistical evidence, sampling procecures and statisit
data. 697 Directed Research (1-3) F S Prerequisites: Consent of Center graduate
advisor, advancement to candidacy. The definition, presentation and discussion


Acting Dean: Thomas Ferreira Associate Dean: Vacant Administratlve Services Manager: Ken Schilling Assistant to the Deans:
Joan Slack Joan Slac Performance Facillites Manager: Charles Johnson Sickie Messina

\section*{Fine Arts Ticket Office Manag}

College Office: LBB E-112 Telephone: 985-4364 The learning opportunities within the commitment to the arts in all forms. For performers, artists and scholars, the Colege of the Arts provides an
environment designed for individual achievement. It offers programs to meet the needs of students who wish
- pursue professional careers in art
dance, design, music or theatre dance, design, music or theatre
arts;
- arts;
- teach one or more of the arts
- follow a degree program that
provides a broad education in the arts;
- learn about the history and nature of the arts to complement studie
- develop appreciati develop appreciation of the art
forms and their lasting value to the quality of life.
The College of the Arts offers a variety of degree programs designed
to meet high standards of excellence and to provide our students with appropriate backgrounds consistent
with their academic objectives. These with hieir academic objectives.
include professionally oriented degrees for those who plan to become visual or performing artists
(the Bachelor of Fine Arts Degree in (the Bachelor of Fine Arts Degree in
the Departments of Art, Dance, and the Departments of Art, Dance, and Department of Music; the Master of
Fine Arts Degree in the Departments Fine Arts Degree in the Departments
of Art, Dance, Design, and Theatre Arts; and the Master of Music Degree in the Department of Music).

\section*{For those students who are
planning careers in secondary}
teaching, or wish to pursue the arts in
a more scholarly, rather than
performance oriented direction prefer to obtain a more liberal ducation with the arts as a central component, the departments of Art, appropriate Bachelor of Arts degree options. The Departments of Art, Design, Music and Theatre Arts als
offer the Master of Arts Degree. The quality of the programs in the Collegeo of the Arts is evidenced by he fact that each department in the an accredited institutional member of the maior accrediting agency for that
discipiline: The National Association of discipiline: The Nattiona Associat National Association of Schools of Dance. The National Association of
Schools of Music and The National Schools of Music and The National
Association of Schools of Theatre. Other special programs include certificates inArts Management, Biomedical Illustration, Music Therapy
and Museum Studies. The University Art Museum presents exhibitions of professional stature focusing primarily on contemporary artists.
Major performance facilities include
the University Theatre Studi Thutre the University Theatre, Studio Theatre
and the Recital Hall of the University Music Center. Additionally, an exceptional Theatre Arts complex and classroom and art studio space
serve almost any creative purpo provide the setting for the work of the College. The extensive performance
calendar generated from the wide-ranging curriculum - concert theatre productions, dance performances and art exhibitions -
has become a highly visible part of he campus, as well as an important cultural resource in the Long BeachL_os Ang
County areas.
The nearly 200 faculty of the College of the Arts are themselves accomplished scholars, artists or
performers who bring their expertise pentormers who bring their expertis
and experience to their teaching assignments.
Interaction between students is vital
to the life of the College of the Arts: to the life of the College of the Arts;
students join together in such pursuits students join together in such pursuits
as the bands, choirs, ensembles and orchestras of the Music Department, in the many-faceted production efforts
behind each theatte performance, in the choreography, performance and
technical support that bring together a dance concert and in group
exhibitions of work by art and design extudints.
The College also enjoys the suppor of two long-established community organizations: Fine Arts Atfiliates and
Dramatic Allied Arts Guild These groups award student scholarship and provide assistance for special
projects and events within the Colleg projects an
of the Arts.
Graduate Certificate in Arts
Management (code \(1-5000\) )
The graduate Certificate Program
Arts Management is designed to train
students to hold admen students to hold administrative
positions in visual and performing arts positions in visual and performing aris
organizations as well as with presenters, booking managements,
arts support groups, and arts arts support groups, and arts Admissions Criteria:
1. Compliance with all University
admissions requirements for graduate standing.
2. Baccalaureate degree or Graduate degree from an accredited
institution in Art. Dance, Design Music, or Theatre Arts with a minimu of 24 semester units of upper-division coursework comparable to those Music, or Theatre Arts major at this University. Under some
circumstances, students with ather baccalaureate degrees and a background in the arts may be
considered for admission
considered for admission. 3. An undergraduate GPA of 3.0 in
the major and/or 2.5 in the most the matly completed 60 semester units 4. Proof of completion of at least one course in Journalism. JOUR 270 - Introduction
5. Three letters of recommendation 6. Interview with a faculty committee 7. Successtul completion of COTA 510 - Arts Management: Scope and
Sources Studer Students will be tentatively admitted to the program prior to enrolling in
COTA 510. Final acceptance will be granted upon successful completion of this course students who have completed at least
ne course in three different arts fields (a total of three courses) other than undiscipline in which the
The following courses are
- ART 345 -- Introduction to
- Museums (3)

DANC 441 - - History of Dance (3)
- Civilization (3)
- THEA 324 -- World Theatre Today 3) Students interested in the Certificate program may contact
Professor Pat Finot, Director of the Arts Management Certificate Program, Colleg
(310) \(985-4269\).
Requirements for the Certificate:
1. Twenty-seven units are required as follows: ACCT 500, PPA 540,
COTA 510, \(520,545,580,585,610\), and 630.
2. The following elective courses are MGMT 500, PPA 565, PPA 590, REC 93, and COTA 599
The Certificate will be awarded upon
completion of all required completion of all required course
with a GPA of at least 3.0 and successtul completion of the CSULB Writing Proficiency Examination. The program must be completed
completion of the initial coursework.

College-Based Courses (COTA)
404. Arts and Values (3) F,S

Prerequiste: Limited to students in the Libe
Studies Major, Track 1 , who have completed Stucies Maior, Track 1, who have completed al
Areai V Core requirements with a C or better
grade, or consent of Program Director Areav, or conesent of Program Director. In in
quuestion-based format reauiring integration of previous exxerience in the atts and humantites students will explorot the relationshii between ars criticiem and variious broader values hhistoricol addresesed are: What establishes the parameter
of ats criticism? How does a critic distinguish a from non-art, good art from bad? Who should Corticize? What is the releationship between Criticisem and censorship? What shapes people's
values in the ats? Competency in the art will be assessed as the impact of religion,
Enightenment philosoohy, modernism and Enilihtenment philosophy, modernism and
mutituituralism on the ars and values and theil multiculurualism on he
relation to ars edu.
Taritional grading only.

\section*{510. Arts Management: Scope} and Sources I (3) F Introduction to the scope of the arts management not limited to Dance, Musio, Theatra Atts, Viverial Ats, Umberela Organizations, Ats
Organtaztions and Presenters.
Tradition grading only.

\section*{20. Arts Manageme}

Prerequisite: COTA 510. Resources for the arts manaager: computer applications, sourcos for
fundraiaing, apporoaches to boardmanship and nonpartisan political
Traditional grading onk
545. Arts Marketing/ Developmen (3) \(F\) Prerequisite: COTA 520 . Identification of target Long-range and shoniteterm gaoket setine ants. Trpaditional grading only.
580. Arts Management Internship
580. Arts
(2) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: COTA 510. Corequisite: COTA 520. On-campus work experiencoes undider facuity
supervision in one of the programs in the Colege of the Ats to be individually selected for each
sudent. May be repeated student. May be repeated once for credit with
permision of instructor. Traditional grading only. 585. Arts Management Internship
(6) \(F S\) (6) \(F, S\)

Prerequisitites: HRM 362 and completion of. or
concurrient enrollment in all courses required for concurrent enrollment in all courses required for
the Ats Manaegment Certificate Program.
Oftceampue Off-campus work experience under tacuity.
supenision in a professional ats orgniziton to supenision in a profeesional arts organization to
be individualy selected for each student. (Must be traken concurrenty with COTA 630.)
Traditional grading only. 599 , Special Stud 599. Special Studies in Ar
Management \((1-3) ~ F, S\)

Prerequisite: Consent of instructor. Individual research or project under the guidance of a
faculty member. May be repeated once for faculty member. May be
creatit. Traditional grading only
610. Arts and the Law (3) S

Prerequisite: COTA 545. Legal aspects of
 Contracts. Traditional grading only. 630. Seminar in Arts Management: Scope and Sources
III (2) F,S III (2) \(F, S\)
Prerequisites: Completion of, or concurrent
enrollment in all courses required for the Atts Management Cortificacese Progauired. Mor the Arts concourenty with COTA 585 . Student discourse
on intenship experience.

Department Chair: Patricia J. Clark Department Administr
Fine Arts 4, Room 106
Department Student Services Office/Graduates/Undergraduates: Fine Arts 4, Room 110 elephone: 985-4376 Faculty: Professors: Ingrid Aall,
Archie Boston Jr., Patricia J. Clark, Archie Boston Jr., Patricia . Cl Cretara, Donald Dame, John eHeras, A. Thomas Ferreira, Richard Glazer-Danay, Jennifer J.
Grey, Calvin D. Gross, Thomas E. Grey, Cavin D. Gross, Homas
Hall, Kristi E. Slayman Jones, oseph H. Krause, Mary Jane Leland, Neil Lieberman, John R Lincoln, Diane L. Martel, Dieter Cynthia A. Osborne, Alvin A. Pine, Jhn J. Shaak, John C. Snidecor, Charles M. Thompson, James J. Van G. Werlick; Assoclate Professors: homas J. Krumpak, James A. Kvapil, Faya Causey, David A adiock, Elisabeth Hartung, Peter Mender, Julial
Assistant Professors: Anthony arsh, Beverly Naidus, Roxanne Sexauer,
meritus Faculty: Blair C. Archer,
ela L. Biro, David C. Borders, Robert E. Click, James S. Crafts,
oval Dillingham, Betty A. Edward Kenneth Glenn, Herman H. Graff, Beatrice M. Greer, Howard G. itchcock, John Martin, Maxine Meriino, C. Douglas Mory, Jan osephine Schultz, Richard Swift, L Ward Youry
Department Secretary
Merrie Martino
Students should contact the epartment Student Services Office or referral to one of the faculty advisors: Art/Credential Adviso
B.A. B. F. A. Advisor, Graduate M.A.M.F.A. Adviso

The Department
In recognition of the quality of rograms and the standards it accredited institutional member of the
tational Association of Schools of At and Design.
The Art Department at California State University, Long Beach, is one State University sytem authorized ter the master of fine arts degree in art with a large number of specializations. The diversity of its programs, the quality of instruction
and the professional caliber of its aculty all combine to provide an exceptional opportunity and challenge o students seeking meaningtul in the visual arts.
The Art Department has curricular programs leading to the following of arts (art); (2) bachelor of arts (art history): (3)) bachelor of arts (art education); (4) bachelor of fine arts in nine specializations (art photography
ceramics, drawing/painting, visual communication, illustration, netalsmithing/jewely, printmaking,
At the graduate level the A
Department offers both the master of
arts degree and the master of fine arts arts degree and the master of fine arts degree. As the terminal degree for
studio artists, the master of fine arts degree requires a minimum of two eears and provides eight professional drawing/painting, general cratts,
illustration, metalsmithing/jewelry
orintmaking, sculpture, textile design. The master of arts degree offered by the Art Department in ten specializations; in addition to the eigh studio areas listed above, the M.A.
degree is granted in art history and art education. The department also offers a graduate-level Certificate Program in Museum Studies and an interdisciplinary program lead
As is customary in most schools, the Att Department reserves the right to of us to three years
completed by students for class credit.
Students majoring in Interior Design should contact the Design Department Office for specific course
offerings and degree requirements.

Admission to Baccalaureat degree Programs in Art Department programs may exceed the capacity to accommodate, all applicants are encouraged to apply
during the first month of any initial filing period. When the initial application is received, an Art Department questionnaire will be sen
to each anplicant tor designation of the specific degree and specializatio desired. Applicants must return this form by the stated deadline directly \(t\) considered only for the B.A. in General Art. Applicants for admission to the B.A. degree programs (Gener meet all entrance requirements of the University.

\section*{Admission to
Arts Degree:}

Students seaking admision the
B.F.A. program must:(1) Meet University;
(2) Provide a transcript of all college level credits. This is in addition to any Admissions Office:
(3) Submit a portfolio of creativ ork to the Art Departmen Students who have not yet achieved portiolio or otherwise demonstrate their qualfications for the B.F program are advised to seek
admission to the B.A. program in art Once in residence, the B.A. student may take more specialized work and apply at a later date to change to th "Impacted stat
declared for the Gens has been Option in the Bachelor of Fine Art
Admission
ion Procedures for Change of Major:
Currently enrolled students who are undeclared or majors in other
departments and who wish
for admission to degree programs in art must:
(1) Submit a Change of Degree Objective form to the Art Departmen Student Services Office during the
months of November or August:
(2) Students applying for the B.F.A. degree programs in Art must also
supply transcripts of college-level academic work attempted, and a
portfolio of their creative work
Bachelor of Arts in Art (General
Art) (code 2-5850) (124 units)
This program is for students who
seek a broad understanding and seek a broad understanding and
application in Art. Total Art
Aesign application in Art. units required: 23 lower divisision, 35 upper division).
Requirements for the Bachelor of (General Art):
Lower Division Requirements: ART
\(1111112 \mathrm{~A}, 12 \mathrm{BB}, 131,181,184\), and 187; DESN 121.
Upper Division Requirements
1) ART 1) ART 320
2) two courses from art history, only
one of which may be ART 438 or 439 : 3) one course from three of the following disciplines to total 9 units. Drawing and Painting, Printmaking lilustration, Photog
Communication;
4) one course from three of the following disciplines to total 9 units Ceramics, Cratts, Textile Design;
5) plus an additional 9 units upper division from one of the following disciplines: Art History, Ceram
Drawing and Painting, Visual Comming ancation, lliustration, Metalsmithing/Jewelry, Photography,
Printmaking, Sculpture, Textile Design. Printmaking, Sculpture, Textil additional lower division
prerequisites may exist for some
upper division discipipline options. Bachelor of Arts Degree in Art (Ar History) (code 2-5857)
This program is for students who
wish to specialize in the study of the history of art.
Lower Division: ART 112A, 112B,
113A, 113B, 181, 187, 263; DESN
113A, 113B, 181, 187, 26,
121: HIST 131 and 132 ,
Upper Division: ART 307, 308, 309, selected from five of the following seven groups: I. ART 408, 409, 410;
II. ART 423, 424. 425. IIt ART 401 II. ART 423, 424, A25; IIt: ART 401,
\(426,427,436\); VI. ART \(437,438,439\), V: ART 465, 466, 467\% VI: ART 468, 469, 470; VII: ART 455, 456, 457. Other: A score of 450 in either French
or German on the Graduate School Foreign Language Test or complete two years of French or German with
an average grade of " \(B\) ' or better.
aachelor of Arts Degree in Art (Art The bachelor of arts for teach preparation degree is a four-year ar major degree program required those students seeking a single
subject teaching credential in art (K-12) under the Teacher Preparation
and Licensing Act of 1970 (Ryan Act). dicensing Act of 1970 (Ryan Act) Requirements for the Bache
Arts in Art (Art Education):
Lower Division: ART 111, 112A
112B, 131, 151A, 181, 184, 187; ESN 12
Upper Division: ART 438 or 439 , and one course selected from ART
\(455,456,45,466,47,468,469\) or
470 ART 470. ART 385 a and one course
selected from ART \(370,381,384 \mathrm{~A}\),
\(387 \mathrm{~A}, 389\) or 372.0 ne course
selected from ART 327A \(327 \mathrm{~B}, 371 \mathrm{~A}\), 38lA, 38 or fom ART 3277, 327B, 371 A
sel DEt
or DESN 344A. ART 354A and one ourse selected from ART \(328,355 \mathrm{~A}\) r 355B, 357A, \(362 \mathrm{~A}, 363,428 \mathrm{~A}\) or
59. One ceramics course seleted
rom ART 341A, 341B or \(352 \mathrm{~A}, 300\), trom ART 341 A
305 , and 407 .
Single Subject Credential
The Single Subject Credential in Art equires 30 units of upper division or graduate course work beyond the B.A. However, some or all of the student teaching may be taken in the B.A. program or with hin the fifth year These courses are EDSS 300A
recommended of the junior year):
H/SC 4ll: EDSE 310 and 421 or 435 and 436; EDSS 450A; EDSE 457; ED Final Directed Field Experiences (Student Teaching). Before studen eaching in art, students must pass a portfolio review for the assessment
subject matter competency. A passing score on the CBEST is also equired. For information concerning equirements for the B.A. progran, fith year for the credential, consult the art education advisor
Bachelor of Fine Arts Degree The bachelor of fine arts degree is
offered tor the student eventually eeking a master of fine arts degre he position of a professional artist or designer, and for the student seeking a career of teaching studio art within a degree program is demanding, equiring high quality performance in
order to develop the professional competence of talented students toward successful entrance into the
professional art field. There are seven
professionally-oriented specialized programs leading to the B.F.A. degree. Total art and support units
required: 70 (29 lower diviion, 41 equired: upper division). Total units for graduation: 132
Requirements for the Bachelor of in Art:
Programs of Speciallization: Option in Art Photography code 4-5865):
Lower Division: ART 112A, 112 BB ,
131, 161, 181, 184, 187; DESN 121 , 131, 161, 181, 184, 187; DESN 121;
TED 101 and dwo 2-unit lectiv
courses in ART for a total of 29 units. courses in ART for a total of 29 units.
Upper Division: ART \(320,49 \mathrm{~V}\); ART 438, 439 and TED 400; pick from one of the following TED 402, 405, or 407; 9 addditiona
specialization.
Option in Ceramics (code 4-5852) Lower Division: ART 111 or 161 ,
\(112 \mathrm{~A}, 12 \mathrm{~B}, 131,151 \mathrm{~A}, 151 \mathrm{~B}, 181\), 184, 187, DESN 121.
Upper Division: Art \(320,341 \mathrm{~A}\), 341, Art 364 and 6 additional units of art history; only three of which may be in Art 438 or 439,8 additional units of art outside specialization. (code 4-5858)
Lower Division: ART 112A, 112B,
\(131,161,181,184,187 ; 281,284\), 287: DESN 121
Upper Division: ART 320, 381. 384 A or \(384 \mathrm{~B}, 38 \mathrm{AA}, 387,389,487 \mathrm{~A}\)
or 487B, 499 K : 6 units of only three of which may be in ART 438 or 439; 12 units of art outside the specialization; special emphasis in
Drawing and Painting: Intermedia. Upon approval of the intermedia
faculty, 9 units of ART 499T. Intermedia, will be substituted for 9 required upper division units in drawing and painting.
Option in Illust
(code 4-5855)
Lower Division: ART 1111 or 161,
112A, 112B, 131 \(181,184,187,223\)
271,284 : D. 2 .
112A, 112B, 131, 18
271, 284; DESN 121
Upper Division: ART \(320,371 \mathrm{~A}\),
\(371 \mathrm{~B}, 372\) a a minimum 371B, 372 a a minimum of 4 unitis from
\(373,385 \mathrm{~A}, 385 \mathrm{~B}\) or \(389 ; 471 \mathrm{~A}, 471 \mathrm{~B}\), 499 F or \(374 \mathrm{~A} ; 6\) units of art history. only three of which may be from ART 438 or 439 ; ART 387 A ; ART 382 A and
6 additional units of art outside specialization.

\section*{Option in Metalsmithing and
Jewelry (code 4-5860)}

Lowe Divison: ART 111 or 161,
112A, 1128, \(131,181,184,187,271\)
DESN 121, TED 101, 282, Unper ivision. ART 320 Upper Division: ART 320, 357A
\(357 \mathrm{~B}, 358 \mathrm{~A}, 358 \mathrm{~B}\), and 9 units selected from ART T 555 A , \(355 \mathrm{~B}, 356\), 3 ,
\(359 \mathrm{~A}, 359 \mathrm{~B}, 458 \mathrm{~A}, 458 \mathrm{or} 499 ; 6\) units of art history, only three of which
may be in ART 438 or \(439 ; 12\) units may be in ART 438 or 439; 12
art outside the specialization.
Option in Printmakin
(code 4-5861)
(code 4-586
Lower Division: ART 111, 112A,
112B, 131, 181, 184, 187, 281: ART 112B, 131 , 181, \(184,187,281 ;\) ART
284 or 287; DESN 121; TED 101. Upper Division: ART 320, 370; 18
units from ART 376 , 377 378 379 units from ART 376, 377, 378, 379,
475, 480 and 499R; ART 365, 439 and 3 addditional units of art history
(not to include 438), ART 381 and 6 (not to include 438), ART 381 and
additional units of art outside additional units
specialization.
Option in Sculpture (code 4-5862)
Lower Division: ART 112A, 112B,
131 161, 181, 184, 187, 263; DESN Lower Dision: ART 112A, 12B,
131, 161, , is1, 184, 187, 263; DESN
121,4 units of art electives. 121; 4 units of art electives. Upper Division: ART 320, 361,
\(362 \mathrm{~A}, 362 \mathrm{~B}, 363,459,461,463,6\) units of art history only 3 units of which may be in ART 438 or 439 ; 12 units of art outside specialization. Option in Textil
(code 4-5863)
Lower Division: ART 111, 112A,
1112B, 131, 181, 184, 187; DSN 121 , 12 2B, 131,181 , 184, 187: DESN 12,
6 units selected from ART 271, 281,
Upper Division: ART 320,327A, \(327 \mathrm{~B}, 328,428 \mathrm{~A}, 428 \mathrm{~B}, 428 \mathrm{C}, 499 \mathrm{~N}\)
ART 366 , DESN 368 and 3 additional units of art history; only 3 units of
which may be in Art 438 or 439,9 which may be in Art 438 or 439,9
additional units of art outside the specialization.
Supplemental Screening Criteria for Admission to the BFA Degree
in Graphic Design (code 4-5859) in Graphic Design (code 4-5859) Applications for the Graphic Desig
specialization exceed the spaces specialization exceed the spaces
available; therefore, this program is considered impacted by T
California State University.
Supplemental screening criteria wil Supplemental screening criter a
be used to determine which
aplicants will be admited into applicants will be admitted into Graphic Design (10091). The criteria
for admission to this program are for admission
listed below:
(1) Return the Department questionnaire by the stated deadline (2) Submit also by the stated
for all college-level academic work attempted. These are in addition to the transcripts sent to the University
Admissions Offfice;
(3) Have earned a 3.0 GPA or better at least 15 units of design/art, which must include the following required design/art courses or their
(4) In addition, applicants for this BFA. degree must submit a porttolio \(f\) their creative work by the stated deadine tor a tormal review
faculty in this specialization. Option In Graphic Desig code 4-5859)
Lower Division: ART 112A, 112B,
\(31,181,184,187,223,225\), DESN \(131,181,184\),
\(121,224,231\).
Upper Division: DESN 322A, 322B 323, 327, 421, 422A, 422B, 4999; DESN 368 and 3 additional unit Design/Art ilstory, 1 units of or
Design/art or Photography outside of
Graphic Design, approved by Major Design/Ar
Graphic D
Advisor.

\section*{dvisor.}

Cert (codicate Progra 1 -5010)
The Certificate Program in
Tiomedical Art is an interdiscipl program sponsored by the Art,
Anatomy and Physiology, and Biology Departments.
Biomedical art is commissioned
principally by (1) hospitals or dividual researchers for publicatio 2) by publishers and film and iomedical professions, (3) by producers of educational aids for commercial art and printing procedures including photograp and typography is required. Special permission is not required
or a student to pursue the Certificate in Biomedical Art. The student may pply for certification upon completion of the following
and conditions:
equirements for the Certificate in Bomedical Art
(1) A major in art or biology
(2) A 2.75 overall GPA and 3.25 in major
(3) 48 units as listed: ART 181, 184, DESN 121; AP 208, 365; BIOL 313 or 24, 364,427 or 439 . (Although CHEM 111A is a prerequis
10A and CHEM 111B is a prerequisite for BIOL 210B, these may \(e\) waived for art majors in the instructor concerned.)

Co-directors of the CSULB biomedical art program are in Art: in Anatomy and Physiology: and Dr. Kenneth Gregory. Questions may be addressed to them during office hour Which are listed in the
departmental offices.
Certificate Program in Museum Studies (code 1-5020) The Certificate Program in Museum
Studies is open to graduate students Studies is open to graduate students visual arts, science, history, but does not exclude other fields. The initial program is to be devo
art museum studies.
Admission to the program is by permission of the museum studies faculty with in the Art Department. interested students should apply to
the Director, the Museum Studies Program.
Requirements for the Certificate in
Museum Studies Museum Studies
A total of 30 units to include: ART beginning in the spring semester, 542 in in msum intennship; ART 307
and 15 additional united selected and 15 additional united selecter
from ART 499Q, Art History. Anthropology, Business Adminstration, English, Instructional Media, Journalism or Public Po and Administration, subject to ART 545A.

\section*{Master of Arts}

The Art Department master of arts degree program provides 10 rotessional specializations under the
following categries: At Education following categories: Art Education,
Art History, Pictorial Arts (drawing and painting, sculpture, printmaking) illustration, Cratts (general crafts,
textiles, ceramics, metalsmithing jextiles, ceramics, metalsmithing/ and painting: Intermedia Upon approval of the Intermedia faculty, 9
units of ART 599 . Intermedia will be units of ART 599T. Intermedia will
substituted for 9 required units in drawing and painting.
Prerequisites:
(1) A bachelor's degree from an
acceedited institution with a minimum of 24 units of upper division art comparable to those required of major in art at this University. These should include completion of 16 units
minimum of upper division work in the area of specialization for the Master of Arts degree program. If the area of
specialization is Art Education, the 16 specialization is Art Education, the 16
units will consist of art and education
courses approved by the An
(2) Completion of a minimum of 12
units in Art History, 6 units of which must be upper division. (Not applicabe the M.A. in Art History); (3) Successful completion of the
witing proficiency exam (WPE) (4) Presentation to the student's specialization faculty of a body studio work with emphasis in the area of specialization. Reviews are completed
by the first week in October for the following spring semester, by the first week in March for the following fall semester;
In lieu of a portfolio, Art History
students must: (a) present colleg students must: (a) present college
transcripts to the Art History graduate advisior; (b) pass the Graduate Scho Foreign Language Examination in
French or German with a minimum score of 450 , or complete two years
of French or German with an of French or German with an average grade of "B' or better; (c) have
completed ART 307 (Historiogra completed ART 307 (Historiography),
308 (Art Theory), 309 (Art Criticism),
ART 3351 ("Art and Anthropology") ART 3355 ("Art and Anthropology") oo their equivalents.
(5) A GPA of 3.0 or better in upper
division Art. Students who do not meet the minimum 3.0 GPA within the required 24 units as an undergraduate
may count units taken as a post-baccalaureate studen this GPA. Course work taken as a
graduate to validate graduate to validate undergraduate satisfy any requirement in the
student's student's M.A. program
All prerequisites must be fulfilled
before a student can before a student can become
classified in a graduate degree program.
Requirements for the Master of Arts - Studio:
Completion of all program
requirements as established by requirements as established by the
student's graduate committee to include:
A Master's Graduate Program which
totals at least 30 units and where a totals at least 30 units and where a
minimum of 18 of the 30 units are graduate courses ( \(500 / 600\) series) Program units are divided between courses in the specialization and
elective courses as follows. Specialization Requirements 1. A minimum of 18 units in the area of specialization. At least 15 of the 18
units must te 500 units must be \(500-600\) series course
taken at this University. taken at this University
ART 698 ( 6 units):
project report. All students completing project report. All stucents compleing
a project are required to exhibit the
work done for the project and receive
department and University approval nd acceptance of a project re 3. ART 692 (2 units): Public Elective A minimum of 12 units up division or graduate courses. (Upper division courses approved for nthe University Bulletin.) These should include:
A minimum of 6 units of art history or elated history beyond the 12 units
sted as prerequisites. Additional upper division art history taken as an undergraduate may be included as art istory prearequisites to meet the
indergraduate and graduate indergraduate and graduate units (i.e. if prerequisites in art history
otal 15 units only an additional units otal 15 units only an additional 3 units
would be required in the program.) Electives may be selected from within the specialization, from other specializations, or from outside the
department. (Not more than 8 units outside the department.)
Requirements for the Master of Arts - Art Education Completion of all Program student's Master's Graduate Committee to include.
A Masters s Program which totals at
east 30 units and where a minimum 18 of the 30 units are graduate ourses (500-600 series). Program units are divided between courses in e specialization and elective courses follows:
Specialization Requirements A minimum of 18 units in the area of specialization. At least 15 of the 18 Elective University
A minimum of 12 units A minimum of 12 units upper
division or graduate courses. (Upper division or graduate courses.
division courses approved for graduate credit have been asterisked should include:
A minimum of 6 units of art history or elated history beyond the 12 units as isted as prerequisites. Additional
upper division ant history taken as an Indergraduate may be included as art istory prerequisites to meet the undergraduate and graduate
cumulative total of a minimum of 18 units (i.e., if prerequisites in art history
total 15 units, only 3 units would be otal 15 units, only 3 units
equired in the program.)
Electives may be selected from within the specialization, from other
specializations, or from outside the
department. (Not more than 8 units
outside the department.) utside the department.)
Advancement to Candidacy Before Advancement to Candidacy
an examination must be successfully completed which (1) tests knowledge
co literature elative to Alt of literature relative to Art Education
and (2) shows evidence of writing and skils.

\section*{Requirements for the Master of Requirements for the
Arts - Art History}

Completion of all program requirements as established by the
Art Department and the Art History Area, and approved by the student's Graduate Committee to include Art leasartment Requirements 30 units of approved graduate and upper-division courses; a minimum of 18 of the 30 units are graduate courses ( \(500-600\) series). Program units are divided between
courses in Art History and elective courses as follows:
Art History Requirements
1. A minimum of 18 units in Art
History. At least 15 of the 18 units History. At least 15 of the 18 units
must be \(500-600\) series courses taken at this University.
2. Art 698 ( 6 units): A thesis which must receive department and University approval a and acceptance required 15 units in \(500-600\) series Art
History courses) History courses)
A minimu
A minimum of 12 units of electives Which may be selected from within specializations, or from outside the
department. (Not more th
outside the department).
Upper division courses approved for graduate credit have been asporisked
in the University Bulletin. Master of Fine Arts in Art

\section*{Master of Fine
(code 7-5850)}

The Art Department master of fir arts degree program provider of 8 ine
professional specializations under the professional specializations under the
following categories: Pictorial Arts diowing categories: Pictorial Art
(drawing and paitting, sculpture, orintmaking), illustration, Cratts general cratts, textiles, ceramics,
metalsmithing/iewelry. Special emphasis in drawing and painting Intermedia. Upon approval of the Intermedia faculty, 12 units of ART
\(599 T\) Intermedia will be substituted for 59T Intermedia wil be substituted painting.
Prerequisites
(1) A bachelor's degree from an
accredited institution with a minimum
of 24 units of upper division art comparable to those required of a
maior in art at this University major in art at this University. These
should include completion of 18 units of upper division work in the area of specialization for the proposed M.F.A (2) Completion of a minimum of 12
units of Art History 6 units of which must be upper division
(3) Successful completion of the

Witing Proficiency Examination;
(4) Presentation of a body of studic
work to the faculty in the student's area of specialization, with emphasis on work in that specialization. Reviews are completed by the first week in
October for the following spring October for the following spring
semester, by the first week in March for the following fall semester;
(5) A GPA of 3.0 or better in upper
division art Students who do not meet the minimum 3.0 GPA within the required 24 units as an undergraduate may count units taken as a post-baccalaureate student to mee
this GPA. Course work taken as a graduate to validate undergraduate preparation may not be used to satisty any requirements in th
student's M.F.A. program. All prerequisites must be fulfilled before a student can become classified in a graduate degre
program.

\section*{program.}

\section*{Advancement
Requirements:}
(1) Classified graduate standing; (2) A graduate program approved Graduate Advisor, the Department Chairman, and the Dean of the College of the Arts;
(3) A GPA of 3.0 or higher in all work ndertaken for the program,
(4) The removal of any Incompletes (5) Successful compl
(6) Complete minutes of graduate
committee meetings with the student which total a minimum of one meeting
for each semester of program units.
equiemes for the Master of

\section*{Requirements
Fine Arts in Art:}

Completion of all Program requirements as established by the
student's Master's Graduate student's Master's Graduate
Committee to include:
A Master's Graduate Program which totals at least 60 units and where a minimum of 36 of the 60 units are graduate courses ( \(500 / 600\) series). courses in the specialization and elective courses as follows:

Specialization Requirements
A minimum of 36 units in the area of specialization. At least 30 of the 36
units must be \(500-600\) series courses uniten at this University. Specialization courses must include ART 690A and 690 B ( 6 units), 692 ( 3 units) and 699 roject report. All students completing a project are equired to exhibit the work done for the project and receive and acceptance of a project report. Elective Requirements
A minimum of 24 units upper division or graduate courses. (Upp
division courses approved for graduate credit have been asterisked in the University Bulletin.) These should include:
A minimum of 6 units of art history of isted as prerequisites. Additional upper division art history taken as an undergraduate may be included as art istory prerequisites to meet the umulative total of a minimum of 18 units (i.e., if prerequisites in art history otal 15 units only an additional 3 units
would be required in the program.) A minimum of 6 units with a naximum of 8 units from outside the department.
Electives may be selected from
within the specialization or from other within the speci
specializations.
M.F.A. Transfer and Residence Policy:
M.F A i is normer crit allowable on the units. Exceptions up to an additional 6 units may be approved for
outstanding students by the outstanding students by the
Department Graduate Committee 2. M.F.A. candidates must complete a minimum of 18 specialized units in 3 esidence ( \(500-600\) series courses) M. All transferred credit used in the the student's Master's Graduate Committee and the Graduate Advisor. 4. The CSULB Master of Arts maximum of 30 units ( 18 in the specialization) toward the M.F. A degree. Exceptions up to an
additional 6 units may be approve or outstanding students by the Master's Graduate committee and the graduate advisor.

Advancement to Candidacy Requirements:
(1) Classified Graduate standing,
(2) A graduate program approved
by the student's committee the by the student's committee, the
Graduate Advisor, the Art Department Chairman, and the Dean of the College of the Arts;
(3) A GPA of 3.0 or higher in all work
undertaken for the er (4) The removal of any
(5) Successful completion of the Advancement Review;
(6) Complete minutes of graduate
committee meetings with the student committee meetings with the student which total a minimum of one meeting
for each semester of program units. Additional Advancement to Candidacy requirements for the
M.A. in Art History also include M.A. in Art History also include: (1) Approval of a qualifying paper thesis and research writing; (2) A distribution of course work in prerequisite and completed graduate units B.A. in Art History at CSULB (a course or its equivalent at another institution, in five of seven categories.
A minimum of one course in Eastern Art, whether in lower or upper division prerequisite or upper division
graduate course work will be graduate course work will
expected of all students)
(3) A minimum score of 600 in either French or German on the Graduate School Foreign Language Exam
pass an Art History language pass an Art History language
competency test in reading French or Gempetency lest th reacing french of from the Art History facully to
substitute tested compencie substitute tested competencies in
another language other than French another language other than French
or German it their graduate studies would justify the alternative language Courses (ART)
100. Introductory Studio Art for Non-Art Majors (3) F,S Basis theory and concepts in drawing, painting.
color and two-dimenional design Use of various color and tho-dimensional design. Use of vaious
mexia with emphasis on developing perceptual
skillo. (Lecture 2 hours. alaboratoy 3 hours) skillo. (Lecture 2 hours, laboratory 3 hours.) 110. Introduction to the Visual Arts
(3) (3) F,S

Anaysis, interperation and evaluation of art
forss; strjes and themes in aat; infuencess
 supplemented
non-art maiors.

\section*{111. Fundamentals of Art (2) F,S} Compparative study, through lecture, discussions
and
beadinging of of the conisierations which are to society.
112A,B. Survey of Western Art
\((3,3)\) F,S
Chronologigal survey of att as an integral part of
Western culture.
Western culture.
112A: From Preh
112A: From Prehistory through the Middle Ages
(CAN ART 2)
112B: From Proto-Renaissance to 1945 (CAN
ART
113A,B. Survey of Eastern Art
\((3,3)\) F,S
Survey of art as an integral part of Eastern
culture Att
1133:
131. Three-Dimensional Form
(3) F,S

Prerequisitos: ART 181; DESN 121. Investigation
and orpobems in the organzation of
threedimensional phenomena. theoo-dimension
laboatory.
151A. Beginning Ceramics:
Handbuilding
Handbuilding (3) F,S
Introduction to ceramics as an art making
material using handbuilding tecchiqueses such as slab, coil, and molding, including glazing and
fring processes. ( 9 hours laboratory.) (CAN ART

151B. Beginning Ceramics: Wheet Throwing (3) F,S,SS
Introcuction to ceramics as an att making
mateeiel emphaszing the use ot the poteress wheel
to develo to develop torms. Includes glazing and fring. (9
hours laboratory.)
161. Beginning Life Sculpture (2)

F,S
Prerequisites: ART 181, 184. Modeling from the
human figure with emphasis on composition. human figure with
181. Beginning Drawing (3) F,S

Introduction to do drawing with emphasis on
perspective, Ilight, shadow, and vill perspective, light, shadiow, and volume in
compositon using a variety of media.. (6 hours
labocatory) (CAN ART 8 ) 184. Beginning Life Drawing
(3) F,S (3) \(\mathrm{F}, \mathrm{S}\) Pretequaisites: ART 181 or concurrent enrollment
in 181 and 184. Introduction to drawing from the human figure. (6 hours laboratory)
187. Beginning Painting (3) F,S

Pererequistes: ART 181: DEES 121. Introcuction
to paining problems sing popaque media. ( 6 to painting problems using opac
hours labocratory) (CAN ART 10) 220. Principles of Color (2) F Prerequiste: DESN 121. Study of the physical,
physiological and psychological aspects of color physiological and poschological aspects of color
through lecture and studio proiects. An
 Ostwatd. , ete) used to catalog color. (Same
222. Calligraphy (2) \(\mathbf{F}\) Preerequisite: DESN 121; ART 181. Study of letter
 contemporaras interpirenatalions of these forms. (6
hours laboratory) 223. Lettering-Typography (2) F,S,SS
Prerequisite: DESN 121; ART 181. Study of lettering in ind contemporay letter forms applications of
viewed as cesign elements that cans enthance visual
communication. Students examine various letter bom styles, design new forms based on existing ypography and execute finished leter forms for
25. Typortion ( hours taboration).

Preerequisite: DESN 121, 223; ART 184 and permision of instructor. This; course builds on conceptual and skill experiencere involued in
letering and calligraphy coursework. \(t\) will explore the history and contemporary applications of typpraphic desion in all design
disciptines. (q hours labocatory) 263. Beginning Sculpture (2) F,S Principles of sculpture expresessed through basic
experiences in modeling, carving. construction experiences in modeling, carving, construction
and mold making. (4 hours laboratory) (CAN
ART and mol
ART 12 )
271. Rendering (2) F,S

Preerequisites: ART 181; DESN 121. Graphic
visualization for convincing reperesentation. (4 hours laboratory.

\section*{281. Inte}
reerequiste: ART 181. Drawing in various media with emphasis on space and form. (4 hours
laboratory). 284. Intermediate Life Drawing (2) F,S
Preerequistes: ART 181, 184. Drawing trom the human figure with an emphasis on
repreesentation. (4 hours laboratoy) 287. Beginning Life Painting 287. Beg
(2) \(\mathrm{F}, \mathrm{S}\) Preerequisites: ART 184, 187. Painting from the
human figue with an emphasis on representation. (4 ho
330. Cross Cu
330. Cross Cultural Visual Literacy (3) S
Crose-Cutural Visual
 premise that At is an aesthetic. Busted on the culture's ethos, a method of inquiry has been
designed to integte at designed to integrate: a e exposurue to the basio
technical aspects of art-making, together with b) a discussion of core conceepts in two different culture-clusters. the Enve-Americican, and the
Pann-Alian. The significance of the concept of Pan-Acian. The significance of the concept of
cultura Ielativity applied to the study of att curtural
cracielituturatly
graing only.
320. Issues in the Arts (2) F,S
 on issues that tace the e artist in our contetmporary
society. Evaluation on a CreditNO Credit basis. 326. Computer Graphics (3) F,S Prerequisite: Permision of instructor. This
entry-level sunvey introcucess desion and computer-science maiors to the basic connecpts
of computer graphics applications in televisison, film pomputer graphices applications in terevision
filmet, interior and architectural
desion. desion. Lectures, films and videotapes on
applications will complement fild trips to local
deosign firms utilizing the computer as a deosion firms utilizing the computer as a basic tool. A research paper andior at least one
hands-.0 proiect on the computer will result from
individual and team input. (6 hours laboratoy) 348A-B. Stained Glass \((3,3)\) F A: The study of basio stained glass techniques
involved with glass bonding, leaded glass and the eopper foil procosestan An emphases ond onsesign
application and color theory will be stressed. (6) appication and colors theory will be stressed. (i) hours laboratory.)
B: Prerequiste: Ar
Bi Pererequiste: Aft 348A. Advanced techliques
relatin tot the of oftained llaso. Sandblasting plass slumping, of slasannd paintiass, Sandblasting,
plass coulpure and trame masting. glass scuipture and frame making will be amon
the techniques
covered. ( 6 hours laboratory) 349A-B. Microcomputer Art Studio \((3,3) \mathrm{F}, \mathrm{S}\)
Prerequisitit: Aft 181, 187. Basic theory and ( 6
heurs Labooratory.) tool. Hands-on use of hours laboratory.) tool. Hands-on use of
microcomputery employing graphics in "Pain
Programs" with color hardber Programs" with color hardocopy output and
animation production on vidoo tape. Emphasis animation production on ivooo tape. Emphasis
on computer graphic applications in strudents
idividual stucio ant diocilinea. At athity ndividual studio arto dispopilinines. (Att autivity:
hours) hours)
360 O.
F601. Mythic Visions into Art (3)
Prerequistes: ENGL 100 and upper division
status. Thematio polartites in ant will heo Chaos and Colarties in art will be examined: Microcosm and Macrocosm: Life and Death; Sacred and profane
 375l. The Avant-Garde: Radical Change in Art and Music in the \(20 t\) Century (3) \(F\)
\(\qquad\) statucquskes. An eximination of some of the maior
'modern' or avant-garde styles and movements modenn or avant-garde stryes and movements
in art and musi in Eurpe and America from
about 1900 to the present. The course aims no about 1900 to the present. The course aims nol
only to characteize these stylies and thei
 n modern society.
(3,3) F,S rerequisites
A: Exequisleration At of printing ing and reproculuction process related to pinting the needs of teproduction iliustrator and museum protessional, and an
introcuction to intocustion to the skille and and accabulan
necessary for the preparations ond
 electionic media. Emphasis is on direc
interaction with the varus commercial
production protesionale

Procesess learnes in 3822 , but within the context of sequential esthetics, (i.e., students produce
limited edition books). ( 6 hours labratory, 440. Art and Soclety (3) This course will conider the nature of ar in
Western culture from several discidininary Western culture from several disciplinary
peerspectives including art theory, social and perspectives including, art theory, social and
political theory. history, philiosophy
scond economics. It seeks to demonstrate that art is a
construct based on human intellect and belif. 489. Special Topics in Visual Art (1-3) F,S Prerequisitit:: Consent of instructor. Topics of
current interest in the visual arts will be selected
 oplos to a maximum of 12 units. Topics will be
announced in the Schedule of Classes.
\({ }^{490}\). Special Topics in Studio Art (1-3) F,S Prevequistit: Consent of instructor. Special topics of current interest in studio art will be esielcted for
ntensive study. May be repeated with different spisis to a maximum of 12 units. Topiciss will be
nnounced in the Scheduie of Classes. ( \(2-9\) announcod in the
hours laboratory.)
\({ }^{49} 495\). Field Studies in Ar (1-6) F,S
An opporunity to study artistio monuments, ald edit may be earned in ART 495 .
\({ }^{499 \text { T. Sp Special Studies Intermedia }}\)
reacalisite
lor extensisive work with facuulty superisiotion on Idvididual and group profocts. Projects may be tercrisciplinary and indude pefformance,
process and conceppt att, and the application of materials and technology to new forms of art Limited do 6 unitis in one semester and a tot
units. (6 hours
aboboratory.)
499V. Special Studies in A
Photography (3) F,S
Prerequiste: Consent of instructor. Opportunity indididual problems in photography as an art Indivdual probiems in photorapophy as an art
torm. Limited to 6 units in one semester and a
otal of 9 unts. ( (hours laboratog) ART EDUCATION COURSE
(ART 407 and 499P are accoptable for the MA.
an
aspecilization in Att Education.) 00. Art and the Child (3) F, Experiences in visual art appropiate to ovicelininges found in the California Yieval and
 chilicrer's artistic and aesthetic development. In
addition, students will divelop aeesthetic adorion, strucentis will develop aesthetio nd jucgment for application to vivual art: and ain an undertanding of the historical and
cuturual contexts of visual att. (6) houra laboratory.)
302. Crafts and the Child (3) F,S prerequisite: ART 300 At and the Child other visual art forms appropiate to developoing treertive selfi-xxpression according to guidetine tound in the Califoria Y Yival and Pertorminin Ats
Eramework; review of the chidren's artistio and tramework; review of the chilidren's artistic and
 analysios, interperation, and Judgment for of atti, and enrich their understanding of the listorical and culturual contexts of cratst and othe
visual art forms. Course is not repeatable and is hisual art forms. Cours is int repeatable and is Att. (6 hours laboratory.)
303. Introduction to Art Therapy (3) F An introductory overview of the theory, literature and practice of att therapy tor theoo intineresteted in
his field as a potential career chocee or 304. Areraputico proceses. (2) F,S

Preerequibite: ART 100 or consent of instructor. An and crat media, techniques and procoessos in recreation and lieisure studies. For programs
which reach diverse age and interest levels. (4 hicurs labocoratoy.)
305. Perceptual Skills (3) F,S Development of skills in making and talking
about Aft through interrelating ant production with art articisism, cultural-historical connections, and aesthetico. Within this multit-acated approach painting, and new att forms including those
reated to new technologese blatec to new technologieo. 306A. Arts and Crafts for
Exceptional Children Methods and materials for teaching arts Methods and materials for teaching arts and
crats to mentaly retarcoc, evucationaly
handicappeod, visually impaired, aurally \(m\) maired handicappod, visually impoiriod, aurally impoiited
nutit-handicapped, orthopedically impaired and nutithandicapped, orthopedically impoaired and 402. Art Therapy: Theory and Practice (3) S
Prerequisist: ART 3 303. Study of the theory of art
therapy as tevealed through case histries therapy as tevealed through case histories coltocess invoved. Emphasis on school and
clinical settings ranging trom preschooll to clinical
geriatic leveringel.
*407. Art Practicum (3) F,S
Preerequiste: Consent of instructor. Development
of attudes and skills required tor the production of atitudes and skilis requirird to the procoction evelatation, and appreciation of the visual arts
Consideration of the value of the art procossa and
product to the individual in an ethically diverae

 examined in relationship to learning about art
The At Education Bound Portoloio is begun in The At Education Buind Porttolio o a bogun in this cou
held for
att.
*499P. Special Studies in Ar Education (3) F,S
Prerequisite: Consent of instructor. Opportunty individual problems in art education. Uimited to 6 units in one semester and a total of 9 units. (

\section*{ART HISTORY COURSES}
*307. Historiography in Art (3) S Prerequisite: ENGL 100. Consideration of
standard research techniques and resources as well as composition and docoumentation of wititen reports specifically welated to the study or
opent to students with credit in ART 496 . *308. Art Theory (3) F Consideration of histaric and contemporary theories and aesthetic frames of reference
whereby what has been, or is, identified as ant is
soidentifed *309. Art Criticism (3) F An examination of a variety of critical approaches to modern art. Discussions will be based upon
the writings of 19th and 2oht century art theocists and protessional an cortices
3351. Art and Anthropology,
Theory and Practice (3) \(\$\) An introduction to and critical (3) S intion concopptions, misconcoptions, artititiodes af and Judgments which have attended the artifacts of
African, Oceanic, and Ameican Indian Aftican, ceeanic, and American Indian
manutacture sinco their dolscovery' as att earty in the eath century will serve as a cases study for
understanding the complex theoretical and practical inding the coremitionships among theorevical and and
of iplines
of and practical intererelaitionships among ihe discipines
of art, aesthetics, museology, and anthropogy.
Then *364. History of Ceramics (3) S Materias and tecchiques as they relate to the Mateialas and techiciques as they relatet to the
historical development of pottery styles and forms. Not open to students with crededit in ART *365. History of Prints and *365. History of
Drawings (3) F Historical sunvey of prints and drawings, with and on the role played by these media in in reation to other arts through the 2oth century. (Leeture) Grading: Student Option
*366. History of Textiles (3) F Historical survey textiolestructure and dosion as
they relate to to use, materials and invention of they relate to use, materials and invention of
procoseses in detemining character, qualify and styistic concepts. Not open to students with
cread in ART 419 redit in ART 419
401./598A. American Art (3) S A survey of American art from 17760 to 1945 .
Emphasis will be given to painting from Colonial portrature to zoth contur Abstrat
Expresionims. Not open to students with creadit Expressionism. Not
in ART \(413 A\) or \(413 B\).
408./598B Early Christian and Architecture, mosaics and sculpture of Pome e Roman Empire to the end of the Byzantin ra. Not open to students with credit in AR (3) S Arts of Northern Europe from Merovingian Ants of Northern Europe from Merovingian
thrught themanemaue period. Not open to
students with credidin ART 3 3ist. 10./598D. Gothic Art (3) F,S Itternate even years syistio analysis in the his chitecture, sculpture and stained glase of the wreat cathedralas of Europee. Not open to to students
416./59

This survey will trace Greek Att from its frist beginnings in the Aogean periot and auray irst
development on through the late Hellenistio Period. The key monuments of acchinecture. sculpture, painting, vase-paining. and the
soccaled minor a ats will be disussed against the background of contemporary theories, ariticism, and histor, of opariuiuar concerm are the
echniques and materials. of the various ats. tractitional grading matery.
417./598L. Roman Art (3) S 1992 and odd years thereafter
This survey will begin with an overiew of the arts
of taly before the Romans including both the Of thay before the Romans induluding beth the
indigenous or of the tainic peoples as well as the
better known art of the better known art of the Etruccans. The survey of
Roman At teef will begin with the earty Republic and end Art tither the til bege of Constantinte. The maico at forms of architecture, , paithinitine. soulperum and
the soc.called minor ants will be disused Contemporayy cinticisis, theory, and discussed.
be part of the subiletet of the course. Tradtional bo part of the
grading only.

\section*{423./598F. Early Renaissance Art} In Italy (3) \(F\)
Painting, sculpture and architecture in thay
during the 14 th and 15 th centuries: Giotto to Botticellif Pisaano to Verrochior . Not Gopen to
students with credit in ARr 3144.
424./598G. High Renaissance Art in ttaly (3) S
Painting, scuipture and architecture in traly
during the 18 th century. Classical High curing the 1 the century, Classical High
Renaissance and Mannerists stless Leonario da Vinci, Michelangelo, Bramante; TTian and Venention painters, Sansomino. and Palaciio.
Fiotence, Venice and Rome. Not open to students with reedit in ART 314 C .
425./598H. Northern Renaissance Painting (3) S
Renaisaance painting in Northern European
Netherlands, Burgundy, FTance, Germany and
 manuscript illuminators (Limbourg Brothers), Van Clovet. Special attention to ioconography. Not
426./598J. Baroque
Trends in Art (3) \(F\)

Mainstreams of art in tray, Holland and German in the 174t and 18th centurree. Emphasis on ay
 representative examples of the art of the period in
the Nooton Simen and Getty Museums. Not oper to students with creditit in ART 315A.
427/598K. Baroque Art: Court and
Middle Class (3) Middle Class (3) S
Palace of Versailles and its influence on the cour
art of Germany and Austria in the 17th and 183 centureers Pany and Austria in the 17th and 18th
Velasquez. Gainings of Poussing. Rubens Velasquez, Gainsborough and their followers.
nfluence of Caravagio umon the infiunce of Caravaggio upon the bourgecis art
of the period Examination of reresentave
examples of art of the period in the Nototon Simen examples of art of the period in the Nortans Simon
and Gethy
ardele cedit in ART 315B.
436./598M. Neo-Classicism to
Romanticism, \(1789-1850\) (3) F

Romanticism, 1789-1850 (3) F Examination of Nea-Classicism, Realism,
Romanticim, phototoraphy and tio acciemic
tradtion in art and cuture of Europe trom Romanticism, photography and the academic
tration in art and colture of Europ from
1789-1850. Not open to students with creodit in 1789-1850. Not open to students with
ART 316 A
437/598N. Impressionism to Post-Impressionism, 1850-1900 (3) S

Analysis of the development of Impressionism
and Post-Impressionism in
1850-1900 and Post-Impressionism in France from
1850-1905. No open to studentis with credit in
ART 316 . 438./598P. Twentieth Century Art 1945 (3) F
Examination of Abstraction, Non.Obiective art,
10 students with creditit in ART Surrealism. Not open 439./598Q. Twentieth Century Art
from 1945 (3) S from 1945 (3) S
Examination of Pop Att, Happenings, Minimal Art

455./598R. Traditic

Africa: A Thematic Approach
Africa:
(3) F
Prerequisite: ART 3351 or consent of instuctor.
Exploration from a Western perspectio Exploration from a Weetern perspentive of the
conceptual, expressive and aesthetic aspocts of
 context and to Western concepts of art. Focus on
West Atica. Not open to students with credit in
456./598S. American Indian Art

Western Perspectives (3) S
Prerequisite: ART 3351 or consent of instructor.
Exploration from a Western perspective of the Epiloration trom a Western perspective of the
instocially various and changing frames of
 and considieration of Native A American art through
tocus on selected traditin. Not open to
students with credit in ART
457./598T. Pre-Columbian Mexican Art (3) F
A survey from the Olmeo to the Artec of the art
and architecture of Merico and and prior to the Spanish conquest. Not open to
students 465./598U. A ART 393A. East (3) S
Prehistoric. Near Eastern. Eypptian and Aegean
art. Not open to students with credit in ART 312 .
466./598V. Buddhist Art of India and S.E. Asia (3) F
The formation and dovelopment of Budarhist art in
India and its subequene India and its subsequent metauorophoses in
Cambocia, Thailand and Indonesia will be examineod. Not open to students with credit in
ART 415A. 467./598W. Hindu and Islamic Art of India (3) S
The formation and development of Hindu Art in
India and the genesis as well as transformation of
 characteristics will be examined.
students with credit in ART \(415 B\). 468./598X. Early Chinese Art
(3) \(F\) (3) F

The formation and development of Chinese art
from the third millennium to the toit century A.D.
Not open tiom the third millennium to the 1 tot century \(A\)
Not oopen to studuents with credtit in ART \(319 A\). 469./598Y. Later Chinese Art
(3) S (3) S

 470./598Z. Japa
apanese Art (3) F The characteristicse of Japaneves ant from 10,000
B. . to the present in lo examined and the
develomenent and trand development and transtofmation of native styles
studied in telation to infuences from Buddhist.
Chinese. Chinese, Korean and Weetern Att, Iespocthisy.
Not open to students with credit in ART 494A
B Not open to students with credit in ART 444A or
B.
497. Special Studies in Art History (3) F,S
Prerequisite: Consent of instructor. Opportunity
for eexensive work with faculty superision on for extensive work with facculty superision on
individual problems in art history. Uimited to 6 *498. Independent Studies in Art History (3) F,S
Prerequisite: Senior. At History Maior and
consent of instuctor. Opportunity tor cuitananding consent of instructor. OPporturity yor outstanding
students to underakee independent art historical
investigations. Limited to 3 units in in one semeter Investigations. Limited to 3 units in one semester and a total of 6 units.

341A
Handbuilding (3) F,S Prerequivites: ART 1131, 151A. Design problems with handobitc ceramic 1otms with emphasisis on
*341B. Intermediate Ceramics Wheel Throwing (3) F,S Prerequisites: ART 131, 1518, Design problems
with wheel- thrown ceramic orms with emphasis With wheel- thrown ceramic forms
on surface. (
*343A. Ceramics Sculpture

\section*{(3) \(\mathrm{F}, \mathrm{S}\)}

Prerequistes: ART 341 A. Advanced studies in
ceramic sccipture. *343B. Advanced Wheel Throwing (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: ART 3418 . Advancod studies in
ceramio form employing the poters weel ceramio form emplo
hours labocatory.)
*352A. Ceramics: Glaze
Technology (3) F
Prerequiste: ART 151 A or 1511 . Nature of raw
materials as they relate to the development of materials as they relate to the development of
clay bodies and ceramio glazes. (8 hours laboratory.) *352B. Ceramics - Plaster Shop (3) s

Preerequistes: ART 151A or 151 B . The use of
plaster molds for making ceramic art induding plaster molds for making ceramio att including
prese molds, slip casting, and iggeering. ( h hours
paboaton
*451A-B. Advanced Ceramics
\({ }^{*}\left(3,31\right.\) F F, \({ }^{4}\)
Proerequiste: A: ART 343A or 343B. Indindual
 Preerequistes: ART 451A. Individ
ceramics. 9 hours laboratoy.)
*452. Ceramic Shop Planning and Kiln Design (3) \(F\)
Preerquishes: ART 341 A or 341 B . Ceramio equipment including kilins, their
construction. (9 hours
laboratory.)
453. Seminar in Ceramic Arts (3) F,S

Prereaquivite: Consent of instructor. Cititical analysis of work of historical and contemporary
ceramic artists; the changing role of ceramic ant as ant becomes part of the contemporayi art ar
mainstream. May be reeated to creadi with mainstream. May be repeated for credit with
study of different artists each semester up to a study of different art
maximum of 6 units.
491. Ceramics: Senior Project (1) F,S
reerequiste: At 451A or 4518 and consent of instructor. Planning, preparation, completion,
and phoographio salio documentation of a
and creative extibtion and wititen thesis as aspproved
by taculty. Should be taken in last semester by faculty. Should be taken in last sememter
 *499A. Special Studies in
Ceramics (3) F,S
Prerequisite: Consent of instructor. Opportunity
for extensive work with tacuity supenision on Idvidual problems in ceramics. Limited to 6 hours laboratory.

DRAWING AND PAINTING
*381. Drawing (3) F,S Preequiste: ART 181. Problems and concepts in laboratory.) . Advanced Life Drawing \({ }_{(3,3)}^{*} 38\) F,S
Prerequisite: ART 284 . Continued. study in
draving foom the human figure. (6 hours
385A, B. Watercolor Painting
\((3,2)\) F,S
Preerquistes: ART 181, 187; DESN 121 . Nature
and uee of the waterocolor media. ART 385B, tor and use of the wateroolor media. ART 3a5B, to 4.6 hours laboratory.)
387. Painting (3) F,S

Preerequistes: ART 181, 187: DESN 121.
Problems and concepes in Problems and concepts in space, form
structure, color and content in studio painting. *388. Mural Painting (3) F,S Prerequiste: Consent of Instructor. Problems and concopeps in the devevelopmentho. propoosal and creation of indididual and collaborative mura painting. Students will paint murala in selected
public placeses located on or of campus. Limited
os unts in one semester and a total of 6 unita. public placess located on or if campus. May be repeated for
*389. Materials and Craft of
Drawing and Painting (3) F,S
Prerequisitite: ART 181, 187. DESN 121 . Theory
and practico in the crat of drawing and painting and practice in the crat of drawing and painting.
Limited to 3 units in one semester and \(a\) total of 6 ints. ( 6 hours laboratory.)
4874,B. Advanced Life Painting \((3,3) F, S\)
Prereauistes: ART 287, 384 A or \(\mathrm{B}, 387 \mathrm{~A}\) or B .
Continued study in painting trom the human figure. .
499D. Special Studies in Drawing (3) F,S

Prerequisite: Consent of instuctor. Opportunity
lor extensive work with faculty subenision of ion exiensive work mit facuitry supersision on n one semester and a total of 9 units. (6 hours
*499K. Special Studies in Painting (3) F,S Prerequisite: Consent of instuctor. Opportunity
lor extensive work with faculty Ior extensive work with faculty superision on indididua problems in painting. Limited to 6 units
in one semester and a total of 9 units. (6 hours
laboaton) 499L S
499L. Special Studies in Life Drawing (3) F,S
Preerequiste: Consent of instructor. Opportunity
for extensive work with faculty supenision of individual probilems in in life drawing supenision on units in one semester and a total of 9 units. (6

GENERAL CRAFTS
*354A-B. General Crafts
\((3,3)\) F,S
Prerequistes: Art 131, 181; DESN 121. Cratis processes, techniques and concepts in the
design and making of utilitarian art objecti. (6) hours laboratory.)
\((3,3)\) F,S
Prerequistes: ART 354A and B. Concepts and skills necossary for the production of handcrated
furniture. Emphasis on the use of hand techniques as a means of understanding the philiosophy and aesthetics
furniture. (6 hours laboratory)
*499B. Special Studles in Genera Crafts (3) F,S Prerequisiti: Consent of instuctor. Opportunity
for extensive work with faculty supenision for extensive work with faculty supenision on
individual problems in general cratts. Limited to 6 units in one semester and a total of 9 units. GENERAL STUDIES IN ART

\section*{310. Creativity and Cognition for \\ 310. Creativity and Cogn
Non-Art Majors (3) F,S}

A course designed for studemist from any major
field. tecchical or non-technical. No special training in art or special capability in att is
required. Emphasis is in probled.esolving andis on bisinging on creproative
creative thinking under beter contro. 380A Perceptual Skills in Drawing for Non-Art Majors for
(3) \(\mathrm{F}, \mathrm{S}\)
Use of various drawing media with an emphasis
on developing drawing skill. (6 hours 380B. Perceptual Skills in 380B. Perceptual Skills in
Painting for Non-Art Majors (3) F,S

Use of various painting media with an emphasis
on developing a personal approach. (6 hours laboratoy.)

BIOMEDICAL ART
*371A-B. Illustration (3,3) F,S Preerequistes. (377AA ART 111 or 161, 112AA, B. 131,
181, 184, 187, DESN 121; ( 3718 ) ART 271, 284,
 protessional media, sal
(6 hours laboratory)
*372. Anatomy for Artists (2) F,S Prerequistes: ART 181, 184. skeletal and muscle strucucture empheasizing the developpenent of skill in
depicting the human figure. (4 hours laboratory) *373. Fashion Illustration (2) F,S Prerequisites: ART 371A, 372 . Fastion drawing
\({ }_{(3,3) ~ F, S}^{* 374}\) S. Biomedical Rendering Prevequaisto: Consent of instructor. Introduction to
and practice in techniques of deacititie ctan and practice in techniquees of descriptive drawing and press repproduction of
skill ( 6 hours laboratoy.)
\({ }_{(3,3)}^{* 471 \text { F.S. }}\). Advanced Illustration \((3,3) F, S\)
Prerequiste: ART 3718 . Illustration in part from
Invemodes. Each course \(1 / 2\) Iive model foe. ( 6
hours laboratory) hours laboratory.)
*499F. Special Studies in
Illustration (3) FS
Illustration (3) F,S
Prerequisite: Consent of instuctor. Opportunity
for extensive work with faculty supperision on for extensive work with faculty supenision on
individual problems in illustration or bimedical
art art Limited to 6 units in in one semester and a total
of 9 unts. ( 6 hours labocaton)
\begin{tabular}{|c|}
\hline METALSMITHING AND \\
JEWELRY
\end{tabular}

355A. Enameling (3) F,S
Prerequiaite: DESN 121 or consent of instructor.
Techniques, materials and concopts oid Techniaues, mataiaias and concepts of Metalworking technicuestas associaited with making
enameled metal obicots. Emphasis on the enameled metal objects. Emphasis on the
exploration of characteristics of enamels and explotation of characteristics of enameles and
metars stressing indrivual acvinancement of interest and expression. May be repeated once
for creditit. ( 6 hours laboratory.)
355B. Enameling: Phot
355B. Enameling: \(P\) Processes (3) F,S
Prerequistes: ART \(355 A\), or onseent of ingtructor.
Introcuuction to concoepts and skilis tutiring photo
processes in enameling such as photo priccesses, in enameling such as photo
sikceren, themomescreens and photo etching with

*356. Jewelry Casting (3) F
Prevequisite: Consent of instructor. The design
and creation of jewely through loot-wax casting

\begin{tabular}{l} 
echniques and processes. Mat \\
once for credit. (6 hours laboratory.) \\
\hline
\end{tabular}

*358A-B. Metalsmithing ( 3,3 ) F freerequisites: ART 357A, , A2 282. The design and laboratory.)
359A. Archilectural Metalwork
and Blacksmithing (3) F,S
Prerequisite: ART 131. Techniques, material forme in largeer scale and in an architectura context. Hot forging and fabricating with ferrous

credit. (6 hours laboratory.)
\({ }^{359 B}\) (3) \(\mathrm{F}, \mathrm{S}\)
Preerequiste: ART 131 a consent of instructor
Introcuction to metalforming and construction
techniquas in the dosign and creation of
scullutura form and composition in metal on an
architecural architectural scale. Traditional grading only.
Course may be repoeted for a maximum of 6 units. (16 hours laboratory.)
458A,B. Advanced
Metalsmithing/Jewelry and
Enameling
Enameling (3) F,S
Prerequistes: ART \(3558,357 \mathrm{~B}, 358 \mathrm{~B}\) and
consent of instuta
 metalsmithing, eewelry, enameling and
architectural metalwork and blacksmithing. (s hours laboratory,
*499J. Special Studies in
Metalsmithing and Jewelry
(3) FS
(3) \(\mathrm{F}, \mathrm{S}\)

Prorequusite: Consent of ingtructor. Opportunity
for extensive work with faculty supenion
 Limited to 6 units in one semester and a total of 9
units. (6 hours abocratoy.)

\section*{MUSEUM STUDIES}
*435. Introduction to Museums

\section*{(3) F,S}

Designed for students interested in pursuing the
Museum Studies Corfificate: alio Museum Studies Certificate: aloo poen to art
malos and students from other dicocipinees. Study of current musemums, their finctions, services, are included.
*499Q. Special Studies in Museum Studies (3) F,S
Prerequisites: ART 435, 445A and consent of
instructor. Opportunity for extensive individual work with tapurty superinison on problems in museum studies, including utilizing tre eresurucces
of The Center for Southern of The Center for Southern Califoria Studies
the Visual Att. Limited to 6 units in one semester and a totala of 9 units. (6 hours laboratory.)

\section*{PRINTMAKING}
370. Printmaking (3) F,S Prerequistes: ART 112A, 112B, B181, 187; DESN
121. A studio course exploting a printmaking techniqueses axno imagery, selected
 *376. Printmaking: Relief Printing (3) F,S

Prerequistes: ART 112A, 1212, 181, 187; DESN
121. Instuction in releff printing techniques and 121. Instruction in relief printitg technicues and
image development, induding wodatit, wod image development, including woodcut, wood
engraving, innout, collagraphs and ateenative
pint surfacese in black and white and polor is prift surficase. In black and white and color. (6
hours laboratry.)
*377. Printmaking: Silkscreen (3) \(\mathrm{F}, \mathrm{S}\)

Prerequistes: ART 112A, 122B, 181, 187; DESN
121. Instrution in fine art screen printing tecchiquues and imane development. intolinting
resist, paper, film, emulision and aternative stencil methocs. ( 6 hours laboratory)
378. Printmaking: Etching (3) \(\mathrm{F}, \mathrm{S}\)

Prerequistes: ART \(112 A, 112 B, 181,187\); DESN
121. Instuction in and inmage diveliopment, indincluding techniques etching engraving, drypoint. aquatitht and alternative
platemaking methods. In black and white and
coler. ( 6 hours laboorotoy) color. (6 hours laboratory.)
(3) F,S
379. Printmaking: Lithography Prerequisiste
Prerequistes: ART 112A, 1212B, 181, 187; DESN
121. Inturution in stone lithography technicuues
 drawing, flats, washes, transfers and alternative ( 6 hours mathoratory.)
*475. Printmaking: Photo Processes (3) F,S
Preequistes: ART 370 :
Trerequisites: ART 370; TED 101. Instruction in the photo pritimaking proccoses for lithography
etching and silikscresen suing ocpy camera and
experinental lechiques experimental techniques to expolore phometograpphic
and non-photographic \(i m\) imager. ( h ) *480. Advanced Printmaking (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: One of the following: ART 376,377 .
78,379 or consent of instuctor tudy in one of the four of areas of p printmaking, with emphasis on teoch nereas of printmaking, with development. Limited to 6 units. Repeatatele to a
maximum of
labratits in different topics. ( 6 hours *499R. Special Studies in
Printmaking (3) F,S
Prerequisite: Consent of instructor. Opportunity
 ndividual problems in printmaking. Uimitiod to 6
units in one semester and a total of 9 units. Hints in one sememester and a total of 9 units. (6

*361. Life Sculpture (3) F,S Preerequiste: ART 161 . Intensive study of the
figure through individual student concepto and casting techiquaves andednt concoepts. Mold
parging. 6 hours laboratoy) parging. (6 hours laboratory.) *362A. Sculpture Foundry:
Investment Casting (3) F,S Prerequistes: ART 131, 161, 181. The traditional lost wax techniques of casting non-terrous metal.
Wax tormation and manitu Wax formation anv masipulation, gating theory and practioc. Investment procedures, foundry
management metal casting, patination and tool
making making. (6 hours saboationy)
*362B. Sculpture: Molding and
Reproduction (3) FS
Preerequistes: ART 131, 161. 181. Construction
and use of fexible and plaster molds. (6 hours
laboratory) laboratory.)
\({ }^{* 363}\). Sculpture: Carving and Prerequistes: ART 131, Preerequistes: ART 131, 161, , 181 or consent of
instructor Compoostion in sculpture utilizing stone
and woodcan⿻ing, metal and wood fabrication. (6
hours labooratoy.) *459. Sculpture Foundry: Shell Casting (3) F,S Rerequisitit: Consent of instructor. Lost-wax casting of expressive andor functional ant torme nits. (6 hours laboratory.)
461. Advanced Life Sculpture (3) F, S Ferequubistes: ART \(361,362 A\) and B. Large.scale cuipture form the modele emphasting experessive tand construction, oill-clay formulation and tand construction, oil-clay formulation and abvonatod. .)
463. Advanced Sculpture
(3) F,S
 ours laboratory.)
499M. Special Studies in
(3) F,S
rerequiste: Consent of instructor. Opportunity extensive work with faculty supensision on units in one semester and a total of 9 units. (e TEXTILE DESIGN

\section*{327A-B. Surface Design
\((3,3)\) F.S \\ \((3,3)\) F,S}
reeriquisites: ART 181, 187; DESN 121 . Variety of design concoepts in relation to mexia and
processes appropiate to both hand and commerciel application of pattern to
*328. Structures in Fiber (3) F,S
Preerequistes: ART 131, 181, 187; DESN 121
Conceots and develoment in non-loom fiber Concepts. and developpment in
*428A-B-C. Weaving \((3,3,3)\) F,S
Preerauistes: ART 131, 181, 187; DESN 121 Neeves, teciniqueses and materials of structural extile design with emphasis divided between ommercial application and personal expression \({ }^{428 \mathrm{C}}\) require consent of the instructor. (6 hours

\section*{430. Fib}
430. Fiber Art: Paper (3) F,S Prerequistes: ART 121, 131, 328. Basic materials ncluding emphasis on conceopt and form. development. Liminted to 6 units. Repeeatable to a aximum of 6 units. (6 hours labocratory.) 499N. Special Studies in Textile Design (3) F,S
Prerequiste: Consent of instructor. Opportunity lor extensive work with tacuilty supenision on
ndividual problems in texie design. Limited to 6 nits in one semester and a total of 9 units. ( hours labocratory.)
\(\qquad\)
321. Graphic Production
Non-M (Non-Major) (3) F,S,SS Prerequisites: DESN 121, 223, ART 181. Visual
 concept to finished at. Similar to DESN 323 bu
leess "hands-on" oriented. Field trips, lectures ritiques lab sessions. ( 9 hours laboratory.) *322A-B. Visual Com Design ( 3,3 ) \(\mathrm{F}, \mathrm{S}, \mathrm{S}\)
Preerequistes: fo 322A: DESN 121, 223, 224; ART
131, 181, 184, 187; to 322B: DESN 32A and
 conceptualization and visualization appropriate ot
communication in print, film and video. (9 hours laboratoy.)
*323. Visual Communication Design/Production (3) F Prerequisites: DESN 121, 223, 322A and
permision of instuctor. Visual Communication peemisstion of instuctor. visual communication
prodution procoses, including concept to
press-ready finish. Lecture, Lat Field trip. (6 press-reacy frish.
*324. Film Animation (Non-Major) (3) F,S Preercauiste: Consent of instuctor by drawing
portoloio presented at first class meeting portololo presented at first class meeting. Design
and production of color, super 8 mm and sound ynnchronzed 16 mm animated fims. ( 6 hours *aboratory.
\({ }^{* 325}\). Packaging Design (3) F Prerequisite: Consent of instructor. Materials.
processes and the design of packaging. hours labocatory.)
329. Advertising Design (3) F Preerequistes: DESN 121, At 184, DESN 223
and permission of instructor. This course wil explore small space advertising, television, and outdoor billboards from the conceptual stage
through comprehensive layouts. \(\quad\) ( 9 hours through com
laboratory.)
*420. Visual Communication
Design Workshop (3) F,S
Prerequisite: Consent of instructor. An \({ }^{10}\) allow outstandings students (selectedish by porttolio review only) to deveropp popattoloios
ppinted work in visual communication design Students work in wisual commumineation deesign dructot relationship on artual proiectst with read budgets, deadilines, and dients in the University
and communty with responsibility for all phases
at of each project, from deosion to procuction
printing sureenision and eompletion. printing supe
labocatory.)
*421. Visual Communications Design/Comping Skills (3) F,S Preerequiste: DESN 121; ART 181. DESN 3224
recommended, but not required. Conceopts and recommended, but not required. Concepts and
comping sikis trom thumbnails, through tight
comps comps, emphamzing miarker terahigue
chendering of various materials, surfaceses and type Rendoting of various materials, surfacces an
indication stressed. ( 9 h hours laboratory)
*422A-B. Advanced Visual
Communications Design \((3,3) \mathrm{F}, \mathrm{S}\)
Prerequilites: DESN 322 A, ,323. DESN 422 A is a
studio course resulting in advanced proecta in studio course resuler
the design, computer graphics, photo design and grid layuut syptems development. DESN 4228
deals with advertising acency att direction and deals with advertisisn agency art direction and
results in a campaign development. (i) hours resuits in a
laboratory.)
*442S. Internship in Visual
Communications (3) F,S
Prerequistit: Consent of instuutor. Student
internuhbip experience in selected studios, internship experience in selectad. studiont,
advertising
agencies and
in-house
creative departments. Opootunity to work under
superision of profesionals in the field for six hours per week. Limited to 3 units in one semester and a total of 6 unit
*499S. Special Studies in Visual
Communications Design (3) F,S Prerequisite: Consent of instructor. Opportunity prerequisin: Consent of intructor. Oppotunity
for extensive contract \(\begin{aligned} & \text { work with taculty } \\ & \text { superision }\end{aligned}\) on supervision on probems in vivicual
communiations design. Limited to 6 units in one
semester and a total of 9 unita. 9 hours semester and
laboratory.)
Graduate Division
509A-B. Studio Problems in Art
Preacuite (2,2) fos
Prerequisite. Consent of instructor. Advanced
indriviual graduate problems in art education with projects related to in specific leaening 5420 .
542Q. Internship in Museum
Prerequisites: ART 435, 445A-B and consent of instructor. Student internship experiensent in
selected museums. college and comunity art conters approppiatet to the student's patiticular acaderime interest. Opportuntity to wortaticuldar
superision of museum profesionals in the feld supenision of museum professionals in the field
to expand student understanding of the to empand studint undertstanding of the
complexties, dicicipline and challenges in the proteosis. Limited to 6 unitis in one semester and
a total of 9 units. ( 6 hours laboratory.) 545A-B. Museum-Gallery Practices \((3,3)\) F,S
Preerequistes: ART 435, consent of instructor. Pro-proteosional training in museum-gallery
techniques: adminitration, extibition, budget techniques: a amministraton, extibition, budget
planning, curatorial problems, publio relations, insurarco, packing and stipping. The UUivensity
Galleny will be the laboratory tor practical experience: students will assitat in conceevining and realzing exhibitions.
551A. Advanced
Ceramics-Graduate (3) F,S
Prerequisite: Ar 451B. Opportunity for beginning Prerequiste: At 451B. Opportunity for begining
graduate students to
to reearch employing variuus ceramics matarials, procesoses and divinual
solutions in preparation tor a mere earrow and solutions in preparation for a more narro
concentrated study. (f hours laboratory)

551B. Advanced Ceramics -
Graduate (3) F,S
Prerequiste: At 551 A. Solection of a specific
area of ococontration in ceramice, iminting the materials and processes to develop a proiect
which will refiect a preditermined statement. (6) hours laboratory.)
\({ }_{(3,3)}^{554 A-B . S}\). Handcrafted Furniture
3,3) \(\mathbf{F , S}\)
Prerequisite: Ar 454 B or consent of instructor.
Advanced concepts and skilis neceosary for the production of handscrateded ulunituresesary Emphast on on
the use of hand techniques as a mene the use of hand techniques as a means of
understanding the philosophy and aesthetics of handcrated furniture. ( 6 hours s labooatory.) 558A. Metalsmithing, Jewelry and
Enameling (3) FS , Enameling ( 3 ) F,S
Prerequisite: ART 458 A or consent of instructor.
Indivicual graduate evel studio proiecte Indivcuave gracuate evere stucio projects involving
investigation of materials, procosesses and visuaul
solutions in preasation tor study in metalsmithing, jewelry, enameling. os archiencural metawork and blackeminthing.
Traditional grading only, Course may be Traditional grading only. Course may be
repeated for a maximum of 6 units. (6 hours laboratory.)
558B. Metalsmithing, Jewelry and
Enameling (3) F. S Enameling (3) F,S
Prerequisites: ART 458A and 55BA or consent of
instructor. Selection of a specific area of concontration in metalasmithing and jeweify, enameling, or architectural metalwork and
blackmmithing: focus on creative obiectives
based on a procected theme Traditional orading backso on a propected theme. Trative obitonal rectives
oning. Course may be repeated for a maximum of only. Course may be repeated
6 units. ( 6 hours laboratory.)
559. Sculpture Foundry Advanced Shell Casting (3) S Prerequibite: AAT 459. Lotet-way casting of art
forms in warious metals using advanced techniques of ceramio shell mo
to 9 units. (6 hours laboratory.)
564A,B. Advanced Crafts Studi (3) \(\mathrm{F}, \mathrm{S}\)

Prerequistes: ART \(354 A\) and 3543 . Advarced
cratt processes, techniques, and conceevis uned cratt processees, techniques, and concopts used
to make tutitaian obiects. In conjunction with
object making, research will be requirect in obiect making, research will be required in
various aspects of the cratts field. (6 hours laboratory) 575. Printmaking: Ad
Processes (3) F,S

Prerequibite: Consennt of instructor, Graduate level work in one or more of the photo printmaking processees, with emphasis on photographic or
non-phoographic imager. Uimited to 6 units.
Repeatable to a maximum of 6 unis in itterent Repeatable to a maximum of 6 units in differen
iopics. ( 6 hours laboratory.) 580. Printmaking: Advanced Studio (3) F,S Prereaquistes: Conssent of instructor. Graduate
level work in one of the four areas of pointmaking stressing directed individuual Ieseasearch and inage development. Repeotable to a maximum of
589. Special Problems in Visual

Art (3) F,S
Prerequisite: consent of instructor. Topics of for intinensive study. May be repeated wed different topiciss to a maximum of 12 evenited. Topich an 590. Special P
Art \((1-3) \mathrm{F}, \mathrm{S}\)

Preerequiste: Consent of instuctor specilil Pierequisite: Consent of instructor. Special
problems of current interest in stucio art will be selected for in inensine study. May be repeated with difterent topics to a maximum of 12 units.
opices will be announced in the Schecouit of Classes. (2.6 hours labooratory)
598A./401. American Art (3) S A survey of American at from 1760 to 1945
Emphasis will be given to painting from Colonial Emphasis will be given to painting from Colonial
portrature
to
2ath century Abstract Exprossionism. Not open to century Abents with creact
in ART 413A or 413B. 988./408. Early Sy8B./408. Early Christian and
Syzantine Art (3) F yzantine Art (3) F
Architecture, mosaiss and sculpture of Rome,
Ravenna and Constantinople from the decline of
the Roman the Poman Empire tothe end of the decine of
era. Not open to tuduents with credid in Apatine 598C./409. Romanesque Art (3) s

Atts of Nothern Europe from. Merovingian
through the Romanesegue periods. Not open to through the Romanesaque periods. Not open
students with credit in ART 313 A . 598D./410. Gothic Art (3) F Sylistic anayses in the historical content of the
architecture, sculpture and stained glass of the architiecture, sculptrue end stained glass of the
great catherdald of ulorope. Not open to stucents
with cedit in with crediti in ART 3138 .
598E./416. Greek Art (3) F, Odd Years
This sunvey will trace Greek Att trom its frrst beginnings in the Aegean period and isurive tist
development on through the late Hellenistio perilod. The key monuments oft archilecturtic,
sculpture, painting, vase-painting and the sculpture, painting, vase-painting, and the
socalled minor arts will be discussed against the background of contemporary theocies, criticicm,
and history. Of patioular concern are the and history. Of particular concour are the
technicuess and materials of the various ants.
Traditiona grading only. Tradtional grading only.
598F./423. Early Renaissance Art
in Italy (3) F In Italy (3) F
Painting. Sculpture and architecture in traly
during the 14th and 15 th centuries.
 students with creadit in ART 314 A
598G./424. High Renaissance Art
in ltaly (3) \(\mathbf{S}\) in Italy (3) Paining, scoupture and architecture in thay
during the 1 toth Renaissance and Manneerist ssyles: Clascical High Vinci, Michelangeleo. Sreist styenes: Leonardo da Venetian painters. Sansovino and Palladio. students, with creedit in ART 314 C .

598H./425. Northern Renaissance Painting (3) S
Renalisance painting in North European
Notherlands, Burgundy, France
 \begin{tabular}{l} 
manuscript illuminators (Limbourg Sromethers), Van \\
Eycok to Breughel, Durer to Holbein, Fouquet \\
\hline
\end{tabular} Clovet. Special attention to toonocraphy.
open to students with credit in ART 314B. 598J./426. Baroque and Rococo Trends in Art (3) F
Mainstreams of art in lial. Holland and Germany in the 17th and 18th ceenturutese. Emphatsises on any of Bernini, Borromini, Carravaggio, Rembranct
Vermeer. Piranese, Guacti. Examiniation of
representatie example representative examples of the art of the period in
the Norton Simon and Getty museums. Not opent the Notion Simon and Getty museums
to students with credit in ART \(315 A\). 598K./427. Baroque Art: Court and Middle Class (3) S
Palace of Verasailes and itis infuence on the cour
att of Germeny and Austria in the 17th and 1 1 sth art of Germany and Austria in the 17 tht thend 1 1sth
centuries.
Peaintings of of Poussin. Rubens Velasquevz, Gaintings of ough and their Rullowers
Infuence of Carravagogio upon the bourgeois ant Influence of Carravaggio upon the bourgeis at examples of arat ot the period in the Notton Simiven
and Setty Museums. Not opent to students with and Getty Museums.
credit in AMT 315 B .
598L./417. Roman Art (3) \(S\)
1992 and odd years thereafte TTis survey yill begin with han overeaiew of the art
of tialy before the Romans sinduding boit of taly before the Romans inciucing both the better known at of the Etruccans. The survey and end wither the til bege of Constantintine. The maior att forms of architecture, painting, sculpture and the so-aaled minor, arts will be disurused
Contemporary cortcicim, theory, and history will contemporary cirticism, theory, and history wil
be part of he subtext of the course. Tradtional rading only.
Romanticism, 1789-1850 Examination of Neo-Classicism (3) F Rommination of Neo-Classicism, Reelism,
Romantism, photography and the eacademic
tradition in art and culture of Europe from \({ }_{3}^{17999} 1\)

598N./437. Impressionism to (3) S
 316 B.
598P./438. Twentieth Century Art 1945 (3) F
Examination of Abstraction, Non-Obbective ar
Expressionism, Dada and Surreaism. Not open students with creadit in ART 317A.
598Q./439. Twentieth Century Art from 1945 (3) F
Examination of Pop At, Happorings, Minimal Art
At and Technology. Emvironmental. Concep anta Tochnology. Environmental, Concopt
Pertomance and 1 IVeoe Art Not open to to tudents

598R./455. Traditional Art of Africa:
(3) \(F\)
Prenequis
Prerequisite: ART 3351 or consent of instructor. concoeptual iexpressive and peestheetio aspects of
 context and to Western concepts of art. Focus on
West Atrica. Not open to students with creodit in

598S./456. American Indian Ar
Western Perspectives (3) S Prerequisite: ART 3351 or consent of instructor.
Exploration from a Western perspective of the Exploration from a Western persisective of the
historicaly various and changing trames of
ind referencos surrounding percreption, interpretation focus on silected tradtions. Not open to students with credit in ART 411C
598T./457. Pre-Columb
Mexican Art (3) F
A survey from the Olmed
A survey from the Oimec to the Aztec of the art
and architecture of Mexico and adicacent areen pror to the Spanisx conquest. Not open to to
putidents with credit in ART 393A.
598U./465.
East (3) S
Pretistoric, Near Eastern, Egyptian and Aegean
art. Not opent to students with credit in ART 12 .2. 598V./466. Buddhist Art of India

\section*{The formation and develo}

Indiarmation and dits development of Buddhist art in Indian and ts subsequent metamorphoses in
Cambodia. Theiliand and Indonesiu wil be
examined. Not open to students with credit in examined.
ART \(415 A\).
598W./467. Hindu and Islamic Art of Indla (3) S
The formation and development of Hindu art in India and the genecis as well as transformation
Islamio art of Incia compared to pan-iblamio俍 tudents with credilit ART 415B.

598X./
(3) F
The form
The formation and development of Chinese art
 98Y/469. Later Chinese Art 598Y./4
(3)
D
Development of Chinese at from the 1 1th century A.D. through the culmesination of the trathtion and
A. transtormation in the 2 ath its transtom mation in the 20 h contury will be
explored. Not open to students with creaitin in ART explored.
3199.
5987
5982./470. Japanese Art (3) F The characteristics of Japanenes art from 10.000 C. to the present will be examined and the studied in reotaion to infuencoses from Buddrdist Chinese, Koroan and Western art, respectively.
Not open to students with eredit in ART 494A or
ART 494B.

\section*{599. Studio Problems in Art
(3) FS}
(3) \(\mathbf{F , S}\)

Hequiste: Conneent of art department haulty supenivision, in an area of ant specialization. Limited to 6 units area of amester
 be designated by letter at the time of registration
(a) ceramico, (o) general cratts, (i) drawing. (i)
ill

 drawing and painting specialization. (6 hour

599s. Studio Problems in
Prequisite: consent of art dopartment Advanced individual graduate projects, with
taculty superision, in an area of at specialiatation. Limited to 6 units one semester
and a total of 12 units in any one area 96 hours and a total 10
laboratory.)
599V. Studio Problems in Art Photography (3) F,S Preveruuisist: Consent of At Departmen Advancod individual graduate projects, with
taculty superision, in an area of ait specialization. Liminied to 6 units in one semester 014-B Seminar in Art Education \((3,3)\) F,S
Prerequisite: Consent of instructor. Special surdien, research and evaluation of the rolo of the Education: 601 B may be required by the 611. Seminar in Art History (3) F,S

Preerequisite: Consent of instructor. Directed individual research and group diseussion concerning a topic in art history. Limitied to
651. Seminar in Ceramic Art (3) F,S

Prerequisie: Consent of instructor. Critical analysis of work of histrical and contemporary
ceramic atitsits; the changing role of ceramic art ceramic artists; the changing role of cereamic ar
as is becomes part of the contemporary art as it becomes part of the contemporary art
mainsteam. May be repeated too coedit with
sucy of difterent artists. each semester up to a study of different artiss
690A. Graduate Seminar in Studio Art (3) F Prerequiste: Consent of instructor. Selected eeading and witing concerning topics selevant to
student's specific disciplines in the visual artu with an opportunity for interdiscipina

Art (3) S
Prerequisite: Consent of instructor. Profession preparation for studio artists stresing practical concerns, as well a curices, theory and ortitiom.
692. Public Exhibition (2-3) F,S Preerequisite: Open only to MA. and M.FA
candidates with project statement approval and coansiont of students graduate committee. apen consent of students graduate commitree. Oppa
only to those who have been assigned an
exhibtion date the extibtion date the previous semester. Planning
preparation and administration of a public preparation and administration of a public
extibtion of 698 or 699 creative work. Twouni
deosignation for all MA. candidatase. Theo-unit designation for all MA. candidates. Three-un
deeignation for all M.FA candidates. The course designation for all M.FA candidiates. The couns.
work will result in a pubblic extibtion by each MA.
end MFA. candidate.
cted Studies Studio (1-3)
F,S Preerequisite: Consent of instructor. Independent
studies in creative studio. 695. Field Problems in A (1-6) F,S
Opportunity to study artistic monuments, obiectis Opportunity yo study aristic monuments, oblectst Off-campus locations. Up to 6 units
credit may be earred in ART 695 .
697. Directed Studies (1-3) F,S Prerequisite: Consent of instructor. Independent
studies in technical andlor historical aspects of
698. Thesis or Project (1-6) F,S Prerequisiste: Thesis of proiect-thesis statement Preerequisite. Mest ond consent of studuents graduate
appoval by and
commitee. Planning. preparation and completion committee. Planning, preparation and completicion
of a thesis or a proiect and sturiothesis.
 MA candidacy. Studio maiors are reauired to
exhibit proiect work and wite a stulio-thesio. exhibit project work and wite a studio-the
Required of al candidates for the MA. in art. 699. Thesis or Project (1-6) F,S Prerequishe: Approval of students proiect-thesis
statement and consent of students graduate
 of a creatite extibtion and a studio-thesis. Open
only to students who have been advanced to
MFA Candidacy or secnd MA candidacy in M.FA. candidacy or second MA candidacy in
art. Required of all M.FA. candidates and all candidates seeking a second MA. in at. (9 hours
laboratory.)

\section*{Dance \\ College of the Arts}

Department Chair: Joan Schlaich Department Office: University
Telecommunications Center,
Room 104
Telephone
Faculty: Professors: Pat Finot,
Joan Schlaich; Associate
Professors: Celeste K. Kennedy, Tryntje Shapli, Jeff Slayton, A. Will
Smith, Rebecca Wriaht Department Secretary:
Melody Stott
The Department
Students desiring information should contact the department office
for referral to one of the faculty tor reterral to one of the aculty
advisors. The Dance Department provides an in-depth dance major program of studies including history
and theory, choreography and and theory, choreography, and
technique with emphasis on mod dance technique, composition and performance and with supporting coursework in ballet, jazz, and tap
dance. The curriculum is designe to give students a basic dance background which prepares them as a performer in concert dance choreographer, or as a teacher a the secondary, community college or university level in both public and private schools. The curriculum
prepares students for graduate programs in dance. It gives the general education student and the student in closely related areas Non-major studio classes in ballet, modern dance, jazz and tap dance are open to all students on campus. meet the General Education
requirements in categories C .
and I.C. The CSULB dance major is one of four dance degree program approved in the CSU system. A
large number of part-time faculy members supplement the expertise
of the fulltime faculy of the fulltime faculty.
Dance concerts with faculty,
students and visting students and visiting
Choreographers are held in the studios. Dance majors and minors
are encouraged to participate in
activities of the Dance student organization, "Dancers In Motion." Students wishing to major or minor in dance must audition for placement prior to starting the
program. Auditions are held in November, January, April and August. Applicants should contact the Department of Dance in advance of enrolliment. Non-majo students with no audition.
The department is an accredited institutional member of the National Association of Schools of Dance. Requirements for the Bachelor of Units required: 58 units
Units required: 58 units
Lower Division: DANC 100, 112A,
212B, 220 .
Upper Division: DANC 320, 331,
\(350 \mathrm{~A}, 360,442 \mathrm{~A}, 442 \mathrm{~B}, 485,488\), 375 or \(470,380 \mathrm{~A}\) or \(380 \mathrm{~B}, 381 \mathrm{~A}\) OR \(381 \mathrm{~B}, 480 \mathrm{~A}\) or \(480 \mathrm{~B}, 481 \mathrm{~A}\) or 481 B .
Recommended Electives: DANC \(1114 \mathrm{~A}, 213,215,312 \mathrm{~A}, 312 \mathrm{~B}, 412 \mathrm{~A}\),
\(412 \mathrm{~B}, 414 \mathrm{~A}, 414 \mathrm{~B}, 483 \mathrm{~A}, 483 \mathrm{~B}, 488\), 491A, 491B
Bachelor of Fine Arts in Dance
The Bachelor of Fine Arts in
degree in Dance in the CSU. The primary objective of the degree program is to prepare graduates for positions as performers and/d
choreographers in dance companies, in musical theatre, and in film and television. The program also will prepare students for entry Dance
Preparation: All students wishing to pursue the BFA in Dance must demonstrate advanced technical Requirements for the Bacher Fine Arts in Dance (code 4-5230)
Units required: 70 units Lower Division: DANC 100, 114B, 120, 131, 212A, 212B, 220. Upper Division: DANC 312A,
\(312 \mathrm{~B}, 320,331,350 \mathrm{~A}, 360,361\),

414A, 420, 442A, 442B, 480A, 480B, \(485,488,491 \mathrm{~A}, 491 \mathrm{~B}, 495,375\) or
\(470,380 \mathrm{~A}\) or \(380 \mathrm{~B}, 381 \mathrm{~A}\) or 381 B . 481 A or 481 B .
Select 9 General Education units: A/P 107, DANC 3731 and one of the
following courses: C/T 250, C/T oollowing courses: C/TT 250, C/L
3241, C/LT 4111, C/LT 4121, ART
112A, ART 112 , ART 301, AT 112A, ART 112B, ART 3601, PHIL 361.
All

All BFA Dance majors must be in a minimum on one modern
and one ballet class daily. Master of Fine Arts in Dance (code 7-5230)
The Master of Fine Arts degree in Dance is the terminal degree in
dance and offers professional dance and offers professional
training preparatory for careers in performance and choreography. Criteria for Admission to the Program
1. For acceptance into the
degree program stud degree program students must have degree in dance (or equivalent) from an accredited institution with a 3.0 G.P.A. in upper division courses, meet University admission ability in performance and/or choreography.
2. When an undergraduate program is completed in a program
which has different requirements than those of the dance major at CSULB, additional preparation may be required before the student can the degree program. Up to 30 units the degree program. Up to 30
of credit from an M.A. degree program may be acceptable, with
approval of a faculty committee.
3. Admission to the degree programs in performance and and interview.
4. In order to obtain full classified status, a committee of graduate aculty will evaluate academ
progress and professional accomplishment at the end of the student's first full year in residence 5. Advancement to Candidacy
a. Attain fully classified status
b. Remove all undergraduate deficiences
c. Submit a program for the
c. Submit a program for th
approval of the student's approval of the student's
departmental faculty advisor, the department chair, the graduate advisor, and the Dean of Graduate Studies
d. Pass the Writing Proficiency Exam
3.0 minimum G.P.A

\section*{Requirements for the Master of}

Fine Arts in Dance:
60 The M.F.A. degree in Dance is a
Performance or Choreography.
Performance
include:
642, 696, 699;
Courses reque ior pel option:
DANC \(412 \mathrm{~A}, 412 \mathrm{~B}, 414 \mathrm{4} 414 \mathrm{~B}\) DANC 412A, 412B, 414A, 414B;
\(512 \mathrm{~A}, 512 \mathrm{~B}, 514 \mathrm{~A}, 514 \mathrm{~B}, 562,595\); Electives: DANC 518, 520A,
\(520 \mathrm{~B}, 520 \mathrm{C}, 520 \mathrm{D}, 525,540,545\) \(581 \mathrm{~A}, 581 \mathrm{~B}, 591,599\), and up to 15 units selected from other departme
advisor.
Choreography
Core courses: 15 to 21 units to
include:
DANC 531, 580, 585, 589, 597, 642, 696, 699
Courses required fo
choreography option:
DANC 510 520A 520B, 520 C
DANC 510, 520A, 520B, 5200
520D, 525, 591;
Electives: DANC \(514 \mathrm{~A}, 514 \mathrm{~B}\),
\(518,540,545,562,581 \mathrm{~A}, 581 \mathrm{~B}\), \(518,540,545,562,581 \mathrm{~A}, 581 \mathrm{~B}\),
595,599 , and up to 15 units selected from other departments with approval of advisor
Students may complete the
degree in Performance/
degree in Performance/
Choreography by selecting
coursework from both options with approval of the graduate advisor. Minor in Dance (code 0-5230)

\section*{Requirements:}

Lower Division: DANC 112A,
112B, 114A, 120, 220 112B, 114A, 120, 220. Upper Division: DANC 320, 331
442 A or \(\mathrm{B}, 488\) and a minimum of one unit of DANC 380A or B or DANC 480A or B.
eaching Credential

\section*{Courses (DANC)}

Dance Technique
Note: It is expected that dance majors will take technique courses in sequence. However, major/min
students must screen for level placement in all technique classes Screening will take place the previous semester and the first day of class. (Non-major technique
classes are not screened. They are open to all students.)
Lower Division
All Dance majors must be in a minimum of one modern dance technique or baliet technique 100. Or (2) \(\mathrm{F}, \mathrm{S}\) Corequisit: DANC 112A. Introductory
 opportuntites, current probiems and issues in
the field. Student dentifaction of opersonal
learing needs and goals. CreditiNo Credit learning needs and goals. CreditiNo Cred
grading only. grading only.
111A. BegInning Modern Dance
Basic skills and techniques of modern dance.
Not open to dance majoss. (4 studio hours.) 112A,B. Modern Dance A: Corequiste: DANC 100 and 381 A or B A: Corequiste: DANC 100 and 381 A or B .
Dance majors and minoras. Basicic skills and techniques of modern dance. May be repeoted once tor
113A. Beginning Ballet (2) F,S Basic skils and techriques of ballet. Not open to dance maliors. (4 stuvio houra.)

\section*{\(114 \mathrm{~A}, \mathrm{~B}\). Ba
\((3,3) \mathrm{FS}\)}

Dance maiors and minore
 115A. Beginning Jazz (2) \(F\),S Not open to dance majors. Basis okills and techniques of iazz. May be repeated once to
credit (4 studio houra). 115B. Intermediate Jazz (2) F,S Not open to dance maijors. Prerequisiste: 115A or consent of instructor. Intemedediate skills an techniques of jazz dance. (4 studuio hours) \({ }_{(2,2)}^{116 A, B, S}\)
Pretequibite: Open to dance maiors only. Basio Perecauiste: Open to dance maiors only. Basic
theocy and practice of modern jazr dancee. May theory and practico of modemn azz dance. May
117. Tap Dance I (2) F,S Basic technique in the tap dance idiom, time stepp, sylistic patte
tap combinations.
120. Improvisation I (2) F

Use of improvivation as an introduction to
stucturual form; individual and group problems. Itructura ionm; hours.)
131. Introduction to Music for Dance (2) F
Sasic musio notation, simple and complix sf percussion instrumments and a abiliff surueve of 200. Viewing of music for dance 200. Vlewing Dance (3) F,S Introduotion to contemporary dance theatre
through viewing dance films (modern dance,
 beture/discussions on dance. 212A,B. Modern Dance
Technique III, IV \((3,3)\)
F,S Dance majors and minoors. Increased skill in the
 once for CreditiNo Credit grading. (6 studio
hours.) 213. Mo (2) F,S Prerequiste: Dance major or minor. Exploration of the technicques of modern dance. Must be taken the first time for a grade and may be 215. Ballet Workshop (2) F,S Prerequisistes: Dance maior or minor.
Exploration of the techniques of ballot. The first time taken will be for a leterer grade. May be
repeated once to coreditnocredt. repeated once for credititno credil.
220. Elements of Solo
Choreography (3) S

Prerequiste or Corequisite: Dance 131. Theory
and practice in the basic elementis of dance and practice in the basic elements of dance
composition. (Leeture 1 hour, 4 studio hours.) Upper Division
Survey of American Show Dance (3) s

History and development of dance as popular extiertainment. Styies and basic covabulary
Exploation of the choreographic process. 312A,B. Modern Dance Technique V , \(\mathrm{VI}(2-3,2-3) \quad \mathrm{F}, \mathrm{S}\) Prerequuiste: Dance maior or minor. Increased okiri in the teechnique of modern dance. May be studio hours.)
316. Jazz Technique III (2) F, S Prerequibite: 116 B or consent of instructor
 May be
grading.

\section*{318. Ethnic Dance Forms}
(1-3) F,S
Theory and technique of various ethnio dance
form. May be reepeated crovided May it be repeated up to 12 units,
cith a ifferent time. (Lecture 1 hour, 4 studio hours.) (3) \(F\)

Prerequisite: DANC 220. Development of theme
and styie in small group studies. (Leoture 1
hour, 4 studio hours)
331. Music for Dance (3) S

Prerequisite or corequisite: DANC 131 or
consent of instructor. Theoretical and practical consent of instructor. Theocretical and practical
analyyes of musical forms and instumentis or
diance dance accompaniment related to class work and pertormance. Includes a music repertolio
for dance. (Lecture 1 hour, 4 studio hours.) 350A. Dance Notation I (3) F
Prerequisite: DANC 131. Theory and practice of notatitng movement through
(Lecture 1 hour, 4 studulio hours.) 360. Prevention and Care of
Dance Injuries (3) F Prerequisist: AP 107 . Factors in injury
prevention. Pininciples of iniuy care. 361. Body Placement for the Dancer (2) F
Prerequistes: Open to Dance Maiors and
Minors. Body Placement and corrective exercrises for moderem danement and corrective ballet classes.
CreelitNo Credit rodining only odit grading only.
362. Dramatic Concepts for

Dancers (2) F,S
Prereauisite: Dance maior or minor. Use of
acting techniques to provide dramatic content acting techniques to
to dance movements.
3731. Nonverbal Communication: Interaction of Mind and Body
(3) F,S (3) F,S

Prerequisistes: ENLL 100 and upper division
status. History and theocies of the developenen status. History and theocies of the developmen.
of mind \(/\) bocy integration. Enhancement o personal and interpeation. Enal relataionsement through
 experiences. Analysis and synthesis of the
interdependence of the peyyhological and
phyyical
procesesses in in in-werbal physical processes in non-verbal
communication. Same course as ED P 3731. 375. Dance for Children (3) F Prerequuistes or corequisite: 212A. Practical
experience in teaching dance to elementary school children employing impromiational
approaches to basic elements of dance integrated int the total elemementary curriculum; as a basic form of commenurication, as am an
instument for the development of individual creativity, as identification of dance as an art
form. (6 studio hours plus 3 hours by arangement.)

\section*{379. Exploring Dance: Th}

The
The historical and cultural background of
dance, designed to develop cirtical thinking
participate in the procoss of danco in order to gain aesthetic perception and self expression
as outined in the Calformia Framework for the as outined in the Caifionnia framework for the
Visual and Performing Ats and Guidelines
Dance Component Dance Component, grades K -8.
380A,B. Dance Performance
\((1,1)\) Fs
\((1,1) F, S\)
Participation as a pertormer and/or
choreographer in Dance Departmentappocived choreocgiapher in Dance Department:approved
Univesity-sponsored production. Concert
participation is by audition ontion participation is by audtitio only. A Combination
of \(380 A, B\) and \(480 \mathrm{~A}, \mathrm{~B}\) man be repeated for or
total of efight units.
381A,B. Dance Production
Technical ( 1,1 ) F,S
Corequiste: DANC 112 A. Technical
procuction paticicipation in production participation in Dance Departimen
sponssored productions. A combination of \(381 A, B\) and \(481 \mathrm{~A}, \mathrm{~B}\) may be repeated for a total of eight units.
398. Fieldwork in Dance
Elementary (1-3) F,S

Superised teaching experience in dance in an Superivect teaching experienco in dance in an
off-campus heting. Practical \(e\) experience
working with students in kinderaten working with studdents in kindergaten throush
Gth grace. CreditNo Creedit grading only. May 6th grade. CrodidiNo Credit grading only
be erepeated to a maximum of six units. 399. Fieldwork in Dance Secondary (1-3) F,S Supenised teaching experienco in dance in an
off-campus seeting. Practical otri-campus setting. Practical experience
working with studeonts in grades 7 through 12 an
communty communty
onlle. Moge. Creditiono Credit grading be only. May
412A,B. Modern Dance
Technique VII, VIII (2-3,2-3) F,S Prereauiste: : Dance major of minor. Increased
skill in the technioue of modern dance skill in the ecchniaue of modern dance (4.6
studio hours). Must be taken the frist time for a grade and may be repeated once for Credit'No Credit grading.
414A,B. Ballet Technique III, IV
Dance major or minor. Advanced okills in the
 CreditNo Credit grading. (4 studio hours.) 415. Ballet Pointe Class (1) F,S Prerequistes: Development of the technique of
danacig in
opointe shoes. May be repeated once for creodit.
416. Ballet Variations (2) S Prerequistes: DANC 114B. Covers modern and classical variaions and hoovers modern
work. seace the
(Teaches the dancer how to locok the the work. Teaches the dancer how to lock at the
wakk and appropiately interpeet its styie, work and appropriatey interpet its strie,
techique, musicality, focus, special content
and phrasing. Stresses the interpetation and and phrasing. Stresses the interpetation and
analysyis of what the variation means artistically Helpe students approach all work with creative
Hisulication. (3) S (3) S

Prerequisite: DANC 320 or consent of
instructro. Approaches to the development of
choreographic materials of extended structure
and content. (Leeture 1 hour, 4 studio hours.) 4351. Dance in Film (3) F Examination of the relationship between dance
and film; study of historical and theocition and film: study of historical and theorectioal
connections placed in both aesthetic and connections plac
cultural contexta.
440./540. Historical Dance Styles (3) F,S
Theories and techniques of various historical
dance forms and stylee of the danco forms and stylyes of the Western tradition
Selected dancos from the 15 th C . Italian
隹
 Tractional grading only.
442A. History of Dance to 1925 (3) F

Development of dance from primitive origins
through Diaghiev. 442B. History of Dance since 1525 (3) S
Prerequisiste: DANC 442 . Development of
Dance from the origin of modern dance to the presen
470. Dance Methodology (3) S Prerequisite or corequisite: DANC 212 . Methods for teaching dance in order to prepare
(or teaching in sudios, recreation, departments
 colleges and univestitios. (b studio hours plus
3 hours by arangement.). 480A,B. Dance Performance (1,1) F,S Partioipation as a performer andior
chorocoraher is Dance Deparment appoved
Univeraty-shon
 of \(380 A, B\) and \(4880, B\) may be repeated for
total of eight units. 481A,B. Dance
Production-Technical (1,1) F,S
Technical participation in \({ }_{\text {in }}^{\text {in }}\) Danceo
Department-sponsoceditions.
 482. Intermedia Festiva
\(\qquad\)
Preerequiste: Audition. Combination in a performance in collabocotiction culminatites departments of the Colacoation with other
Repeatable to a maximum of 6 units with different topica
483A,B. Performance Tour Students will audition at first class meeting.
Development and performance of iniormal

 only. 485. Contemporary Dance and the Fine Arts (3) S Prerequisites: DANC 331. Advancod theory and
practice ereating contemporary dance to the
fine arts.
488. Organization of Dance

\section*{Production (3) S}

Prerequisite: DANC 212A. Analysls and practio in the production elements of dance
concoets. Course is coordinated with

\section*{department concee}

\section*{\({ }_{(1-3)}^{490}\). Spec}

Prerequiste: Consent of instructor. Topics of current interest it the field of dance selected for
special presentation and development. May be special presentation and dovelopment. May be
repeated provided it is a different topic, or with repeated provided it is a dirferent topit, or with
consent of dopartment fhair. Topics will be
and announced in
studio hours.)

\section*{491A. D}
(3) S

Preeraquistes: Upper division status o
permisssion of instructor. Technicues of
permission of instructor. Techniques of
designing lighting for dance. Practioal
 appication
lighting for
settings.
491B. Design for Dance
4918. Design for
Costuming (3) F

Prerequisites: Upper division status or
permision of instuctor. Designing and 492. Introduction to Dance 492. Introductio

Readings and discussion of the history and
philiosophy of dance/movement as a
Reaaings and discussion of the history and
phisosphy of dancolmovement as a
thereapeutio modality and tits role as a therapeutic modality and tits role
profession in the field of mental heath. 493. Computers for Dance (3) F,S

Prereaquisite: Dance maior or minor. Theory
and practice in the basio tochniques of and pratice in the easio lochniques
computer usage in the art form of dance.
Tradtiond Traditional grading only. Course may be repeated for a maximum of 6 units
495. Repertory (1-3) F,S

Prerequisite: Audition. Students learn and
pefromm \(\begin{aligned} & \text { works } \\ & \text { of }\end{aligned}\) listinguished
 performance. May be repeated for credit
provided it is with a different instuctor each provide
time.
499. Directed Studies in Dance (1-3) F,S
Prerequisite: Consent of Intructor
Independent projects and research of Independent projects and research of
advanced nature in any area of dance. May be advanced nature in any area of dance. May be
repeated for a maximum of six units. CreodiNo
Ceriti grading Credit grading only.

\section*{Graduate Division}

510A,B,C,D. Technique
MFA Choreography option students are
required to take a technique class each required to take a technique class each
semester. Howere, their technical abobity will
vary. By registering for Dance 510 , they will be vary. By registering tor Dances 510 , they will be class and adoditional work will be required

512A. Modern Dance Technique IX (3) F,S
Prerequisite: Placement Screening. A curse
for graduate dance majors in the acvanceed skill lor graduate dance majioss in the acvancod skill
of modern dance techniques. Tradtional grading only. Cours.
512B. Modern Dance Technique (3) F,S

Preerequiste: Placement Screening. A course tor graduate dancemement Screening. A in the advancod skili
of modern dance technicues. Tradtion of modern dance techniques. Traditional
grading only. Course may be repeated for a of 6 units.
514A. Ballet Technique V (3)
Prerequisite: Dano 414 B or equivalent.
Graduate evere skilis in the techicue of ballet. Traditional grading only.
514B. Ballet Technique VI (3)
Preerequist
Prerequisite: Danc 414 B or equivalent.
Garauate
Tradtion skilis in Traditional grading on
518. Ethnic Dance Forms II (3) S For graduate dance maiors to learn the
techniques and styes of ettric dance forms. A
 different cuiture will ee stucied each semester.
Additional work will be required as appropiate Adotinonal work wirl be required as approppriate
to g gracuate evel curse. Traditional graidng
only. Course may be repeated to a maxinum ony. Cours
of 6 units.
520A. Choreography A (3) F
A course in advanced approaches to the development of choreographic mateotiols ano teochiquer. The class will include an
introcuution of video and other multi-media
 graduate level course. Tradtional grading only.

520B. Choreography B (3) S Prereauishe: Danc 520A. A course in advanced study of chorecographic method with an emphasis on the use of costumen
setipprops, and lighting for dance. Traditione grading only.
520 C . Choreography C (3) F Prerequibite: Danc 5200 A course
adranced methods and techniques choreography concentrating on the indinidual strite of the students'. Work and in depth study
in developing a full- length dance work Class in developing a tull. length dance work Class
will invove choreographing works of subbtantial length using small and large numbers of dancers. Incy intruction will emphasze
consistency in choreographio style and consititency in
content. Tradtional grading onty.
520D. Choreography D (3) S Prereauishe: Dano 5200 C. A curres in the
advanced study of choreographic methods. with an emphasis on the use of costuming. lighting. musis/cound and other procuuction techniques in preparation for pettormance. The
course involves presenting finished full-iength

Costumed dance works, lighting designs for the directing works and durearn ing the methods of 525.. Tradtional grading only.
F.S. Dance in Video/Film (3)

Basic camera tecchiques. Exploration of movement within the confines of the camera.
persective in fimingtaping dance.
531. Music for Dance II (3) F,S

Prerequibite: Dano 331 or equivalent. This
course is to provide dance students an opportunity for accuanced, in-depth study of musical form and style
Traditional grading only.
540./440. Historical Dance Styles (3) F,S
Theories and techiniuues of various histotical
dance torms and styles of the Western tradition
 Renaissance through 18 th
Tradtional grading only.
545. Movement Analysis (3) F,S Prerequisite: Anatomy and Physiology 107 Prerequisise: Anatomy and Physiology 107.
Study of the prinioles underlying movement
and their appoication. All areas of movement and their appication. All areas
study. Tradtional grading only.
562. Dramatic Concepts for Dancers II (2) F,S
The application of the techniques of acting to
the eneeds of dance Additional wark will be the needs of dance. Additional work will be recuired as appropiate to a
course, Tradtional grading only, 580A,B. Dance Performance (1) F,S
Prerequiuite: Audition. Participation as a
performer and/or choreggrapher in Dance
Denater performer and/or choreographerer in Doance
Doparment apporved Univesty. - pponsered
production. Tradtional grading only production. Tratitional gradining. spons.. Course
may be epeopeted tor a maximum of 2 units 581 A . Performance Tour II (3) F Prerequiste: Audition The coveo is 0 give Preerequiste: Audtion. The course is to give
graduate students the experienco of developing graduate studunts the experience of developeping
dance programs which use language and
movement materials appopiate to adiences movement materials appropiate to auciencees
of eiementarn or secondary school chidren. It
 experience of performing for young audiences.
Additional work will be required as appropiate to a graduate evel course. Traditional grading only. Course may be iopeated for a maximum
of 6 units.
581B. Performance Tour II (3) S Preerequisite: Audition. The purpose of the curse
experience of divevepoping dance programs
which use lancuan appropriate to aud aiences of elementary or econdary schoor chiciden. It wif abso provide perorming for young audiences. Addtional work will be required as apppopopiatetio to graduate level course. Tradtional grading only
Course may be repeated for a maximum of 6 Unite.

F,S
Prerequisite: Audition. Participation as performer and/or choreographicer in Dasco Department appoved University- sponsoroce
production. Traditional grading only. Course may be repeated for a maximum of 2 units.
589. Works in Progress (1-2)
F,S

 grading only. Course may be bepeatiod for a
maximum of 4 units 591B. Design fo Costume II (3) S
The course is to provide graduate students with
adavanoed coursework in designing costumes acvancood coursowork in designing costumes
for danco, and of students of develop the ekilily necessary to eevecute the deaigne. Additional
work will be required as appropiate to a work will be required as appropriate to a

\section*{595. Repertory (1-3) F,S}

Prerequuiste: Audition. A course for graduate
dancee majors to learn more advancod works trom the repertoire of noted chorevegrapherhers or to have new works created od onteregrapheress or
distinguished ohoreographers.
Instruction rehearsal and performancor oives the dance student a broader knowiedge of the various
methods used by profesionel chorecoraphers mathods used by protefsioional choreographers and stae beforion an on audiencome with thult theartical
production induluding musio, sound, cootumes production including musio, sound, costumes appropriate to a a graduate eevel course.
Traditional grading only. Course may be Traditional grading only. Course may
repeated for a maximum of 6 units. 97. Criticism and Analysls of Dance (3) F,S
Students will analyze choreography and wite
artiques in order to learn how to look at and ciritiques in order to loern how to look at and
evaluate dance works. Tradtional grading only
599. Directed Studies (1-3) F,S Prerequiste: Consent of instructor. Individual
reeoerch or priject under the guidance of a reoearch or project under the guidance of a
faculty member. May be repeated for a
maximum of six units. CreoditiNo Creditit grading only.
642 . Sel \({ }^{\text {(3) }}\) F,S Intensive study or sistory intensive study of selected topics in the Hiltory
of Dance. Traditional grading only. Course may be repeateditional grading only. Course 696. Resea

\section*{相 Research Methods (3) F,S} Preraquisite: Graduate level in Danco. Theory
and practioe in the basic techniques and practice in the basic techniques of
information enagement and
methocologyy in dance. Traditional oseearach method
only.
699. Thesis/Project (6) F,S Preerequisite: Dance \(69 \%\). Approval of student's
propecthesis and consent of student's

 Traditional grading only. Cousse may bo
repeated for a maximum of s units.
\begin{tabular}{|c|c|}
\hline & \multirow[t]{39}{*}{\begin{tabular}{l}
The Bachelor of Fine Arts in Art degree is offered as preparation for the student who will eventually seek the Master's degree or a position as a professional designer. The BFA. program is a rigorous and competitive one. One hundred and thirty-two semester units are required for the degree, including 70 units for the major and 51 for General Education. (A portfolio review is required for all Interior Design students prior to enrollment in DESN 341A-B, DESN 441A-B.) \\
Requirements for the Bachelor of Fine Arts in Art: \\
Option in Interior Design (code 4-5854) \\
Lower Division: ART 112A, 112B, \\
131, 181, 184, 223; DESN 121, 141, 224, \(231,243\). \\
Upper Division: DESN 332, 340, 341A, 341B, 342A, 342B, 367, 368, \(441 \mathrm{~A}, 441 \mathrm{~B}, 499 \mathrm{H}\); ten units of upper division design/art electives outside of interior design with the approval of major advisor. Approved lower and upper division electives to total 132 units. \\
Bachelor of Science in Industrial Design (code 3-5853) \\
This degree program is concerned with the relationship between technology and the visual arts. It includes background courses in engineering and sciences. (A portfolio review is required for all enrollment in DESN 331A-B, DESN 333A-B, DESN 431A-B.) Portfolio reviews are conducted each semester for all upper division majors as a means of advisement and to insure satisfactory progress. \\
Requirements for the Bachelor of Science in Industrial Design: \\
Lower Division: ART 112A, 112B, \\
131, 181, 184, 223 ; DESN 121, 224, 231, 280; TED 281, 282, ME 172. Upper Division: DESN 331A, 331B, \(332,333 \mathrm{~A}, 333 \mathrm{~B}, 368,431 \mathrm{~A}, 431 \mathrm{~B}\); twelve units of design/art electives, nine units of which must be outside of Industrial Design. Approved lower and upper division electives to total 132 units.
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\hline \multirow[t]{5}{*}{The Department of Design was established to provide an administrative and academic framework for professional design training in the fields of Industrial Design, Interior Architectural Design, and Display/Exhibition Design. The degree programs that may be pursued are the Bachelor of Fine Arts, the Master of Arts, and the Master of Fine Arts, with the Bachelor of Science offered in the Industrial Design curriculum.} & \\
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\hline \multirow[t]{14}{*}{The faculty of Design believe that an appropriate education for the professional designer must include a comprehensive body of technical knowledge involving historical sources, tools, techniques, and materials; a methodology for encouraging the creative process; and the attainment of the requisite level of skill to express visual ideas
with clarity. While being fully equipped to meet the objectives of the marketplace, today's designer must also achieve sufficient educational breadth to adapt successfully to the varying demands imposed on his work by economic, social, and psychological factors.} & \\
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\hline \multirow[t]{7}{*}{The academic programs of the Department of Design have been accredited by the National Assoclation of Schools of Art and Design and the Foundation for Interior Design Education Research. Student demand for these programs is high. Requirements for admission and degree requirements are given below.} & \\
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epartment Chair:
epartment Office: Fine Arts 3,
100
Faculty: Professors: Michael J. Kammermeyer, Herbert H. Tyrmauer Bhupendra K. Singhal, Jery W
Yates; Assistant Professor: Maureen Sullivan; Lecturer: Bruce
meritus Faculty: Estelle R. Brisker, ean W. Myers
epartment Secretary:
The Department
The Department of Design was astablished to provide an ramework for professional design Design, Interior Architectural Design degree programs that may be degree programs that may be
pursued are the Bachelor of Fine Ar Fine Arts, with the Bachelor of Science offered in the Industrial Design

The facult
appropriate education for the omprehensive body of technical owledge involving historical ources, tools, techniques, and encouraging the creative process;
and the attainment of the requisite evel of skill to express visual ideas meet the objectives of the marketplace, today's designer must
also achieve sufficient educational readth to adapt successfully to the varying demands imposed on his ork by economic, social, an epartment of Design have been accredited by the National Association Schools of Art and Design and the ducation Research. Student demand or these programs is high. degree requirements are given below.

The Bachelor of Fine Arts in Art
degree is offered as preparation for the student who will eventually seek the Master's degree or a postion as a
professional designer. The BFA. program is a rigorous and competitive semester units are required for the degree, including 70 units for the (A porttolio review is required for all merior Design students prior to

441 A -B.

Option in Interior Design
Lower Division: ART 112A, 112B,
\(131,181,184,223\); DESN 121, 141, 224, 231, 243.
Upper Division: DESN 332, 340
\(341 \mathrm{~A}, 341 \mathrm{~B}, 342 \mathrm{~A}, 342 \mathrm{~B}, 367,368\) division design/art electives outupper interior design with the approval of major advisor. Approved lower and units. n (code 3-5853) with the degree program is concerned echnology includes background courses in portfolio review is required for Industrial Design students prior to 333A-B, DESN 431A-B.) Portfolio reviews are conducted each semester
for all upper division mas a atisfactory progress. Requirements for the Bachen
Science in Industrial Design Lower Division: ART 112A, 112B,
\(131,181,18,232 ;\) DESN 121, 224, 231, 280; TED 281, 282, ME 172 . Upper Division: DESN 331AA, 331B,
332, 333A, 333B, 368, 431A, 431B; nine units of which must be outside of ndustrial Design. Approved lower and
upper division electives to total 132 units.

\section*{Design}

\section*{Master of Arts in Art}
(code 5-5850)
The Design Department Master of Arts in Art program provides degree: Industrial Design Interior Prerequisites:
(1) A bachelor's degree from an accredited institution with a minimum
of 24 upper division units in design/al of 24 upper division units in design/a major in Design at this University; (2) Completion of 16 units minimum of upper division course work in the area of specialization;
(3) Completion of 12 units of
design/ art history, six units of which must be upper division;
(4) Successful completion of the
Witing Proficiency Examination: Writing Proficiency Examination; (5) Presentation, to the student's
specialization faculty, of a porttolio of representative studio work with emphasis in the area of specialization.
Reviews are completed by Reviews are completed by the firs
week in October for the following spring semester, by the first week in March for the following fall semester (6) A GPA of 3.0 or better in upper
division design/art course work. Students who do not meet the minimum 3.0 GPA within the required 24 units as an undergraduate may count units taken as a post-baccalaureate student to meet raduate to yalidate work taken as a preparation may not be used to preparation may not be used to
satisty any requirement in the saitsty any requirement
student's MA program.
All prerequisites must be fulfilled efore a student can become
classified in a graduate degree program.
Advancement to Candidacy Requirements:
(1) Classified graduate standing (2) A graduate program approved (2) A graduate program approved Graduate Advisor, the Design Department Chairman, and the Dean the College of the Arts
(3) A GPA of 3.0 or higher in all work
undertaken for the program:
(4) The removal of any Incompletes:
(5) Successful comp
Advancement Review;
(6) Complete minutes of graduate which total a minimum of one studen which total a minimum of one meeting
or each semester of program units. Requirements for the Master of Arts:
Completion of all requirements established by the student's graduate (1) A minimum of 30 units of approved upper division and graduate-level courses; a minimum of ninimum of 18 units in the pecialization;
(2) A minimum of six units of design welve prerequisite units:
(3) A thesis or studio project. All studio projects must be formally
exhibited. xhibited
Master of Fine Arts in Art
(code 7-5850)
The Design
Fine Arts degree program provides specializations in: interior design and
display/exhibition isplay/exhibition design
Prerequisites:
accredited institution with a minimum of 24 units of upper division design curse work comparable to those University in BFA in Design at this
(2) Completion of a minimum of 18 units of upper division course work in the area of speci
proposed MFA;
(3) Completion of a minimum of 12 units of design/art history, six units o
which must be upper division;
Writing Prosiciciency Examination;
(5) Presentation, to the student's specialization faculty, of a portfolio of representative studio work with
emphasis in the area of specill emphasis in the area of specialization
Reviews are completed by the first Reviews are completed by the first
week in October for the following spring semester, by the first week in
March for the following fall semester. March for the following fall semes
(See MA and MFA procedures, "Screening for Acceptance" for Screen
(6) A GPA of 3.0 or better in upper
division design/art course work Students who do not meet the minimum 3.0 GPA within the required 24 units as an undergraduate may
count units taken as a count units taken as a this GPA. Course work taken as a graduate to validate undergraduate
preparation may not be used to
satisfy any requiren satisty any requirement
student's MA program All prerequisites must be fulfilled before a student can become
classified in a graduate degree program.
Advancement to Candidacy
Requirements: Requirements
(1) Classified Graduate standing.
(2) A graduate program approved by the graduatente program approved Graduate Advisor, the Design Department Chairman, and the Dean
of the College of the Arts; (3) A GPA of 3.0 or higher in all work undertaken for the program: (4) The removal of any incompletes; (5) Successful completion of the
Advancement Review: Advancement Review
(6) Complete minutes of graduate which total a minimum of one meeting
fo each semester of program or each semester of program units Requirements for the
Fine Arts Specialties:
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A minimum of 60 units

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A minimum of 60 units of approved
coursework including at least.
(1) Thirty-six 36 units in the area of specialization. Thirty of these units
must be in the 50 - and 50 must be in the 500 -and 600 -levels
and must include \(690 \mathrm{~A}, 690 \mathrm{~B}, 692\). and 699;
(2) Six units of approved upper-division or graduate
coursework outside of desig
(3) A comprehensive review graduate advisory committee, after he completion of 21 units of studio
coursework. This review is to determine whether the candidate will continue in the MFA program (4) A minimum of 6 units of
approved upper division or graduate design/ art history beyond that equired as prerequisite work; (5) Twelve units of upper division or
graduate level elective coursework in gradua
(6) A studio proiect exhibited and described in a studio thesis. MFA Transfer and Residence Policy:
(1) Transfer credit allowable on the
MFA is normaly not to exceed 30
(2) MFA candidates must complet minimum of 18 specialized units with graduate numbers in residence All transferred credit used in the
MFA must be determined by the student's graduate committee and
approved by the department (4) The CSULB Master of Art degree will normally count for a
maximum of 30 units maximum of 30 units ( 18 in
specialization) toward the M.F.A. degree. Exceptions up to an additional 6 units may be approved for outstanding students by the
Art/Design Graduate Committee. Courses (DESN)
Lower Division

\section*{121. Two-Dimensional Design}
(3) F,

Investigation and problems in the organization of
two- dimensional Isivual phenomena. ( 6 hours
laboratory) (CAN ART 14) 141. Interior Arc
Methods (3) S

Methods
Prerequistes:
DESN Prerequiustes: DESN 121, 224, ART 181 and
permision of instructor. Sunvey of dratiting for
interior, construction det interiors, construction detaliling, axonometric and
other deigen drawing techniques. (6) hours
then
220. Principles of Color (2) S Prerequisite: DESN 121 . Study of the physical
phyyoiological and poychological aspects of color phyiological and poychological aspects of colk
through lecture and studio proiects. An investigation of the various methods used to
cotalago color. (4 hours laboratory.) Same course
as ART 220.
224. Perspective (2) F,S,SS Use of measuring devices and the mechanical
develoment of volume, space and shadow
proiection. (4 hours laboratory) 231.

Prerequistes: DESN 121, 224; ART 181 consent of instructor. Rendering of accurate and
dramatic presentations. Primarily for desion dramatic presentations. Primarily for design
students entering the design profeosion. (4 hours aboratory.)
243. Materials of Interiors (3) F Prerequisites: DESN \(121,141,224\), ART 131,18
or permission of instructor. Materials, processes and resources shastuctor. Mey Materials, procoesses
architecture. Examination of to the interior architecture. Examination of technology and application
fiel trips.
280. Industrial Design Processe (3) S

Prerequistes: DESN 231; TED 281, 282; ME 172
and permission of instuctor. Introductay and permission of instructor. Introductory course development for mass production. (6 hour Upper Divisio
330A-B. Computer-Aided Design 3,3) F,S,SS Preerauistes: Upper division status in either
Industial. Graphic or Interior Design Permission of instructor. Intredion Destory course Cand Interior Design. Includes dratiting, 30
modeling and paint programs. (6 hours
laboratory.) \({ }_{\mathbf{F}, \mathbf{S}}^{331 \text { A-B. Industrial Design (3) }}\) F, S
, requistes: for 331 A: DESN \(121,224,280\), ART
 roducts for industrial procuction. (6 hours
*332. Rapid Visualization (2) F,S Ferequistes: ART 181, DESN 224, 231 o consent of instructor. Visual presentation of
concepts with emphasis on qualiative and
 seed in conte
333A-B. Industrial Design
333A-B. Industrial Des
Methodology (3,3) F
Prerequistes: tor \(333 A:\) Permission of instructor: for 333B: DESN 333A and permission o astuctor. Examination of methods and
chniques in deilan problem sobing. (6 hours techniquess in
laboratory.
*340. Professional Practices for
terior Architecture (3) S
Trerequistes: Permision of instructor.
ceamination of profesional
practices commercial (corporate) institutional/publicic interion bhitectural design.
341A-B. Interior Design \((3,3)\) F Prerequisites: for \(341 \mathrm{~A}:\) ART 223 , DESN 121,224
231, 3 23: ART \(112 A\), , 1128, 131,\(181 ;\) for 341 B DESN \(141,243,332,341 \mathrm{~A} .141 .18\) Design of interib)
 342A-B. Interior Architectural rawing and Rendering (2,2) S Preeqquisites: for 342A: ART 131, 181, DESN 141
\(224,231,332\) for \(3428: 3424 \mathrm{D}\) Drawing, fendering
 architectural designers. Inc
drawings. (4 hours laboratoy:)
*344A-B. Display and Exhibition Design ( 3,3 ) F,S
Prerequisites: ART 112A,B, 131, 181; DESN 121
24, 231, 332 or consent of instructor. Use 24, 231, 332 or consent of instructor. Use of materials, processeses, and design conceotst in the
tanning and opeoaration of displays and
xhibits. chibits. (6 hours laboratory.)
67. History and Theory of
volution of architecture
F Evolution of architecture relative to the human
need to shape envirmment in accordanco with
avening concerni of specific periods in history
 368. History and Theory of Design (3) S

Development of design as an independent
creative activity including a consideration of both pre-echnologogical and technologogical oulture. No pre-technological and technologicial coll
open to students with credit in ART 418 .

\section*{70. Design in Contemporary}

Soclety (3) F,S
Discover the pinioplese of design by examining
the human reationship to the buit enviromment
through a sequence of scales:
from the
ganization of cities, to public architecture and housing, the the design of funniture and products.
Emphasis will be on experiencing design through Emphasis wirb be on experiencing deaign through Tradtional grading only.
*431A-B. Advanced Industrial Design (4,4) F,S
Prerequisites: DESN 331 , PHYS 100AB of
consent of instructor. Advanced planning and design of projects in the area of mass procucuced packaging, tratic, transportation
nical design and shelter. (8 hours chanical d
*432. Advanced Rapid
Visualization (3) s
Preerequisites: DESN 224, 231, 332, consent of nstructor. Advanced idea generation and
visuarzation for industrial deeign. (6 hours bocatory.
435. Furniture Design (3) F,S

Prerequisites: DESN 121, 331A, or \(341 \mathrm{~A}, 332\),
ART 131, 181, 187, TED 281,282 or permision of
 urnishings with an in depth study of the and mateerias. (6 hours labocratory.) *444A-B. Advanced Interio Design ( 3,3 ) F,S
Prerequisites: DESN \(341 \mathrm{~B}, 342 \mathrm{~A}\).B or consent of
nstructor. Advanced interior design and space Intructor. Advanced inietior deaign and space
planning problems emphaszing relationshipe
between between the built environment an
*442G. Internship in Industria Design (3) F,S
Prerequiuste: Consent of instructor. Studer
internship experience in selected lindustria Intenship experience in selected industrial
design offices. Opportunity to work under design omices. Opportunnty 10 work under
supenision of industrial deesigners in the foeld to
expand sudent understanding of the expand student understanding of the
complexties, diacipine and challenges in the practice of industrial design. May be repeate once for creadit. (6 hours laboratory.) *442H. Internship
Prerequisine: Consent of instructor. Student intergsinip experiensent in selected interior design offices. An opportunity to work under superision \(t\) interior designers in the field to expand studeni
 minte untis. ( 6 hours laboratory.)
*443. Building Systems fo
interior Architecture (3)
Prerequivite: DESN 3428 or consent of ingtructor
Survey of dosign implications of typical buiding Survey of design implications of typical building systems (structural, mechanical, plumbing.
electical, acoustical energy conseration) as
infuences on interior architectural design. invencess on interior architectural design. *489. Special Top
Theory (1-3) F,S
Preerequibite: Consent of instructor. Topics
 Intensive study. May be repeated with difterent
lopics to a maximum of 12 unita. Topics will be announced in the Schedile of Classes
*490. Special Topics in Design (1-3) F,S Prerequisist: Consent of instructor. Special topika intensive study. May be repeated with dififerent
topics to a maximum of 12 units. Topics will announced in the scheduie of Classes. nours laboratory.)

\section*{(1-6) F,S}

An opportunity to study design movements,
obiects, theories, technicues at appropiate obiects, theories, techniques at appropriate Off.campus locations. Up to sid units
cumulative credit may be earned in DESN 495 . *497. Special Studles in History of Design (3) \(\mathrm{F}, \mathrm{S}\)
Prerequisist: Consent of ingtuctor. Opportunity
for extenowive wark under faculy for extensive work under faculty superision on
indididual problems in history of design. May be repeated to a total of six units.
*499C. Special Studies in Display
and Exhibition Design (3) F,S Prerequiste: Consent of intucto Foport for extensive work with faculty supenvisision on
individual problems in display and exhibtion individual Probiemm in display and exthibtion
dosign. Uinited to six units in one semester and a total of nine units. ( 6 hours laboratory.) \(* 499 \mathrm{G}\). Special Studies in
Industrial Design (3) F,S
Prerequiste: Consent of instructor, Opportunity for extensive work with faculty spopenision on
individual problems in industrial deesig. Limited to sid untst in one semester and a total of nine
units. (f hours laboratory. units. (6 hours laboratory) *esign (3) FS Studies in Interio Prerequisite: Consent of instructor. Opportunity for extensive work with faculty supenvision on
individual problems in interior design. Limited to indwidual
six units in one sememester and a total of fine units.
\((6\) hours ite \({ }^{(6}\) hours laboratory.)
590. Special Problems in Design (1-3) F,S Preteqquiste: Consent of instructor. special
problems of current interest in design will be selected tor intensive studuct. May be repeated
with ifferent topics to a maximum of 12 unts Topics will be announced in the scheculute of Topics will be announced in th
Classes. (2.6 hours laboratory.)
599. Studio Problems in Design (3) \(\mathrm{F}, \mathrm{S}\)

Preauisise: Consent of instructor. Advanced
individual graduate projects, \(\left.\begin{array}{l}\text { with } \\ \text { facuity }\end{array}\right)\) individual graduate propiects, with facuity
superision, in an area of design specialization.
Limited to six units in one semester and a total of Limited to six units in one semester and a total of
12 units in any one ara. Areas will be designated 12 units in any one ara Areas will be designated
by elter at the time of registration: (c) display and extibition. (g) industrial design, and (h)
interior design. (6 hours laboaratoy) 690A. Seminar in Design (3) 690A. Seminar in Design (3) F
Prerequiste: Consent of instructor. Selected
 student's specifico discipilines in design with an opportunity tor interdiscipipinary d discussion.

690B. Seminar in Design (3) S
Preerequiste: Consent of instructor. Professional
perapation for deoigners stresing practical concortrs as well as current
practices, theory and criticim.
692. Public Exhibition (2-3) F,S

Prerequuisite: Consent of instructor. Planning
propearation and admininstation of a public
exhbibtion of creative exhibtion of creative work related to the desigo
feld. TTo units only for all M.A. candidates. Three nitit only for all M.FA. candidates. The course will result in a public exhibition by each MA. and
694. Directed Studies - Studio
(1-3) F,S
Preerequisite: Consent of instructor. Independent
studies in creative stucio. studies in creative studio
695. Field Problems in Design
(1)
(1-6) F,S
Ppooriunity to study design movements, objects

997. Directed Studies (1-3) F,S Prerequisite: Consent of instructor. Independent
studies in technical and historical aspects of design.
98. Thesis or Project (1-6) FS

Preveruviste: Advancement to candidacy
Planning, preparation and completion of a thesis or proiect. Required of all Master of Ats
(1-6) F,S Prevequiste: Advancement to candidacy.
Planning, preparation and completion of thesis or roject. Required of all M.FA. candidates and all

\section*{Department Chair: Donald J.Para} Department Office: University Telephone: 985-4781
Faculty: Professors: Richard P. Birkemeier, Michael R. Carson, Laryy
G. Curtis, Kristine K. Forney Edith G. Curtis, Kristine K. Forney, Edith
Hirshtal, Barbara C. Kovalenko Justus F. Matthews, Donald J. Para, John H. Prince, Kay L. Roskam; Michael R Carney, Roger C. Hickman, Gregory Sands; Assistant Professors: Lyn D. Bielefelt, John T. Barcellona.

Applied Music::John Barcellona, Birkemeier, Trumpet; Gary Bovyer, Clarinet; Michael Carney,
Percussion; Adriana Chirilov, Viola Davis, Trumpet; James Decker Horn; Marcia Dickstein, Harp; Greg Donovetsky, Oboe; Leaine Gibson, Piano; Greg Goodall, Percussion; George Granam, Trumpet; Endre
Granat, Violin; Edith Hirshtal, Pliano; Elizabeth Holborn, Violin;
Christopher Kollgaard, Double Bass
arbara Allen, Piano; Joan LaRue;
Josephine Lott, Voice; Jonathan
Mack, Voice; Loren Marsteller,
Trombone/Euphonium; Shige Matsumoto, Voice; James
McCormick, Piano; Malco umpet; No , Plano, Malcolm McNab rumper, Norman Pearson, Tuba; Saxophone; Phoebe A. Ray Saxophone; Phoebe A. Ray, Trombone; Victor Sazer, Cello; Kur Schuster, Guutar; Gerald Thatcher,
Horn: Jon Walz, Cello; Gregory Woll rombone.
Emeritus Faculty: Robert E . Anderson, Charles Becker, Leon Helm, Hans Lampl, Julien usafia, Frank M. Pooler, Clare Musafia, Frank M. Pooler, Clare G.
Rayner, Russel N. Squire, W. Paul stroud, Henri Temianka, Robert yndall, Robert W. Winslow Department Secr

\section*{General Information}

Students desiring information for referral to one of the faculty advisors: Undergraduate advisor, or Graduate Advisor.
The undergraduate music curriculum provides programs for the student who wishes: to become a teaching profession; to use music as therapeutic tool; for whom music is part of a general education; or, who
itending to pursue an advanced degree in music.
All entering freshmen and transfer students are required to take a theory lacement test and performa administered in Spring and late Fa and are also available at the eginning of registration week each hould inquire at the Music Office for dates and details. In addition, new students are required to meet with the dvisor prior to registration.
Each music major must declare a pecialization in some performance area (voice, piano or other
instrument), develop ability instrument), develop ability in this
area, appear in student recitals and demonstrate progress to th atisfaction of the faculty. Each student must pass a piano appropriate point while meetin ourse requirements regardiess of he performance area. Detailed Music Office.
Participation in a merformance rganization (MUS 100/300) is equired of each music major each ensemble must be approved by the department.
Undergraduates carying six or more units are required to participate
in Semester Recital (MUS 110) ever emester except the semester of the senior project.
The Department of Music offers graduate study leading to the Master of Arts or Master of Music degrees. The candidate shoulda arrange
through the department office for counseling with the graduate advisor.

Special placement examinations or auditions are required to validate
qualifications for graduate work in music.
All general requirements of the University must be met in addition to departmenta requirements listed Long Beach is an accredited institutional member of the National
Association of Schools of Music Associati
(NASM).
Bachelor of Arts in Music
Requirements for the Bachelor of Arts in Music (code 2-5820) Music history and literature (MUS
\(160,260,360\) ); music theory (MUS \(160,260,360\) ); music theory (MUS
\(14 \mathrm{~A}-\mathrm{B}, 142 \mathrm{~B}-\mathrm{B} 241,341,342\) ); Major Performance Organization
(MUS 100 (iower division) or 300 ) [upper division] one unit each semester in residence-the performance ensemble must be keyboard proficiency (equivalent MUS \(220 B\) ) and completion of the piano proficiency examination;
Semester Recital (MUS 110) each semester in residence [exception only when taking MUS 423 (Senior Recital)]: Applied Music: \(129 / 329\) or (MUS 423) or (MUS 428) or (MUS 453 for music therapy students only).

\section*{Bachelor of Music}

A minimum of 72 units including the required, which must include at least 24 upper division units in music. Concentrations include Music History and Literature, Composition,
Instrumental Music, Choral-Vocal Music and Performance. Admission to the concentration is determined by audition and approval of the chair
the department. Application for admission to concentration should be submitted on later than the beginning
of the iunior year, and significant of the junior year, and significant during the remaining two years. A Bachelor of Music degree reaquires a
total of 132 units which must include total of 132 units which must include
minimum of 40 upper division units. Core: Music history and literature (MUS 160, 260, 360): music theory
(MUS 141ABB \(142 A-B, 241\).
342): music performance (MUS
342); music performance (MUS
100/300 - one unit each semester in
residence; the performance ensemble must be approved by the equivalent to completion of the piano profic examinations; semester recital (MUS
110 -- each semester in residence) enior project (MUS 423)

\section*{Option in Choral - Vocal Music}

4-5821)
(This option is intended for single candidates.)
Requirements: MUS 129/329, or
X129/329 (must be taken for 8 units); voice proficiency (equivalent to MUS 222B); MUS \(125 / 325\) (guitar and 1 unit in each family of instruments for
a total of 4 units; may be waived in whole or part upon passage of
proficiency exams): Advanceod piano
proficiency exam: MUS 327; 328 A -B.
proticiency exam; MUS 327; 328A.
\(386 ; 421 ; 422 ; 426 ; 465\) or 490 ;
483A-B; 485; 1 unit from the
following: 100/300 (Music Theatre) or
\(130 / 330\) (Opera) or 200/400 Studio
30/330 (Ope
Option in Comp
Requirements: MUS 129/329, (or X129/X329) to be taken each sroficiency is achieved through lion xamination (a minimum of 4 units is quired). MUS 441, 442, 443, 444, times), \(446 \mathrm{~A}-\mathrm{B}\), five units from MUS 422, 425B, 499. One course from MUS \(3751,460,461,463,464\), and
4US 200/400, New Music Ensemble must be taken for two units. Option in History and Literature code 4-5824)
Requirements: MUS 129, 329, (or
X129, X329) to be taken semester in residence until iunior leve proficiency is achieved through examination (a minimum of 4 units are Methods); elect 18 units from Meinod, 3641, 3651, 3751, 391, 393, 460, 461, 463, 464, 465, 490. Completion f Department of Music Foreign
anguage Examination in German or ttalian (may be waived by Fench, German or level course in ,

\section*{Option of Instru
(code 4-5826)}

This option is intended for single
subject teaching credential subject teaching credential
candidates.) Requirements: MUS 129/329 o
\(\times 129 \times 329\) (mus units): MUS 122A, 7 units of MUS \(25 / 325\) or proficiencies to includ
brass, woodwinds, strings and percussion \(282,382 A-B-C, 386\),
\(425 A-B, 465\) or \(490,480,481,484 B\) MUS 100/300 Marching, Band (one
semester). semester)

\section*{Option in Per
(code 4-5828)}

Individual instruction (MUS 129 , 229/429, or X129, X229/X429) required each semester in residence
with an achievement of senior with an achievement of senior level on
majior performance medium. Music 335 may be substituted for this requirement in certain corcentrations when offered and advised by the
department. Junior Proiect (MUS \({ }^{323}\) ) required of all students excep those in the piano pedagogy

Students in commercial music whose primary performance medium graduation a minimum required for graduation a minimum of 6 units in
saxophone, 2 units in clarinet, 2 units In flute, and 4 units consisting of further study in saxopophone, clarinet, o
flute for a total of 14 units in apolied flute for a total of 14 units in applied
music. Prior to the senior project each student must pass a junior-level proficiency examination on
saxophone, clarinet and flute
Piano: MUS 200/400 (4 units); MUS Piano: MUS 200/400 (4 units)
321, \(326 A-B, 43 A A-\), 400 or 46
MUS 335 in lieu of individual Mustruction in weu of individual instruction when approved by
department chair. MUS 400 allowed for 2 units of major performance
organization credit. organization credit. Piano Accompanying: MUS 200/400 (4 units); MUS 321, 320
\(332,421,431 \mathrm{~A}-\mathrm{B}, 460\)
Piano Pedagog: MUS 200/400 (4
units): MUS 326A, 427A-B, units); MUS 326A, M27A-B, 431A-B
und \(434 \mathrm{~A}-\mathrm{B}, 461\)
Organ: MUS 421, 442, 444, 460 or
String Instruments: MUS 200/400 (4 units, 2 of which must be string 46 Wind Wind Instruments: MUS 200/400 (4 Woodwind or Brass Chamber Musid MUS 425A-B, 460, 464
Percussion: MUS 200/400 (4 units 2of which must be Percussion
Ensemble): MUS 425A-B, 460, 464. Voice: MUS 328A-B, 332, 421, 426 432A-B, 460 . Completion of Department of Music Foreign
anguage Examination in Fren German or Italian (may be waived by
completion of 1018 level course in completion of 101 BI level course in
French, German or ltalian) Opera: MUS 3284 it completion of the Music Department

正ench German examination in rench, German or Italian (may be Course in Frempch, German or It-alian) THEA 262 and 3 units of theatre elective; 2 additional units chose
fom DANC 111 or \(113 A\), MUS 130/330 allowed for 2 units of activity credit.

Commercial Music: MUS 200/400 (Commercial Music: MUS 200/400
(aU last 4 units of Studio Ensemble)
MUS \(271,371,372,393,442\). \(46 \mathrm{~A}, 474\)
Requirements for the Certificate in usic Therapy (code 1-5030) (1) A Bachelor of Arts degree in (2) Additional courses as listed below. Lower Division: MUS 125 (Guitar),
250A-B; PSY 100, SOC 255 . Upper Division: MUS 355 . 384, 3 units chosen from 385 or 386 or 485 ; MUS 421 or \(425 A, 450,481\), 452 453; ED P 305, 311, 350; APP
3081: PSY \(361,365,370 ;\) 3081: PSY \(361,365,370\); SOC 461 o
ANTH 412.
The Music Therapy Certificate Program is approved by the Nationa
Association for Music Therapy Association for Music Therapy.
Acceptance to this program is on a selection process which occurs at the completion of MUS 250 A . Requirements for the Minor in
Music (code 0.580 ) Music (code 0-5820)
A minimum of 20 units, 9 of which must be upper division ( 300 - and
400 -level courses). Specific courses are required. A degree plan must be appropriate department advisor prior to beginning this program Master of Arts in Music (code 5-5820)
The Master of Arts degree in Music provides academic concentrations in
Musicology, Music Theory and Music Education.
Prerequisites:
(1) A Bachelor of Arts with a major in
music or Bachelor of Music deeres music or Bachelor of Music degree, o
a bachelor's degree with a minimum of 24 units of upper division courses in music comparable to those equired of a major in music at this
University: (2) The s istitutions of higher learning attende to send an officialil copy foarning transtenderipts irectly to the Office of Admissions and Records and to the Dep
of Music Graduate Advisor
ranscripts presented to the not acceptable. Graduates of

California State University, Long Beach, must follow theses same
procedures when making application procedures when making applic
to the Master of Arts in music program;
(3) All applicants are required to complete the Department of Music Graduate Placement Examinatio
before they register for courses applicable to the Master of Arts dergee. (Under special circumstances, a student may take
the examination during the first the examination during the first
semester in which he or she is registered in courses applicable to the
degree.) Applicants for all poptions of degree.) Applicants for all optio
the M.A. degree must present samples of their scholarly writings in music for review by the Graduate faculty. Applicants for the musicology
concentration must show evidence o reading and translation ability in one foreign language (French or German) (4) A GPA of 3.00 or better in upper meet the 3.00 GPA requirement or specified balance within the required 24 units of upper division music but
who possess outstanding or unusual qualfications that promise a significant contribution to the Master of Arts program may petition for a Graduate Advisory Council
Advancement to Candidacy:
The prerequisites for advancement to candidacy are the same as those Music. Arts:
(1) Completion of a minimum of 30 units of approved upper division and graduate courses with at least 24
units in the majo. (The program may units in the major. (The program may
not include more than six units of transfer graduate credit);
(2) Core Courses required by all
Master of Arts students, 13-15 units: MUS 696 (should be taken the first time it is offered during the student's residency): MUS 541; one course from \(560,561,562,563,564,565\); upon concentration).
(3) Additional courses for

Musicology concentration; 3 units
from MUS \(560,561,562,563,564\) 565 (other than one taken in core); ; 6 units elected from MUS 560,561 ,
\(562,563,564,565,566,567,569\), \(570,571,660\) (not taken in the core)
6 units of music electives to include whichever was not taken above (students in this concentration are strongly encouraged to elect theory
as well as performance classes, as wen as periormance classes,
especially Collegium Musicum and

New Music Ensemble). Thesis is aken for 6 units in this concentration
(4) Additional courses for Music heory concentration: MUS 542 ;
nits from MUS 548,640 (may be epeated): 6 units of electives students in this concentration are ongly encouraged to elect performance classes, especially New usic Ensemble and Collegium usicum). Thesis is (5) Additional cou
(5) Additional courses for Music
ducation Concentration: MUS 581 , \(588 ; 4\) units chosen from MUS 486,
\(50,580,584,585,587,589,595\) section by advisement), 680,68 \(5-7\) units of electives (students in this oncentration and conducting to elect performance and conducting
classes). Thesis is taken for 4.6 units in this concentration, dependent upon (6) An
the thesis, recital, or project (MUS of the th
698 ).
Master

\section*{Master of Music
(code \(7-5820\) )}

The Master of Music degre rogram provides professional oncentrations in Composition and in Conducting, Opera, and instrumental and Vocal Performance
Prerequisites:
(1) A Bachelor of Music degree, or a Music of Arts degree with a major accredited institution, with a minimum cccredited institution, with a minimum comparable to those required at this University:
(2) The student must request all send af higher learning attended send an official copy of transcripts and nd Records and to the Departme ranscripts presented to the Admissions Otfice by the student are ot acceptable. Graduates of 3each, must follow these same rocedures when making application rogram;
(3) All applicants are required to complete the Department of Music Graduate Placement Examinatio betore they register for courses
applicable to the Master of Music egree. (Under special ircumstances, a student may take semester in which he or she is
degree):
(4) Criteria according to
nd approval on - submiss epresentative originalts scores and vidence of baccalaureate-level
competency as required in the Bachelor of Music Composition Option; (b) Performance - Conducting conducting examination and approval by the conducting faculty; Opera and Instrumental/Vocal eerformance level and with a repertory on an instrument or in voice acceptable to the faculty of the (5) A GPA of 3.00 or better in upper division Music. Students who do not meet the 3.00 GPA requirement or specified balance within the required who possess outstanding or unusual qualifications that promise a significant contribution to the Master
of Music program may petition for a special review from the Detitartment Graduate Advisory Council. Advancement to Candidacy: (1) Satisfy all the general University
requirements, including passing the CSULB Writing Proficiency Examination;
(2) Remove all undergraduate by the departmental Graduate Placement Examination and/or th Dean of the College of the Arts; (3) Pass the Department of Music
Qualifying Examinations; 4) Subit ations (4) Submit an approved project or degree program approved by the student's Thesis Committee, the and the Dean of the College of the Ants;

\section*{Requirements for the Master of} Music Degree (code 7-5820) (1) Completion of a minimum of 30
units of approved upper division and graduate courses with at least 24 units in the major. (The program may not include more than six
ransfer graduate credit): (2) Courses required of all Master of Music students, 13 units: MUS 541 one course from MUS \(560,561,562\),
\(563,564,565,566\); MUS 696 (should \(563,564,565,566\); MUS 696 (should
be taken the first time it is offered during the student's residency): MUS
(3) Additional courses required or unitomposition concentration, 2 units o MUS 529 (section by
undvisement); MUS 542,545 (must te advisement); MUS 542,545 (must be
taken twice), \(546 ; 5\) units of Music electives selected by advisement; (4) Additional courses required in Conducting: 2 units of MUS 500 or \(600 \cdot 2\) units of MUS 529 (section by by advisement); 7 inits (section by advisement); 7 units of Music
electives selected by advisement; Opera: 4 units of MUS 529; 2 units
each of MUS \(528 B, 530,532 ; 7\) units If electives chosen by advisement, 6 approved list of upper division or graduate courses in Theatre Arts concentration are stron in this encouraged to take MUSS 569 . Instrumental/Vocal: 4 units of MUS
500 or 600 ; 4 units of MUS 529 Vo 500 or 600; 4 units of MUS 529 . Voca units of electives selected by advisement. Keyboard specialization:
3 units of MUS 567 ; 6 units of electives selected by adviseme electives selected by adviseme strongly encouraged). Other Instrumental specializations: 9 units of
electives chosen by advisement; (5) An oral examination and def of the thesis, recital, or project (MUS 998).

Teaching Credentials
See Instrumental Music and Choral-Vocal Music options under
B.M. degree. For further information consult with the Department of Music redential advisor.
Music Performance
various instrumental and vocal ensembles are available to all
students. students. Before enrolling in a performing group students should
apply to the director of the rganization in which they wish to participate. Music performance units of credit in MUS 100 or 300 may e counted toward a bachelor's degree. Simultaneous enrollment in nore than one organization is
permitted.

\section*{Courses (MUS)}

\section*{Lower Division}
100. Performance (1) F,S Preerequisit:: Consent of instructor. Maior Peftormance groups, induding University Choir,
Wind Symmhony, University Orchesta, Forty-
Niner Niner Chorus, men's chorus, women's chorus,
 101, Marching
Performance in the Univerty (2) \(F\). Petromance in the Universty Marching Band,
halftime shows and other special marching
events. Recuired attender events. Required attendance at all pertormances
(see note on music pertormance). (6 hours or (see note of muspatory)
110. Semester Recital (1) F,S Recital attendance and performance on principal
instrument or voice. Aecuired of undergiciter
 120A-B. Class Plano (1,1) F,S Technique, tone proncution, thyythm, isight-
reading, interpetation and keyboard facilly. (2 reading, interpeta)
hours laboratoy.)
122A-B. Class Voice (1-1) F,S
 125. Instruments (1) F,S

Prerequisite: Limited to music maijrs and minore Class instruction in applied music. Areas include:
flute, oboe, clacinet, bassoon, horn, trumpet, fute, oboe, colarinet, baspoon, horn, tumpet,
tromocone, baritone, tuba, percussion, vidin, viola trombone, baritone, tuba, percuassion, voinin, yoial
collo, bass, guita, ou groups such as wood wind
brase, string.s. May be repeated for credit. brass, strings. May be repeated for creditit.
hưrs laboratory.)
129. Individual Instruction for Music Majors (1) F,S
Open to music maliors only. Private leosons in their maior performance medium. Appliation
must be made to the Chair of the Department on Music during the semester prior to registration Registration subiject to hisher approval. May be
130. Opera (1)

Preerequiuthes: Consent of instructor. Performance
of excerpts and complete works for the lyic of exceipts. and complite works for the lyre
ofeatre; solo and ensemble coachings; intensive
 language and diction training: preparation and
perforamoo of entire roie in original language:
additional areas inclucte stage management. additional areas include stage management.
scheduling, cootuming. set construction. (3 sheduling, costuming, se
140. Basic Music Theory (3) F,S Notation and reading of music. Written, aural and performance experience with scales, intervals,
chords. and melcolies. Provides.
bacsontial chords,
backgron
theory.
141A-B. Musiclanship (2,2) F,S Preerequisites: Music 140 or a satitfactory scoro
on theory placement examination. MUS \(142 A-B\)
 harmony, melodic and harmonic dictation
through modulation and chromatic harmony

142A-B. Harmony (3,3) F,S Prerequisite: MUS 140 or a aatisfactory score on
theory placement
examination. MUS \(141 \mathrm{~A}-\mathrm{B}\) to
 160. History of Music: Baroque/Classic (3) F
Chronological sunvey of music and musical styles ocordings to 1750 with solected deadings Pocraidngs and scores for indepth study.
rimanlily for music malors and minores, but open
tothers whin others who can read musio
80. Exploring Music (3) F,S Fundamentals of musio and essentials of music
listening. Peeformance skills in singing and
itaying musio. listening. Perior
playing music.
190. Listener's Approach to Music
(3) F,S ,
Hon-technical oourse open to all students excopt
nusic majors. Materials, forms and styles of nusio with extensivier listening
200. Special Topics (1) F,S Prerequiste: conseent of instructor. Speciallued
performance groups, such as chamber muia tass or woodwind ensembles, string cuatet. tc. (3 or more hours laboratory. 2000 - 2 hours
220A-B. Class Plano ( 1,1 ) F,S
Continuation of 120A-B. (2 hours laboratory.)
222A-B Class Voice ( 1,1 ) F, S
continuation of 122A-B. (2 hours laboratory.)
Music Major (2) \(\mathbf{F}, \mathrm{S}\)
Open to performance maifors only. Private
lessons in their maior peeformance medium. Application must be made to the Chair of the Department of Music during the semester prior to registration. Registration is subject
approval. May be epepeated for credit.
241. Counterpoint (3) F,S Prerequisites: MUS 1418 and 1428. Counterpoint 250A. Introduction to Music Prereauiste: PSY \({ }^{\text {P }}\)
Prerequisite: PSY 100 . A courre designed to
provide a broad overiew and introcuction to the field of musis therapie including history, theory,
and current practice. 250B. Introducti
Therapy (3)
Preerequisites: MUS 250A. This course has been
designed for the student
designod for the student accopted into the musio therapy program. Focus is on development of
entry-level clinical skills, as well as orientation to various pathologies and inteventions used in
musis therapy. musie therapy
260. History of Music:
Nineteenth/Twentieth Centuries (3) S

Chronologgical sunvey of music and musical stylea recordings and tresent, with selected reading recordings and scorose for indopth study
Primatiy for music maiors and minores, but open
to others who read music.
271. \({ }^{2}\) Im

Basic tecchniques in improvisation, beginning with
simple simple question and answer phrases and
progeressing to extenced solos. Detalied and d knowedge of chord progressions. 282. Beginning Instrumental
Ensemble Lab (1) \(F\), Odd Years Examination of organizational and instructional
tecochiques relating to instrumental beoginners, techniquess relating to instrumental beginners,
orchesestal and band, as well as performance on secondary instruments and conducting ensemble clase session
290. Music in General Culture Artistio an
Artistio and socio-economic bases of music at
the present time on varioust cultures with wininicideration of the the inpod States Not open to music majirs.
300. Special Topics (1) F,S Prerequiste: Consent of instructor. Maior pertomance. gooups, including Univiorsity Maior
Wind
Symphony, Wind Symphony, Univesity, Orchestra,
Forty-Niner Chorus, men's chorus, women's
 pertormance.) (3) or m
-2 hours 1 laboratory,
301. Marching Band (2) F Performance in the University Marching Band,
halt-time shows and other special marching halt-time shows and other special marching
events. Recuired attendance at all pertomances events. Required attendance at all performances
(see note on musio performance). ( 6 hours or (sees note on mus)
more laboratory.).
320. Intermediate Plano (2) F,S Prerequisite: MUS 220B or consent of instructor. (4 hours laboratory.)
321./521. Theory of Piano

Prereaquisite: Consent of instructor. Physilogica
mechanics and poyychology of piano playing mechanics and ppyychology of piano playing: theory of fingering; memorization; teaching, with
reference to graded materials. (4 hours laboratory,
322. Intermediate Voice (2) S Prevequisite: MUS 2228 or consent of instructor.
(4 hours labocator) 323. Junior Project (1) F,S Prerequisite: MUS 241. Recital of the standard itierature for solo instrument of the see in the
pertomance option in the Bachelo of performance option in the Bacchelor of Music
degree. Enotlimen resticted too music maicos
passing the Cualifining Examination. 325. Special Topics (1) F, Preerequivit:: Linited to musio maiors and minors
Class instruction in applied musio Areas Class instruction in applied music. Areas include:
futte, oboe, clatinet, bassoon, horn, trumpett flute, oboe, clarinet, basscon, nom,
tombone, baritone tuba, vercussion, violin, viola,
collo, bass, cello, bass, guitar, or groups such as woodwinds.
brass, strings. May be repeated for creodi. brass, strings. Ma,
hours laboratory.)
326A,B./526A,B. Piano
Accompanying ( 2,2 ) \(\mathrm{F}, \mathrm{S}\)
Instruction and training in the att and Instruction and training in the att and the
teccomiques or
singers
strumentailits and ensembles. Students with Leocture 1 hour, activity 3 haurs.) 327. Choral Organization and
Rehearsal Techniques (2) \(F\), course for the choral musician with emphas Apon the rehearsal and reeheerasal tecemphiquaves Aspects of ausilitioning voiciese, chooral tones
diction, and score proparation will be stresed. Methods of organization and management of the 28A. Diction for Singers (2) FS. 28A. Diction for Singers (2) F,S Prerequivites: MUS MI2AB or corsent of
instrutor. Principlies of promunciation of English,
German, French, thalian and Latin using the German, Frencon, Halian and Latin using the
Intermational Phonetic Alphabet (IPA).
(2) F
rerequistes: MUS 328 . Advanced study of
 particular emphasis on propert text docclamation in arious styles.
329. Individual Instruction for Music Majors (1) F,S Deen to music majiors only. Private lessons in nust be made to the Chair of the Department of Music curing the semester prior to registration.
legistration subiject to hisher appoval. May be eopistation oubibect.
330. Opera (1) F,S
equistes: Consent of instructor. Performance excerpts and complete works for the yric language and diction training, preporation and
pertomance of entire tole in orginal language: pertormance of entrere roie in iriginal language;
additional areas inclue stage mangement,
scheduling, costuming, set construction. schedodiling. costuming, set
hours or more alaboratory.)
332. Opera Repertoire (2) F
 Competion of Department of Music Foreign Italian (may be waived by completion of 1018 level course in French, German or thaian) and
 Pepertore for the (yric theatre with particular Hench, German and Italian opera: study of iginal source materials, translation and \begin{tabular}{c} 
ansilieration of various foreign \\
nusicaletexual \\
relationshiphages. \\
\hline 4
\end{tabular} abocatory.)
35./535. Advanced Performance
2) S
erequisite: Consent of instructor. Advanced andy in a performance medium with equal cludes special training tor a a pertorming career. May be repeateod for crodit to a maximum of 8 nits. (4 hours laboratory.)
41. Musical Form and Analysis

Pererauisise: MUS 241 . Small, large,
nuti-movement, variation, and contrapuntal ms in inent, variaton, and con
342. Materials of Modern Music (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: MUS 341 . Melocic, harmonio,
thythmic and contrapuntal techniques of twentieth-century musio. Antial Ansyes of
eepresentatite compositions and witing in typical contemporaray styiles.
350. Influence of Music on ehavior (3) S
View of histarical and contemporary uses of
music to influence behavior. 352. Music Therapy -
On-Campus Clinic (3) F Prerequisiste: MUS 250A. Content designed for musio therapy students to receive dinical
experience in a closely supervied and highiy contolled seting on campus. 360. History of Music: (3) F,S Chronological survey of music and musicaa
readings reorodings and scores for in-iedepth
study. Primarily for music maiors and min study. Primarily for music maiors and minors, bu
open to others sho read musio. open to others who read music 3631. Music and the Humanities Prerecuisites: ENGL 100 and upper division status. Survey of interelationships between
music and literatue viner music ann interature, visisal arts, and 3641. Music and the Humanities Enlightenment to the Present
(3) F.S (3) \(\mathrm{F}, \mathrm{S}\)
Prerequistes Prerequistites: ENGL 100 and upper division
ttatus. Survey of interelationships betwen status. Survey of interereationships between
musio and ireature, , isual arts. and dance from
the Eniightementit to the present. 3651. Renaissance World (3) s Prerequisites: ENGL 100 and upper division
status. An intercilicilifinary view of sielected aspects of Renaissance culture and societ, emphaszing the arts and literature within the
historical context of the eraa Topics span social counturalic, issues and theil intin infuencoses in music, art iterature, and philosophy. (Lecture
hours.) Same course as HIIS 3231. 370. Recording and Electronic echniques (2) S
Tecchnique of the preparation and recording of
music and the study of electronic recording and music and the study
musical equipment.
371. Improvisation Techniques (2) s
of MUS 271.
72. Jazz Harmony and Analysis . Pererequiste: MUS 1428. Basic te
witing and analyzing iazz harmony. 3751. The Avant-Garde: Radical
Change in Art and Music in the Change in Art and Music in the 20th Century (3) F Prerequisites: ENGL 100 and upper division
status. An examination of some of the majo
tmodern" or avant-gardo sthee modern" or avant-gardo styles and movements in art and music in Europe and America from
about 1900 to the present. The Course aims no
practitioners butut to relate them to maior changes modern society.
378. Aesthetics of Music (3) F,S Introuuction to some central concepts and
principles in aesthetics, with speefico application
 Yepresentation, musicial exproesion,
in musio. Same course ax PHHLL 378 . 382A. Intermediate Instrumental
Ensemble Lab (1) S Even Years Ensemble Lab (1) S Even Years Prerequisiti:: MUS 282. Examination of
organizational and Instructional techniques
reating to Grade 111 IUsic iterater Ieleating to Graade L-IIl musucictionaturue, orchestral and band, as well as performance on secondary
instruments and conducting ensemble class

382B. Beginning Jazz Ensemble Prerequiste: MUS 282
 relating to beginning iazzensememble performiquance
Toll as performance as well as performance on secondary
instruments and conducting ensemble class
sessions.
382C. Advanced Instrumental
Ensemble Lab (1) S, Odd Years Prerequisite: MUS 282, Examination of
organizational and instructional techniques elating to Grade ell-N music literature, ocrchestral and band, as well as mertormancee on secondial sessions.
384. Music in Special Education 3) \(F, S\)
reerequisite: MUS 180 or consent of instructo Qpen to music majiors, music minors, music
therapy and liberal studies students. Planning developing and evaluating musical procedure and materials for the special learner. Topicas It the following areas: basict sklils, audition
 and enhancement of selt-1mage.
385. Children's Music (3) F ierequiste: MUS 180 or waver (aready in
place). An introduction to general, vocal, and instrumental musical experiences appropriate for hildren in grades \(K\)-6. Includeses participiation in singing and listening activites and experience in harmonic instruments appoporiate to the age and evelopoment of the child. This course is intended
or ilberal stucies maijrs and others by consent \(t\) instructor.
386. Introduction to Music
earning (3) F
This course provides the philosophical and exeoution of approppiaited for the desicign and instrutional programs at the geneeral classrocom, middle
school, and secondary levelis. The content
 ducation, the current state of music education,
deneral learring pinciples, music learning

390. F
(3) F

Musio from the Renalisance to the present; music majors.
(3) F, Prerequisites: ENGL 100 and upper division
status. An historical review of the developmen musical taste and concurrent the diterayy splyes with musicial taste and concurrent literary stylyes with
practical application to modern pertomancos practical application to
393. Jazz, An American Music (3)
F,S A histo A historical sunvey of the origins, developments
and social significance of Amecican and social significance of Ameician Jazz through 400. Special Topics (1) F,S Prerequiste: consent of instructor. Specialized
pertomance peeformancee groups, such as chamber musite,
brass ar wooduind ensembiles, string quatet.
etc. ( 3 or more hour eto. (3 or more hours laboratory. 400 D - 2 hours
421. Choral Conducting (2) F Preerequibit: MUS 327 or conssent of instructor.
Principlese and techniques of choral conduuting Pincipipees and technicues of choral conducting
and orgizaion. Study and interpertation of
choral mateeiale choral
group.
422./522. Advanced Choral Conducting and Literature (2) S Prerequiute: MUS 421 or consent of instructor.
Choral techniqua, style and interpetaiton; choral schools and composers since the 11th century:
contemporary secular and sacred contemporary secular and sacred chora
compoostions. Class used as labocratory group. 423. Senior Project (1) F,S Prerequisites: MUS 341,342 Corequiste:
Concurrent encolment in MUS 329 or 429
 Compostion and Music Therapy options). An individual recital of the standard literature for sol instrument or voice or a witten proiect in certain
options in the Bachelor of Music degree Enrolimentr restricted to music maijors passing the Qualifying Examination
onducting ( Instrumenta \((2,2)\) F,S
Pretequisistes: Consent of instructor. Corequiste
(or 4258 B: MUS \(382 A\) or MUS 382C. Pirinciples and techiques of instrumental conduuting and
organization. Sudy and intercetaion organization. Stroty and interperation of
instumental literaure using the class as a
laboratory laboratory. Course must be taken concourrenty
with MUS \(382 A\) or 382 C . Lecture and lab). 426./526. Vocal Development (2) F Preerequiste: Consent of instructor. Theory and 427A. Piano Pedagogy I (3) F,S Study of the philosophies, psychology, and
methods of piano teaching as they apply methods of piano teaching as they apply to
chidren and to beginning through intermediate
adult levels.
*427B.
Prerequisite: MUS 427A. Study of piano teaching nethods., pesychology and philosophies as they apply to the more adv
*428. Seminar in Musical Styles reerequistes: MUS 180, 260, 360, 341. A study seminar designed to review the development o musicial conecopps ans generes, and signififant
maiors only. Tradtional grading only. For Music *429. Individuual Instruction 429. Individual Instruction fo
Music Majors (2) FS Music Majors (2) F,S peon to pefformance majors only. Private
esons in their major performance medium
Application muit be Appication must be made ot tore Chair of the epartment of Musis during the semeoster prior to pproval. May be repeated for creodit
431A,B./533A,B. Score and Sight
Reading \((2,2)\) S Reading ( \(\mathbf{2 , 2}\) ) S
 coal and instrumenental scoores at the piano.
(2,2) \(\mathrm{F}, \mathrm{S}\)
reerequisite: Voice majior or consent of instructor
 petriormance. Coaching vocal technique
(3) \(\underset{F}{\text {. Studies in Musical Analysis }}\) (3) \(F\) and class analycis 341,342 . Intensive individual of various periocds and styles.
442. Orchestration (3) F Perequisite: MUS 241. Range, characteristices, instruments by writing and/or transeribibng music Tor them. Preparation and prootreancibing of succres
for
and and parts. Readings of stuceent assignments will
443. Advanced Orchestration (3) S
 standard Chamber ensembles, chorus and
ocresta Readings of student orchestrations
and 444. Compositior possible. 444. Composition I (2) F,S Preerequiste: MUS 342 or consent of instructor.
Composition with emphasis on the development
of of an individual styly.
445. Composition II (2) F,S Prerequisite: MUS 444 Composition with
emphasis on the development of an individual style. May be repeated to a maximum of 6 units (composition majoros arer requiremum to enroll for at
least 6 units). Students wishing to least 6 units). Students wishing 10 compose in
the electronic medium must complete. MUS 446 A as a pererauisiste.

446A. Electronic Music Composition (3)
Preerequisite: MUS 342 or consent of instructor.
Basic familiarity with the equipment in the Electronio Music Studio. Basicic of some aspects of the physics of sound with practical application
on studio equipment. Discussion of works from on stiduio equi
446B. Advanced Electronic Music Composition (3) S
Prerequiste: MUS 446 A or consent of instructor. Atvancod Instruction in the electronic Musio some aspects of the physics of sound with practical application on studio equipment.
Procgramming synthesizers and effects devicos. Programming synthersiers and effects devibes.
Advanced comutres secuenndin techniques or Advanced computer sequencing techniquess tor
composing and orchestratin. Dilocusion of
works trom the literature. Traditional grading works from the literature. Traditional lrading
only. Course may be repeated for a maximum of 6 only. 6
450./550. Psychology of Music (4)

Introduction to the physical aspects of musio with emphasis on paychological and perceptual
responses to musi. Primaril for music therapy majors.
451. Music in Therapy (3) F Preerequistes: MUS 250 A. B. Continued
develoment of dirical skils in emphasizing the usire of materials and equipment
to to be utilized in various treatment se
452. Clinical Experience
(1) Demand

Prerequiste: MUS
Prerequiste: MUS 451. Supenised clinical
experience within one area of disability for the
duration of the semester. May
duration of the semester. May be repeated once
for credit.
453. Music Therapy Internship (3)

Prerequisite: All music therapy coursework Extension of academic preparation involving the
superised application of learned therapeutio superisied application of learned therapestic
pinincipese to provide assistancee to human beings defined as "handicappeed."
460/566. Studies in Performance Practices (3) S
Preerequibe: MUS 360
Preerequisite: MUS 360 or consent of instructor.
Surveys problems of vocal and instrumental performance in music of the Middle Agges.
461/567. Studies in Keyboard Music (3) S
Prerequisto: MUS 350 or consent of instructor. Survey of the evolution of keyboard music
including the clavichord, harpsichord, piano and Including the clavichord, harpsichord, plano
organ trom the 1 13th century to the present. 463./569. Music of the Theater (3) S
Prerequisite: MUS 360 or MUS 390 or consent of instructor. History and development of music for
the stage from 1600 to the present. ths comventions and styes. Analysils of represesentative
464./570. Studies in Instrumental Music (3) F
Prerequibite: MUS 360 or onssent of instructor: A
studies course in instrumental music spanning at loast three eppochs of music history and covering a minimum of two of four categories: solo sonata
(excluding keyboarc). chamber music. chesta//symphonic and orchestra/conceeto.
65./571. Studies in
Ethnomusicology (3) Deman

Prerequisite: MUS 360 or consent of instructor. Emphasie. on theory and methe modoctoy of ot particuliar non-western oultures or areas Fo music majiors only.
\(474 . / 57\)
(3) S
Preerequisiof
Prerequiste: MUS 372 or Arranging and scoring of the various types of Arangine and ssoring of the various types of
commercial ensembles in the styles demended
by contemporan pertomance by contemporary periormance pract
480./580. Marching Band

\section*{480./580. Marching}

Techniques (2)
Marching fundamentals, chating formations,
precioison frilis, parade technique and hall-time pageantry.
81./582. Instrumental Rehearsal

Frocedures for organization and development of nstrumental proagrams and literature for 483A Choral
83A. Choral Repertoire (2) F raditional and contemporary choral repertoire
lor publio school teachers and church choir rectors. (4 hours laboratory.)
483B. Choral Repertoire (2) F Traditional and contemporary choral repertoire
tor public school teachers and church choir
directers directars.
484A. Choral Arranging (2) S Preequistes: MUS 142B, 241. Instruction in riranging for vocal ensembles of all sizes
Primarity intended for music education majors Traditional grading only.
484B. Instrumental Arranging
(2) (2) \(F\)
erequistes: MUS 1428, 241. Instruction in wind ensembles. Prestas, anands, and sindeymphonic for music 855./585. Music for the 485/585. Music for the Perequistes: MUS 341. A detalied examination of specifico: Mpporoaches AD tedavelopingmamination and aesthetic sensititity in chidrer.n. Suderits will
 chidren in grades \(K\)-6. This course is intended for music education and music therapy majors,
and others by consent of instructo.
\(* 486\). Jazz Ensemble Techniques *(2) S Preerequisite: Musio 1418, 1428 and the following


Percussion. Introduction to the basic skilis, techniques, and materials required in order to
teach an instrumental or vocal jazz ensemble 487./587. Microc Music Learning (3) S
Prerequisites: Music education applications of
microcomputers, inoluding: existing instruction microcomputers, including: existing instructional
software and harcware admintrative software, and hardware, administrative
applications, criteria for sotwware and hardwar
selection, MII music composition, and selection, MIDI music compostion, and
contemporary issues and trends. Tradtional grading only.
*489. Special Topics in Musi ducation (1-3) Demand
Prerequisite: Consent of instructor. Topics of
interest in the various areas of musio education selectiod for special presestation and development. May be repeated for a maximum o
six units. Topics will be announced in the six unit. Topics will
Schedite of Classes.
490. Music Cultures of the World (3) F,S

Musical cuitures of the world (excluding Westen
 ilatronents, musical forms and pertoruaturee
istandards. Fur mustio maliors or non-music majors.
(1-3) F,S \({ }^{\text {495 }}\). Special Topics in Music (1-3) \(\mathrm{F}, \mathrm{S}\)
Prerequisite: Consent of instructor. Topics of
current interest in the verious fields of musio
elecected for
 development May be repeated for a maximum of
six units. Topicis will be announced in the
Sche six units. Topics will be announcod in then
Scheodue of Classes. (2-6 hours laboratory) 496. Research Methods (3) F Prerequiste: Completion of Department of Music
Foreign Language Profciency Examination French, German, or Profticiency Examination or evidence of
Completion of 1018 tien
 German, or tralian. Bibliography; approachese
contemporary problems in music; demonstration oontemporary problems in music; demonstration musio. Required of all undergraduate musion
historyminerature maiors. *499, Special Stu
ial Studies (1-3) F,S Prerequisite: Consent of instructor. Individual
researh or grout investagito of selocted
topics May be repeated tor a maximum of six
units of credit Graduate Division
500. Special Topics (1) F,S
 Forty-Niner Chorus, men's chorus, woment
chorus, band, orchestra, elcic (see note on music pertiormance.) (3 or more hours laboratory. 5000
-2 hours laboratory.) 520. Advanced Conducting (3) S Prerequisite: Consent of instructor. Advancod
baton techiqua, interperetation, securing proper
sound, organking routine and procram making
echnique (2) S
Prerequisite: Consent of instructor. Physiological eechanice and paychology of plano playing eference tingering, memorzation; teaching, with
graded materials. 4 hour aboratory.)
522./422. Advanced Choral

Prerequibite: MUS 421 or consent of instructe Choral technique, style and intierperetation: intructor chools and composers since the 16th century,
contemporary secular and sacred choral ontiemporary seevurar and sacted choral
compositions. Clase used as labocatory group. 5258./4258. Instrumenta onducting ( 2,2 ) \(\mathrm{F}, \mathrm{S}\)
Torequisite: 425A,B. Principles and techniques Study and interperentation of instrumental iliterature ing the class as a laboratory.
26./426. Vocal Development
(2) \(F\)
reerequiste: Consent of instructor. Theory and
26A,B./326A,B. Piano
ccompanying \((2,2) \mathrm{F}, \mathrm{S}\)
Pierequivite: Piano maip or consent of instructor
nstruction and training in the att and the chiciques of actaing in the art and the
nstrumentaists and ensembling for singers, 28B./328B. Advanced Diction for 528B./328B. Ad
Singers (2) S
Prerequisites: MUS
 rorunciation and enunciciation anoblems whth various styles. Traditional prading only for Maiors. 29. Individual Instruction

1-2) \(F, S\)
pen to graduate students in music only. Private esposn in their maior performance medium.
Appliation must be made to the Graduate
Acioor of the Depat Acvisor of the Department of Music during the semester prior top repisitration. Regoistration is redit.
530. Opera (1) F, of exceerpts: and complete works for the lyic heaate; solo and ensemblete coachs for the hyic language and diction tranining: preperation and dodtional areas incluce stage management, chaduling. costuming. set construction. (3 ore aluboratory.)
32. Opera Repertoire (2) S Prerequistes: Two years of voice study,
Completion of Department of MMsio Foreign
Onguage Proficency Exam in
 evel course in French, German or ort ltaian) and consent of instructor. Advanced study of
spentorire for the lyric theatre with particular
 ench, German and Italian openai, stury of
tiginal source materials: transation and original source materials; transiation and
riansitieration of verius

533A,B./431A,B. Score and Sight Reading \((2,2)\) S
Prearequiste: Consent of instructor. Instruction in reaciing piaiano musio at sigtructor. Ind instruction reducing stucies in transpoosition. \({ }_{(2,2)}^{534 A, B, S}\)
Prerequisite: Voice majio or consent of instructor. Selecting and preparing song litierature for public style and vocal techniques. 535./335. Advanced Performance-Piano (2) F Prerequiliti:: Graduate etanding and consent of with equal emphasasis on comcoert tepertorire an technique. Includes special traning
performing career. (4 hours laboratoy.) 541. Seminar in Musical Analys (3) F,S

Analysis of the forms and techniques of musical coampositions in various genrres and styles. Mea
be repeated tor a maximum of 6 units. 542. Seminar in Advanced Musical Analysis (3) S Advanced analysis of the forms and techniques of musical compositions in various gecries and
styles. May be repeated for a maximum of tylies. May be repeated for a maximu

\section*{\({ }^{543 .}\) (3) S}
(3) S .

Prerequisite: MUS 442 . Graduate level study in
the techniques of arranging, transecibing and the techniques of arranging, transeribing and
 orchestration
544. Composition (2) F,

Graduate level composition with emphasis on the
development of an indiviual styhe . Suddent development of an individual style. Students
wishing to compose in the electronic medium wishing to compose in the elecatronio medium
must complete MUS 446 A or 546 or equivalent ae
aprerequiste. prerequiste.
545. Advanced Composition
(2) F, S
(2) \(\mathrm{F}, \mathrm{S}\)

Peoreauisite: MUS 544 Graduate level composition with turther emphasis on the
development of an indididual style. Stucents wishing to compose in the electronion Sumedium
nust completet MUS 446 A or 546 as prerequis
6 units.
546. Electronic Music
546. Electronic Music
Composition (3) F,S

Prerequiste: MUS 444 A . Graduato level
instruction in the Electronic Music Studio's current equipment. Electronic Music Studio's
aspects of the physicics of sound widy with rocme application on studio equipment. Programming
synthesizers and effects devices. Advanced computer sequencing techniques for Advanced
 iterature. May be repeated for a maximum of
548. Seminar in Twentleth Century Musical Analysis (3) F,S Prerequiste: MUS 342 . Acvanced anaysis of
the melodic, harmonic, hyythmic and contrapuntal techniques of twentieth-century music. Analysis of represestatative compositions
and writing in typical contemporary stylies. 550./450. Psychology of Music (4) Introduction to the physical aspects of music with Introduction to the physical appects of music with
emphasis on pesychological and perceptual responses to musio. Primarily for music therapy
maios.
560. Music of the Middles Age (3) Demand Prerequisites: MUS 360 or consent of instructor
Survey of medieval muic Survey of medieval musio form the beginnings
 Traditional grading only.
561. Music of the Renaissance ( 3

Prerequisite: MUS 350 , or consent of intuctar Preverguisite: MUS 360 , or consent of instructor
Stylistic analysisis and inquiry into the cultura
 and editions:

\section*{(3) S}

563. Music of the Classic Era (3) S Prerequistes: MUS 341,350, or consent of
instructor. Music from the Fococoo to the end of the eighteenth century. Philo
relation to the musica styes.
564. Music of the Romantic Era
(3) S (3) S

Prerequisistes: MUS 341,360 or consent of
instrutor. Music trom Beothover to the end of
the nineteenth century Tradtional instructor. Musio trom Beethoven to the end of
the nineteenth century. Traditional grading only. 565. Twentieth Century Music
(3) (3) \(F\)

Prefequisites: MUS 342,360 , or consent of
instructor. Syylistio analysis and music; aesthetic instructor. Stylistic analysis and muscio; aesthetic
and socioconomic problems of contemporan music; sunvey of new musio.
566./460. Studies in Performance
Practices (3) \(S\) Practictuiste: MUS 360
Prerequuiste: MUS 360 or consent of instructor
Surveys problems of vocal and instrumention

567./461. Studie
Music (3) S

Music (3) S
Prerequisite: MUS 360 or consent of instrita
Surequise: of the evelotion of ofsent of ingtructor.
including the clavichord, harpsoichord musd piano and including the olavichoord, harpsichorod, piano a
organ from the 13 th century to the present. 569./463. Music of the Theater (3) Prerequisist: MUS 360 or MUS 390 or consent of
instructor. History and development of music to instructor. History yand development of musisit for
the stage form 1600 to the present. it
conventions and
masterworks.

\section*{570./464.}

\section*{Music (3) F}

Prerequisite: MUS 360 or consent of instructor. studies course in instrumental music spanning a minimum of two of four catco history and covering
 orchestral/symphonic and
571./465. Studies in
Ethnomusicology (3) Demanc

Prerequisite: MUS 360 or consent of instructo Emphasis on theory and methodology of othnomusicological stucty. Investigation of musio
of paticular noo-western oultures or areas for of patitiuluar non-we
music maliors only.
574./474. Commerclal Arranging

\section*{(3) S}

Preeraquisite: MUS 372 or consent of instructor.
Aranging and Arranging and scoring for the various types of
commerciale ensembles in the styies demanded by contemporary performances practi 580./480. Marching

Techniques (2) \(F\)
Marching fundamentalas, charting, formations,
precision drills, pearade technicque and half-ime preaseantry.
pasit
581. Foundations of Music

Education (3)
Open to graduate musio maiors only. A survey of
contemporary peychompogogical and aeostheliciogical trenilosopphical, education course requirement: a major reseacch papers de
topics.
582/481 Instrum Techniques and Literature (3) \(S\) Procodures for organization and development of
instumental progiams and liferature for instrumental progra
pertorming groups.
583. Choral Repertoire (2) F Traditional and contemporay yhoral repetairire
for pubblic school teachers and church choir directors. (4 hours laboratory.)
583 B . Choral Repertoire (1) F Traditional and contemporary choral repertoire
for public school teachers and church choir Ior public school teachers a
directors. (2 hours laboratory)
584. Music in Special Education (3) S
pen to graduate music maiors only. A sunvey of
music materials and methods suitable for use with special learners. Topics covered. the use of music with mentally retarded, hyperactive,
laarning diasbled, physically dilabled and
amotionaly distubed children. Course motionaly disturbed chidren. Course ne of the previousuly cited topicice. 585A. Children's Music (3) F,S pen to graduate musio maliors only. A study of contemporary techniques for teaching general
musio in grades \(K-6\). MUS \(585 A\), primary level 585B. Children's Music (3) Demand
Fereauistes: MUS 180 or consent of instructor. open to music maiors, music minoros, music eveloping and entuevaluating obs. Plianning, procedures, and material for teaching music in 587./487. Microcomputers and Music Learning (3) S
vicrococomputers, inoluding: existing instructional
 administatative applications, criteria for sottware
and hardware selection, MIDID music compoostion nd contempocary lisuues and trends. Traditional rading only
588. Quantitative Issues and
Research in Music Education
(3) \(F\)

Prerraviltes: Music 551. Assessment and Uuriculum development: approporiatet techniques and existing tools for the measurement and critical analysis of research, especially
quantitative, in areas retevant to music education and therapy. Deoesign reesearch project approppriate and therapy. Deosign research pro.
955. Special Topics in Music (1-3) F,S
Instructor. Topicse of of Graduate Acvisor and elds of music selectert tont interest in various nd development. May be repeated for and development. May be repaeted for the Schediul of Classes.
Special Studies (1-3) F,S Preerequiste: Consent of Graduate Advisor and
instructor. Individual research or group natructor. Indididual research or group
Investigation of selected topics. May be repeated a maximum of \(s\) si units of credit.
600. Special Topics (1) F,S Preerequiste: Consent of instructor. Specialized rass or woodwind eensembles, percussion ansmble, string quartet. Collegium Musicum and New Music Ensemble. (3 or mat
laboratory. \(0000-2\) hours 1 abocratory.)
40. Seminar in Music Theory (3) Demand
Prerequisites: MUS 541 or 542 and consent of
nstructor. Intensive seminar focusing on instructor. Intensere seminat focusing on
anaylical and theortical issues in muscic. May centier on an individual composeser, a theoreticoe grading only. Course may be repeated for a maximum of 6 units of degree credit 645. Seminar in Advanced Composition (3) F,S Prerequisites: MUS 443, 444, 445, or equivalemn
Free composition in the more extended forms for various combinations of instruments including fuil srchestra and band
646. Seminar
ar in Electronic Music
Prevequisite: MUS \({ }^{446}\) and/or consent studio techniques, Ilteraturue and compossing with aligtal electronic equipment. Music (3) Demand
Chronological survey of historical styles in
western music trom ancient times to the present. 680. Seminar in Instrumental 680. Seminar in Instrum
Music Teaching (3) \(F\)

Preeraquiste: Consent of instructor. Prineoiplea, procedures, and materials usucer in trinaipoching
noteumental musio in the public schools. Special Instrumental music in the public schools. Special
attention 1 iven to methodss and materials used in instument clasees.
681. Seminar in Choral Music
Teaching (3) \(S\) Teaching (3) S
Prerequisite: Limited to music majors and minors
Research and analysis of principles, procecouree Research and analysis of pininipleses, proceduress performanco
teaching.
696. Research Methods (3) F Bibliography; approaches to contemporan
problems in
music; competence. Required of all master's compoitencee inequired
698. Thesis (2-6) F,S

Planning, preparation, and completion of a thesis Proidet related to this ffild. Uimited to gracuation candidates who have taken MUS 696 .

\section*{Theatre Arts}

Department Chair
Howard Burman
Department Office: Theatre Arts
Telephone: 985-5356
Professors: Herbert L. Camburn, Ashley Carr, Robert F. Eggers,
Stanly Kahan, Bernard J. Skalka; Assoclate Professors: Joanne Gordon, Nancy Jo Smith; Assistant Professor: Jan Gist, Holly Harbinger, W. Jeffrey Emeritus F
Emeritus Faculty: Gerald R. Bailor, Ralph W. Duckwall, John H.
Green, Michael C. Lyman , David MacArthur, Gilman Rankin, Kenneth W. Rugg, Gail L. Shoup, Harry E. Stiver, Edward A. Wright. Administrative Operations Analyst: Lou Pas
The Department offers three basic programs leading to the bachelor of arts degree with opportunities for options in pertormance acting/directing),
technical theatre (scenery/costume lighting design), and General
Theatre, This flexibility Theatre. This flexibility of program planning in theatre Arts has been
organized to serve student needs in three principal areas: (1) Enrichment of the student's liberal arts background through the insights derived from theatre arts courses taken as general education electives. (2) Development of
interests and skills that will offer the interests and skills that witionter the
student life-long satisfactions as an avocational outlet. (3) Preparation or Theatre Professions in community theatre, recreational
theatre, educational theatre, and professional theatre. Several course offerings in theatre and dramatic literature ere available jointly with the These courses cover the full range of world drama from both the viewpoint of theatre and dramatic literature
The Department of Theatre Arts offers graduate study leading to the
Master of Arts and Master ot Fine Arts degrees. The candidate is
urged to observe the general
requirements stated in this Bulletin, as well the specific departmental equirements stated here and, more
fully, in the Department Program Planners, available upon request from the department.
All majors are required to
participate with or without participate with or without credit in program. Furthermore, majors enrolled in any acting course are expected to audition and participate
in departmental productions in that semester. The student is expected to accept any role in which he/she is cast. Majors are ello expected to before making any commitment to theatre program which lies outside of the departmental academic
atmosphere
The W. David Sievers Memorial first faculty member of the theatre program, is awarded annually to new students who exhibit potential in consists of a modest sum and is determined through competitive audition judged by faculty and fellow students. In addition, the Fine Ants
Affiliates of the University and the Dramatic Allied Arts Guild of Long Beach provide for monetary awards to qualified students in all areas of heatre. For further information Arts.
The Thearte Arts Department holds division II membership in the National Association of School of
Theatre. The Bachelor of Arts, and Master of Fine Arts degrees are accredited by the association. The department is also a member in good standing with the Association.
Bachelor of Arts in Theatre Arts The General Option in the Bachelor of Arts in Theatre Arts provides the opportunity for the
student to gain a broad exposure to student to gain a broad exposure to
the discipline. The curriculum requires study in Acting, Technical
and Design cratts, the History.

Literature and Criticism of Theatre, and in general Directing.

\section*{Aequirements for the}

\section*{Arts in Theatre Arts:}

The Theatre Arts core is required
THEA 010 is required each semester of enrollment. These units semester of enroliment. These
are not included in the 124 for
graduation
Lower Division: THEA 101, 114A,
12, 144, 146, 148.
Upper Division: THEA 321, 322 374, 452, 476.
All performance majors will also fulfill four performance requirements (with or without credit) to graduate
This requirement is met through This requirement is met through
acting, understudying, directing, o assistant directing for a Mainstage production; acting or directing for Showcase production; or by a
special assignment approved by the speriormance faculty.
No more than eight units of Theatre Arts activity (cast and/or crew) will apply toward degree
requirements. Crew requirements all majors: One major running crew assignment in residence in each of he areas of costume, make-up, stagecraft and lighting, to be
satisfactorily completed with or without credit during the semester ollowing completion of the resated course. Students with transfer credit the same running crew requirements, with or without credit, within the first three semesters of At the berinning of
At the beginning of each including transfer students (including those who have been inactive for a year in our department), are required to audition (in the case of acting
majors) or interview (in the case of all other majors). Auditions and interviews to be conducted by appropriate faculty/student groups.
(These auditions are required for admittance to certain upper divisio classes and are therefore used for
at their level of competency as at their level of competency as
determined by the faculty.) General Option (code 2-5844) Choose 6 units from (A) Acting/Directing 112 (A) 271,375 ; choose 6 units from (B) 446, 448; choose 9 units from ( Hist \(/\) it // \(/\) rit: \(380,426,421,422\), 523 ; and chooses 3 units from (D)
Production: \(310 \mathrm{~B}, 340 \mathrm{~B}, 410 \mathrm{~A}, \mathrm{~B}\). \(440 \mathrm{~A}, \mathrm{~B}, 471,498\) for a total of twenty-four units.
Option in Performance:
Acting/Directing (code 2-5847)
THEA 112, 114B, 214, 262, 426,
and 9 units from THFA 116,271 and 9 , 312,31 its from \(318,361,375,380\) \(410 \mathrm{~A}, 410 \mathrm{~B}, 414,413,462,471\), 498.

Option in Technical Theatre: Scenery/Costume/Light
Design (code 2-5848)
THEA \(341,346,444,446,448\) and 9 units approved from THEA \(271,340 \mathrm{~B}, 342,343,348,355,357\) 385, 444A, B, 444, 442, 443, 445, \(446,447,449,451\),
\(471,482,484,498\).
Master of Arts in Theatre Arts
Master of Arts
(code \(5-5844\) )
Prerequisites:
(1) A bachelor's degree with a
(2) A bachelor's degree with 24 units of upper division work in Theatre Arts, including courses
comparable to those required at this University.
Each student applying for admission to a graduate degree program in Theatre Arts must initiate in the department office, a request
to receive a departmental evaluation, based upon diagnostic examination and an analysis of official undergraduate transcripts to
determine any deficiencies and al deteas which must be strengthened by the graduate program
Advancement to Candidacy:
(1) Satisfy the general University requirements;
(2) Remove all undergraduate deficiencies as determined by the departmental evaluation and
Dean of Graduate Studies;
(3) Submit a program for
approval by the student's departmental faculty advisor, the department chair, the graduate
advisor and the Dean of Graduate Studies. Requirements for the Master of Arts:
A minimum of 36 units in
approved upper division and approved upper division and
graduate courses, including: (1) 22 units in Theatre Arts, of which at least 18 units must be in the
500 and/or 600 series complet 500 and/or 600 series completed at this University. Required courses:
THEA 696A-B, 621A or 694J, 523 , 426,514 or 542 , and 698 . The graduate student also will include specialized studies and/or course
work in dramatic theory and criticism work in dramatictheory and criticism of the specific courses to be made by the Theatre Arts Graduate Committee and approved by the
Theatre Arts Graduate Advisor);
(2) 14 approved elective units, of which six may be in approved areas related to Theatre Arts. (No more than six units may be in Educa
Student teaching and special methods courses will not apply)
(3) Each student will select an area of specialization and complete a research thesis. The student must enroll in THEA 698 to a maximum
four units and thereatter enroll in XGS 700 until the thesis is complete and approved.
Master of Fine Arts in Theatre Arts
The Master of Fine Arts Degree in Theatre Arts is the terminal degree
offering the minimum professional training deemed necessary by the major Theatre Arts Schools in the college teaching positions in professional theatre of acting, design and technical theatre in and ind usty, stage, theme parks and industr
All students admitted to the MFA program are members of California Repertory Company and are subjec to the operating procedures of the company. Tarmep, Athe protession prepares and performs plays from the canon of international dramatic literature in rotating repertory over
\begin{tabular}{l} 
Criteria \\
Program: \\
\hline
\end{tabular}
(1) Students applying for the MFA program must have completed a achelor's or master's degree in
institution with a 3.0 GPA in upper-division theatre courses, mee University admission requirements
and submit evidence of creative ability and professional intent in one of the following areas: Acting, (2) When an undergraduate program having different requirements than those at CSULB or in some field other than Theatre may be required before the student can be considered for classified status in the degree program. Up to program may be acceptable after program may be acceptable an
review of the faculty evaluation committee and approval by the Dean;
(3) Admission to the program in
Acting requires audition Acting requires audition and in Technical Theatre/Design requires interview and/or submission of original work such as manuscripts, and/or working drawings
(4) In order to obtain full classified status, a committee from the Theatre Arts graduate faculty will evaluate development, and review of performance or portfolio at the enc of the student's first full year of esidence.
dvancement to Candidacy:
(1) Attain fully classified status (2) Remove all undergraduate departmental evaluation and the Dean of the College;
(3) Submit a program for approval by the studient's departmental faculty advisor, the
department chair, the graduate advisor and the Dean of the College Requirements for the Master of
Fine Arts in Theatre Arts:
The MFA degree is a 60 -unit
degree normally requiring full time degree normally requiring full time
residency. Course requirements are arranged according to the following structure depending on the student's choice of option, Acting or
Technical Theatre/Design: Technical Theatre/Design:
Option in Acting (code 7-5847) 60 units to include: 513,514,
\(515,516,517(6), 518(6), 519(6)\), \(515,516,517(6), 518(6), 519(6)\)
\(520 A, B, 521 A, B, 522,564(4)\), \(565(4), 566,614,696 A, B, 699(1)\)

271. Stage Management (3) F,S Management skills required for the profesesional
stage manager.
Course
examines responsibilitites, and function of the stage manager in elation to the director, designerss,
and pertormers. Traditional grading only. (6) hours laboratory.)

\section*{Upper Division}

310A,B. Theatre Arts Activity-
Cast \((1,1) \mathrm{F}, \mathrm{S}\)
Prerequuisite:
Participation in annior class
atanding
proiects; open to Patitication in acting proiects; open to
students cast in Universty-sponsored students. cast in University-sponsoc
productions. 3 or more hours alaboratory.)
312. Applied Voice and Speech or the Actor (3) S
Prevequisite: THEA 112 or equivalent. Further tholuy of vocal tochniquuses for the theatare, pitch, coansion, and imagery. Application o
basiss leanned in 112 to more complicated basicmesteaned
diamats.
316./216. Rehearsal and

Performance (3) F,S
Prerequisiste: THEA 216. Peerformanoe based
class focusuing on the interelationship of actor and direstor. Working with the director on the reative erpocess, interpeting the demands of the director and combining these with the 318. Advanced Scene Study (3) \(F\)

Prerequisites: THEA 214, 216, 316A,B and/or consent of instructor. Intensive scene stucy in
modern dramatio texts. The class is designed to continue and strengithen the process of role development for the actor through scenio
xercises. May be repeated to a maximum of exerclises. May be repeated to
six unit. (6 hours laboratory;)
*321. History of the Theatre and Drama to 1660 (4) F
Prerequisite: THEA 101 or concurrent
enoroliment or consent of instrutor.
Development of anrollment or consent of instructor.
Development of Theatre Atron trim primition
origins to 17th Century. Tradtional grading only.
only
*322. History of the Theatre and Drama Since 1660 (4) S
Prererauisite: THEA 101 or concurent
enrollment or consent of instructor. enrollment of consent of instructor. only.
3241. Western Theatre Today (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: ENGL 100 and upper division status. Current trends, problems and
achievementso of the theatre of the present day
trom an international point of thew, wit trom an international point of view, with an movement of post world War II (Expresesionism, and
325. Theatre and Drama of India
and Southeast Asia (3) F
reerequisites: ENGL 100 and upper division status. Hiltory and social background of the

 the great indian epics and Sansknit dram 326. Theatre and Drama of (3) F,S Prerequisites: ENGL 100 and upper division tatus. History and social background of dance, foike playy, muassical and modeenn, of
production, including puippetry and maskeal Tival. Readidngs, ing tranplatity., of doramatio, ame course as C CT 326
340A,B. Theatre Arts Activity
Preerequisite: Junior class standing.
Participation in technical play production Projectstis specific assignment detemined at
intial meeting: 60 hours minimum paticication nitial meeting: 60 hours minimum participation
ime or maior crew assignment. (3 or more time or maioc crew
hours laboratoy.)
341 Graphics
\({ }^{341 .}\) (3) \(F\) Graphics for the Theatre (3) \(F\)

Ihtroduction to graphic techniques and media
 and light for typical scenic, costume and ighing design. Basic crawing, watercoloro and 342. Advanced Technical Theatre (3) F,S
Preerequisite: THEA 142 or permission of the
instuctor. The investigation of the tols,
 construction and rigging. Supenised practical
application of the techniques through scenic application of the techniques through scenic productions. ( 9 or more hours laboration.) 343. Pattern Drafting I (3) F Prevequiste:: THEA 146 or consent of
instructor. Principals and application of oraping tabric on the drees form and of flat pattern creation trom master patterm blocks. supenision in the practical application of these Traditional grading only. (6) hours labooratory) *346. Costume History for the Stage (3) S
Chronological study of fashions, modes and
mores of maior historical periods and their noresictor maior historical periods and their hours laboratory.)
348. Stage Lighting II (3) S Prerequibie: THEA 148 or equivalent. Theory nechiquatice of stage lighing ding. Labign or produrution assignment on University sponsonn
procuution required. (6 hours laboratory).
361. Improvisations for the Actor (3)

Trorequistre: THEA 114A,B. Intensive
 hacudes exerciseses to the develor. cours in medtiacy, and spontaneity. \(\begin{gathered}\text { directress. } \\ \text { imagination } \\ \text { Traditional }\end{gathered}\) grading only. (t hours laboratory.) 34. Stage Combat (3) Prerequisitit: THEA 262 or consent of
Thetructor. A practical study of unamme ombat for the stactical study of unarmed
caterety, and application of combat skilhique to sately, and application of combat skills to the
acting procos. Tradtional grading only. (6
hours laboratory). 374. Fundamentals of Directing rerequiste: Trerequisite: THEA 101 or consent of
 sing contemporary tealastio playes st dovelop totrdiricetor communication skills. Intensin scene w
\(\stackrel{3}{*}\)
S
(
Prerequasite: THEA 374. Intensine work using dvanced script analysis and an approach to to he challenges of strie. Introcuction to and make up designers. Instensive scene work with student actors focussing on rehearsal 380. Playwriting (3) \(F\) Creative writing for the stage Study of
character, Concept, theme, dialogue and
85. Stage Make-Up II (3) S
rerequisist: THEA 144 or equivalen ainting techniques and makeup endering. Studentis must be clean shaven due thatical application of thesese eliements in practical application of these elements in
Uniessity sponsored procuctions. ( 6 hours laboratory.)
10A,B. Theatre Arts Activity
Cast \((1,1)\) F, \(S\)
Srerequisite: \(\begin{aligned} & \text { Senior class } \\ & \text { Paticiciation in actanding } \\ & \text { acting proiects; }\end{aligned}\) open
 productions. (3 or more hours laboration.) 413. Film/Video Acting (3) F,S Pererequisite: THEA 318 or consent of instructor.
Actitg techniques required for the sylistic
tange and variety of film and television scciots. ange and varity of film and television scripts.
Video recording and playback of scenes and fimic acting exercisies to oadiust acting skills to hese media
14. Period Scene Study (3) F,S Preequiste: 318 and/or consent of instructo.
 shakespeoare, Comedy of Manners. Analyis a
background, human behavior. May be
repeated toa maximum of six unts. Tradtional
grading only
F15. Audition Techniques (3)


Prerequisite: THEA 318 or consent of instructor. This course is designed tonseantuaint
the actor with auditioning skills and practical business information nececseary for acting
professionally. Topice incluce: picture, lesume, interivew, audition, agent, casaring,
director,
unions, contracts, iob market. and areer strategies. Traditional grading only. ( 6
hours laboratory.)
4211. Classical Drama (3) \(F\) Prerequisite: ENGL 100 and upper division
status, one course in literature or Theatre Atse An interdiciciplinary examination of maior plays of the Greeks and the Romans, osth as Tinverution" of the drama as an art form and the development of tragedy and comedy.
 4221. Renaissance Theatre and Drama (3) \(F\)
Preerequiste: ENGL 100 and upper division
status, one course in literature or Theatre Arts. An intercisiocilinary study of the achievements, problems, themes and trends of Renaissance drama in tuay, Spain, France, and England
between 1350 and 11550 . Maiop plays of the period are read in translation. Texts are treated
poth as literature and theatre. (Same course as poth as iliera
C.T. 4221 )
426. Dramatic Theory and

Criticism (3) F,S
Prerequisite: THEA 101 or consent of
instuctor. Study of the maior theories of nstructor. Study of the maior theories of
dramatic iterature and performance. Analysio dramatic works from the standpoint of gente,
440A,B. Theatre Arts
Prerequisiste: Senior class standing Prerequasife: Senior class standing.
Participation in technical play production
proectain
 time or major crew assignment. (3 or more hours laboratory.)
441/581. Scenographic
. 1
A stucy of the drating techniques used to sot on stage. Includes both tratitional and computer aided design and drating tool
442./540. Stage Property
Construction (3) S

Prerequisite: THEA 342 or consent of
instructr. Application of both basic and advanced conopepts of stage property, set ressing and furniture oonstruction. Study of n-tradtional materials and construction hethods. (6 hours laboratory.)
443./582. Stage Make-Up III (3) S

 rendoring terchiquees. Stadents must be
clean-haver nue to the nature ot this course. Superisison in the practical application of these
elements in Univeraty sponsored productione ( \(\theta\) or more hours laboratory.)
444. Scene Design I (3) S

Prerequisite: THEA 342 or consent of
instructor. Development of scene design instructor. Development of scone deisign
through script analysis and understanding through script lanaysic and understanding of
space, fomm, ine. colot, exture and mood.
Planning and
 rendering and model for the
production. ( 6 hours laboratory.)
445./585. Scene Design II (3) S

Prerequisite: THEA 444 or consent o instructor. Advancod projects in sonene dosesign
for the multi-set show. Consideration of stylistio tor the mutis-set show. Considicatiton of stylistio
unity shititing problems and current trenss and
approache unity, shitithy Probiems a nd current tuends and
aproaches. Rendering, model development and presentation for the play, musical, opera
and ballet. (6 hours laboratory.) F46./546. Costume Design I (3)
Prerequisti: THEA 101 or consent of the through character and scriot analysis and understanding of fine, space, color, and texture. Planning and presentation of the costume
rendering. (6 hours laboratory.)
447./587. Cos

Prerequisite: THEA 146 or equivalent. Advanced technical projects in in costume accessory construction. Supenision in the
pracaitaal application of these elements in Practical application of these elements in
University sponsored productions. (6 hours
laboratory.)
448./548. Stage Lighting Design
(3) \(F\). 448 . Stage Lighting Design
( Prerequiste: THEA 148. Techniques of Preerequiste: ThEA 1 Th8, Techiques of
deigiging lighting for various stage ormes
creative planning and proiection of designs for creative planning and projection of designs for
spepific productions.
(9) or more hours 449./549. Sound Design for the Theatre (3)
Introduction to the scope, tols, materials and
practices of sound in the theatre today. 450./642 Seminar in theatre Decor (3) \(F\). Prerequisites: Minimum of 9 units of work in
theatre history, design and costuming or consent of instructor. Intensive study of the
historical aspects of stage decoration, texilies and properties.
451. Computer Applications for
the Theatre (3) F the Theatre (3) F
lie use of computers in the process of scenico
lighting, and costume design and the lighting, and costume design and the
application of general purpose software in the
management and operation of performing atto
452. Writing for the Theatre Arts (3) F,S

Writing non-fitition prose, with emphaste on
particulur efoutures of witing in the Theatre Ats.
Traditional grading only. (6 hours laborator.) particular features of witing in the Theatre Art.
Traditional grading only. ( ( hourrs laboratory.)
453./586. Pattern Drafting II (3) \(\underset{F}{\text { 453./586. Pattern Drafting II (3) }}\)
Prereauisite: THEA 343 or equivalent. Analysio
of the structure and patterns of clothing from of the structure and patterns of clathing from
various historical periods. Reproduction of these garments for the theatre using draping
and flat patten techniques. Supenision in the and flat pattern techniques. Supenision in the
practical application of these elements in practical application of theses elements in
Univerity sponsoded proudutions. (6 hour
laboratory) Tractitional gradingo only. laboratory.) Traditional grading only. 454./554. Fabric Dyeing \&
Painting (3) S, Odd Years

Prevequisite: Consent of Instructor. Exploration
and practical application of the technicues Prerequisire: Consent of instructor. Exploration
and paactioal application of the tochnicues of
painting ond paining and dyeing textiles. Offers a wide
range of creative possibitites to the theatrica designet. Tradaditional prading only. (o hours laboraton,
455./555. Metal Fabrication for
the Stage (3) \(S\) the Stage (3) S
Prereauisite: Consent of instructor. A study of
metaluorking for the designer and techicicin meetaworking Tor the designer and tecchnician in
the theatre. Tradtional gracing only. (6 hours
taboratory) 456./556. Costume Design II (3) Prere Prerequisite: \({ }^{\text {THEA }} 446\) or equivalent.
Development of skills in research, interpetation,
 Probiems in fabric rendering, developing style
and integrating and integrating multiple sources in design.
hours laboratory.) Tradtional grading only. (3) S . Projection Workshop (3)

Prerequisise: Consent of instructor. A study
and application of new and traditional tech iqueses of sarenio and lighting projection to the stage.
laboratory:
4istory ( 3 ) History (3) S every third year Prerequisite: THEA 346 or equivient. Detailed
examination of historical costume periods. examination of historical costume periods sources. Traditional grading only. 459./544. Visual Conceptualization for the
Theatre (3) F every third Theatre (3) F every third year Presequisite: THEA 341 and/or consent of the
instructor Thechniques in visual
conceptualiation tor conceptualization for the stage, costume
makeup and lighting designet. makeup and lighting designes. Emphasis on
exploratorony apporoach to resentation. media
and rapid-visualization techniuues Tradtional and rapid-aisualization terchineves.
grading only. ( 6 hours laboratory.) grading only. (6 hours laboratory.)
\(* 462\). Intermediate Movement for the Actor (3) S
Presequiste: THEA 262 or consent of
instructor. Further training in movement to
explore and develop physical characterization
or a role. Coursework inductes individual moverent. problem solinin. improviastion,
scenes and mondogues. (6 hours laborator.) 464./584. Scene Painting (3) F Prerequisist: THEA 142 or consent of
instructor. Theatical scene painting instructor. Theatrical scone painting
techriques.matereials and methods through specialized technical proijects. Superisised
 total of 6 units. Traditic
more hours abocratory.)
471. Stage Management Crew
(3) F,S

Prerequisise: THEA 271 andor consent of
instructor. Stage management of a Unversity Instuctor. Stage management of a University
Theatre or a CalRep procuction. Student will be reeponsibibe for all stage management tunctions involved with the mounting and
pertomance of a production. He or she will pork closely with the dirioctor, the cast, the desigioners and the theatre managementst staff)
Traditional grading only. (6 hours laboratory.)
474. Advanced Play Direction (3) Prerequiste: THEA 374 and 375 . Directing a
one act lay or one act of a play. Preoaration, Prerequiste. play on one act of of play. Preparation,
ouvdition, reheearal, coordination with designers, and responsibility for a fully- mounted and responsibility for a tully- mountied
Univerity somsored pproutcon. MMy be
repeatitd for a maximum of 6 unita. (6 hours repeated for a
laboratory.)
\({ }^{*}\) F,S
F,S Theatre Management (3)
Examination of administration, management
and promotion of organization. Practical applicatuiting requireation in University-sponsocre
hours laboratory.)
*480. Advanced Playwriting (3) S

Prerequisise: THEA 380 or consent of instructor
Advanced: creative witing for the stage Emphasis on an examination and creation of alternate theatre torms: sciipts for
improvisation and/or non-matrix material; one of the Absurdist styles: poltical theatie material suited to environmental theatre
Selection material to be procucuced as part of an Solection material to be produced as part of an
annual Sping Festival of thlernate Theatre. *482. Three-Dimensional Makeup (3)
 instructor. Fabrication of theatrical
three-dimensional make-up prosthetic picoses
coloring and painting techniques. (6 hours colocing and painting tecchniques. (6 hours
laboratory)
484. Wigmaking (3)

Prerequisise: THEA 335 or permission of
instructor. Fabrication and styling of theartical
 485. Mask Making (3)
485. Mask Making (3)

Crat of maskmaking in a wide variety of
materials ranging trom paper to vacuum-form maletials ranging trom paper to vacuum-tom
plastics. Tradtional grading only. 6 hours

\section*{490./590. Special Topics
Theatre Arts (1-3) F,S}

Prearequiste: Consent of instructor. Topics of Trerequiste: Consent of instructor. Toplise of
current interest in Theate Atros.
intensive study. May bee taken for maximum of intensive study. May be taken for maximum of
nine units. Topics will be announced in the hine units. Topicse wi.
*498. Special Studies in Theatre Arts (3) F,S
Preerequiste: Consent of instrutor and department chairperson. Independunt projects and
research of acvanced nature in the area of heatre Ats under foculty superisision. Uimestod io six units in any one area. Area will be desig-.
hated by leter at time of registration as (a)

 history, (k) thearare minticis, (i) movement. (m)
makeup, (n) lighting (i) (p) stage management. Graduate Division
512. Advanced Voice for the Actor (1-6) F,S
Preerauiste: Acceptance into the MFA program. Emphasis on the contemporary
lechiques used lor speech and vocal
procuution. Individual sudy
 propection,
laboraton:)
513. Acting in Repertory I (3)

P,S
Preerequiste: Acceptance into the MFA program. Explotation of the acting process as
demended by a vaiety of scripts and
situations. (6 hours laboraton) situations. (6 hours labocatory.)
514. History and Theory of
Acting (3) S

Preog wite: Minim
Prerequiuite: Minimum of size units of acting or
consent tof instructor. Selected areas of sucy in the history, theories and articicism of acting. 515. Advanced Acting Process (-6) F Program. Variable areas and topics of study within the acting proceoss dopending ypon the needs of the performer. May be repeated for a 516. Audition Techniques (3) \(\mathrm{S}, \mathrm{Odd}\) Years

Prerequisises: THEA A14AAB and 214 or consent of instructo. This course is designed to acquaint the strudent with auditioning materials are ousest speakers, preparation of resume and
tapings of scenes, May be repeated for a total tapings of scenes, May be repeated for a total
of six units. Tradtional grading only. ( 6 hours aboratory.
517. Repertory Theatre I (3) F,S Prerequiste: Acceptance into the MFA
Program. Preparation, rehearsads and public Program. Preparation, reteorasals and publico
pertommanes of seleceted plays in Calitionia Repentory Company. Tradtional grading only.
May be repeated for a maximum of 6 units. (6) hours labooratory):
518. Repertory Theatre II (3) F,S Prerequisite: Acceptance into the MFA Program. Preparation, rehearsals and publio Mepertory Compary. Traational gradingo only. May be repeated fo
519. Repertory Theatre III (3)

Prerequisite: Accoptanco into the MFA
Program. Preparation, rehearsals and publio Program. Preparation, rehearsais and public
Performances of eselected plays in Califoria Repertory Compony. Traditional grading only.
May bepeeated for a maximum of 6 units. ( 6 Mours labopoatory.)
520A. Voice I (2) F
Prerequisite: Accoptance into the MFA Program. Laying the groundwork in Voice and
Speech techniques for professional actors. speach techniquess for protessional actors.
Tratitional grading only. (4 hours laboratory.). 520B. Voice I (2) S
Prerequisites: Acceptance into MFA Program.
Application of Vocal technique into various Appication of Vocal technique into various
 ours laboratory.)
521A. Voice II (2) F
Prerequisites: Acceptance into MFA Progrm.
Exploration of extensive vocal variety and expresivenenses, uxing the four components on vice:: qualify, torce, tempo, pitch. Expanding
he boundaries. Traditional grading only. (4 hours laboratory.)
521 B . Voice II (2) S
Prerequisites: Acceptance into the MFA Program. Analysis and development of dialects
and accents for performance. Tradtional grading only. (4 hours laboratory.)
522. Voice III (2) F.S

Preerequisites: Acceptance into MFA Program.
Advanced stucy of dialects. Exploration of Actanced stuady ic ialectis. Exploration of
microphone techniques. Traditional grading only. (4 hours laboratory.) 523. Contemporary Theatre (3) F Intensive study of a maiar area of
contemporay theatre. Problims of modern movements in in playwerting, proboms of of modion, acting. design and theatre philosophy.
540./442. Stage Property

Prerequisite: THEA 342 or consent of advancoed concopts of stage property, set dressing and furniture construction. Stucy of non-traditional materials and construction nethods. (6 hours laboratory.)
541. Portfolio Development (3) S A study of the content and presentation of the
deosigner's porttolio, resume and cover letter. Acquaints the designertechncician with intormation. (6 hours laboratoricy)
542. History and Theory of
Design for the Theatre

Ciritioal exploration of the evolution of diesign
theor and tsylies through historical evidence tom the Renaissance to the present. 543./458. Advanced Costume
History (3) S every third year Prereatisite: THEA 346 or equivalent. Detailed
examination of histrical costume periods, stylies, and accessories for the theatre designer. laboratory.) Traditional grading only. 544./459. Visual

Theatre (3) F every third
Theatre (3) \(F\) every third year
Peserfuiste: THEA 341 and/or consent of the
instrutor: Techniques in visual concoptualzation for the stage, costume,
makeup and lighting designer. Emphasis on makeup and lighting designer. Emphasis on
exploratory approach to presentation, media and rapid-visualization techniaues. (6 hour 546/446. Costume Design I
F,S
Prerequisite: THEA 101 or consent of the through character and scriot analysis and understanding of line, space, color, and texture; planning and preeentation of
rendering. (6 hours laboratory.)
548./448. Stage Lighting Design
(3) \(F\)
 creative planning and proijection of deosigns or or
specific productions.
(or speosific proct
laboratory.
549./449. Sound Design for the Theatre (3)
Introduction to the scope, tools, materials and
practices of sound in the theatre today.
554./454. Fabric Dyeing \& Painting (3) S odd years Prerequisite: : onsent of instructor. Exploation
and practical application of the techniques of painting and dyeing texties. Offers a wide
range of creative possibilities to the theatical designer. . (16) hours laboratiory.) The Tradtional
gracing only.
555./455. Metal Fabrication for
the Stage (3) S
ge (3) S
Prerequisire. Consent of instructor. A stucy of
metaluorking for the designer and technician in
the thearte. ( 6 hours laboratory) Tradtional
grading only.
\({ }^{556}\)./456. Pretequisise: THEA 446 or equivient.
Development of skils in research, interprevetation.
conceptualization, and visual communication. Problems in fabric rendering, developoing style and integrating muttiple sources in design.

\section*{(3)} Prerequiste: Consent of instructor. A Astudy
and
appocication of new and traditional techniques of scenic and lighting projection for
the stage. (6 hours laboratory)) Traditional the stage.
564A. Movement I (3) S
Prerequiste: Acceptance by audition into MFA
Progam. Practical Program. Practical stucy in movemeny
fundamentals, body mechanics, and foucdamentalas, body mechanics, and
nonverbal communication. Exporoation o
movement as an actor movement as an actor's tool to oald in the acting
processs. (4 hours laboratory) 564B. Movement I (2) S
Prerequiste: Acceptance into the MFA
Program. Analytical and practical exploration of Program. Anayticial and practical explocation of
movement principles of weicht.t. space, time and energy and their application to the acting 5654. (Mowre laboratory.)

Pas. Movement (2) F PAerequisite: Accoptance into MFA Program.
A pactiaca stuy of unarmed combent for the
stage. Coursework cover techiqu, stage. Coursew ork covers techiquae, safety,
coreography, and application to the acting
process induding the process, indudung the performanco of scenes
that ind lude combat. 4 hours laboratoy) 565B. Movement II (2) S Preerequistit: Acceptance into MFA Program.
A practical stucy of armed combat for the A practical stucy of armed combat for the
stage, including foils, eppes, broadswords,
canes. quarterstatifs, rapiers and dagese
 566. Movement III (2) F,S Pretequisite: Acceptance into MFA Program,
Historical and practical study of movement styles fiom salctical study of movement thatrical periods
Coursework covers social dancing. movement manners, and the handing of period costumes props, and accessories. (4 hours laboratory.) \(\underset{\text { F,S }}{570 .}\). Production Practicum (2-3) F,S
Prerequiste: Consent of instructor. May be
repeated for a total of 6 units. Advanced repeated for a total of 6 units. Advancec
indiviual projects and research for technician/dosigner under appopopiate faculty
superisisio. Practical experienco in University sponsocred productions. ( \((-9\) or more hours
laborator) 581./441.
581./441. Scenographic
Techniques (3)
\(F\)

Techniques (3)
A study of the drating techniques used to
transiate the deosigners vision to the finished set on stage. Includeses botht traditional and
computer aided design and dratting tools. 582./443. Stage Make-Up III (3)
\(\qquad\) Advancuised: THEA 385 or equivalent. characterization make-up techniques for rendering techniques. stylie, Sudentsign must be Supenision in the practical applicication of thesee (9or more hours laboratory)
584./464. Scene Painting (3) \(F\) Theatical scene painting tecchniques, materials
and methods through specialized technical and methods through spocialized technical
projecto. Superised paint crew assignment
 May be repeated for a total of 6 unite
Traditional grading only. (9 or morese hours
laboraton) 585./445. Scene Design II (3) Prerequiste: THEA 444 or consent of
instuctor. Projects in scene design for the mutti-set show. Consideration of stylistic unity,
shiting problems and current tiendo shitition probblems and current trends and
approaches. Rendering. model development and presentation for the play, musicilal, operana and ballet. (6 hours laboratory) 586./453. Pattern Drafting II (3) Prerequisite: THEA 343 or equivalent. Analysis
of the structure and patterns of clothing from ot the structure and patterns of liothing trom
vairius histrical periricos. Repprocuction of
these these garments for the theatre using craping
and flat pattern techniques. Supenision in the practical application of these elements in
Universty sponsored productions. Tradtional University sponsored productions.
grading only. ( 8 hours laboratory.) 587./447. Costume Crafts II (3) S Even Years
Preserquiste: Advanced tech hical propects in
costume acceasory yoonstrution. Superision costume accossory construction. Superision
inthe paratiac appliation of these elements in
Universty sponsoced prod Unine pratitical application of these elemements in
laboratoy.) F,S Prerequiste: Consent of instructor, Advaneed Pierequiste: Consent of instructor. Advanceed
design projets and concopts with faculty
superision. supenion. no more than six units in in all areas in any
one seme

 lighting.
614. Advanced Period Scene Study (3) F,S
Prerequisite: Acceptanco by audition into MFA
program. Acting in Shatespeat program. Acting in Shakespeare and
advancod scene study from selected theatical
pericter
 include language, background, hu
behavior.
621A,B. Seminar in Theatre
History and Dramatic Literature \(\underset{(3,3)}{ }\) History and Dramatic Literature \((3,3) \mathrm{S}\)
Preetequisite: THEA 321 or consent of instructor.
Itinense sutudy of one maior p playwight or
period in the history of the theatre intensive study of one maior play
period in the history of the thearte. 642./450. Seminar in Theatre Decor (3) F
Prerequisistes: Minimum of 9 units of work in
theatre history, design and costuming theatre history, design and costuming or
consent of instructor. Intensive study of the historical aspects of stage deccration, textiles
656. Costume Design III (3) S Prerequiste: Consont of instruc Dovelopment of skills in costume design for the
musical, modern dance, ballet and opera. ( 6 886. Pattern Drafting III (3) F Reesearch and analysis of historical tailoring
echniques. Projects in tradtional hand and lechniques. Projects in traditional hand and
contemporary machine tailoring methods. Superision in the practical application of these diements in Un Uniersity sponsored productions.
(shours laboratory) Traditional grading only. 694. Advanced Studies in here Ars (3)
Prerequisite: Consent of instructor and
dopartment chairperson. Advanced individual doparment charppreson. Accranoed individual Theatre Arts specialization. Limited to three
units in any one area per semester and no
 of nine units in any one area. Areas will be
designated by letter at time of registration as
(a) acting. (o) directing. (c) Pootumes, (o)
 theatre management, (1) theatre history, (K) theatre o
lighting.

996A. Research Aesthetics and
Conceptualization I (3) F
Resourcos, techniques and metheds of pplies to the creative act.
Sicerestualization II (3) S
study and practical application of research and
 production team concoeptualization projects of Production approacheses tor the actor, directar
98. MA Thesis (1-4) FS

Prerequisite: Advancement to candidacy and
consent of department chair. Pry.
completion and submission of thesis.
699. MFA Thesis Project (1-6) F,S Prerequiste: Advancement to candidacy and
Consent of dieparment chair.
Planning. coneent of department chair. Planning.
preparation and completion of thesis project
ielated to feld of specialization.


Dean: Robert H. Deans Acting Associate Dean: David A. Horne
Dean's Secretary: Diane Barbee School Office: SBA 200 Telephone: 985-5306 Administrative
Lynn Allison
Budget Analyst: Diane Patterson Admissions and Advising Center: SBA 105; (310) 985-4514; oordinator: Carol Grutzmacher elephone: (310) 985-179 Acting Coordinator: Jane Staab international Business Program:
SBA 414: (310) 985-4565: Director: Wendell \(\mathrm{H} . \mathrm{McCulloch} \mathrm{Jr}\) Student Life and Development: SBA 210; ( 310 ) 985-8600
Director: Stuart Farber rector: Stuart Farber Mission
The School of Business Administration seeks to prepare its careers in business. As each graduate pursues a successful career, it is will be accepted for maintaining and enhancing the quality of the society which business and the individual
The Schoo
The School of Business Administration has five Departments Accountancy, Finance, Real Estate and Law, Human Resources Management and Management,
Information Systems and Marketing Each is responsible for administering one or more of the degre
Accreditation:
The School of Business and graduate programs of study. Both programs are nationally accredited by the American Assembly AACSB) and may lead to completion of the following:

Bachelor of Science in usiness Administration Specialization may be made in
choice of the following areas, hereatter referred to in this catalog as Options:
Accountancy; Administrative Systems; Business Computer
Methods; Finance; Real Estate and -aw; Human Resources Management; International Business Management; Marketing; \({ }^{\text {; }}\) Meration
Management; Quantitative Methods. See following pages for more information.)
Students who complete and
formally declare two options may be egarded as having completed a double major, and appropriate notation can be made on the
transcript. However, no more than sixty percent of the total units completed can be in cours
by the School of Business Ad the School of
Minors in Business Administration The School of Business
Administration has developed minors available to any non-business sues
Significant preparation for business employment may be developed through completion of an organize program from one of the following
areas: Administrative Systems, areas: Administrative Systers,
Human Resources Manageme Human Resources Management,
Marketing, Quantitative Methods. (Refer to the sectio
more information.)
Master of Business Administration
Specialization may be made in one of the following areas: Busines Finance, Human Resources Management, Management,
Marketing, Engineering Syst (Refer to the following pages for mor information.)
Student Services
Academic Advising and
Ad
Administration maintains an academic advising and admissions office in SB Room 105 for undergraduate
students. There is an office for MBA students. There is an office for MBA
students in SBA 231. Advisors are available in these offices throughout
the semester to assist students with the semester to assist students win requirement information
Financial Assistance:
Financial assistance is provided
business students through the business students through the
University Financial Aid Office. That office administers funds made
available through the federal and state available through the federal and stat governments and through certain
private sources. Awards are made to students who demonstrate a need for
assistance with educational expenses assistance with educational exp
Selected scholarships and Selected scholarships and
fellowships within the School o Business Administration are publicized. Consult the Director of
Student Life and Development for Student Life
information
Achievement Awards:
Beta Gamma Sigma "Outstanding Student in Business" - Applications
usually due April 1. Award is usually due April 1. Award is presented in eary May It at he annual
Beta Gamma Sigma Instalation and Beanquet.
Outstanding Graduating Senior award is presented at the May commencement ceremony, and the recipient is also honored at an Alumn Association banquet in June. Wall Street Journal Award (Ba
on GPA) - Applications from graduating seniors are usually due March 1. The ward is presented at Student Organizations:

Organizations: Numerous organizations are
available for business students. They include: American Marketing Association, Beta Alpha
Psi/Accounting Society, Personnel
and Industrial Relations Association, Psi/A Acounting Society, Personnel
and Industrial Relations Association, the Data Processing Management Association, The Society for the
Advancement of Management an Advancement of Management and
Management Information Systems, Management Information Systems,
Beta Gamma Sigma, Black Business Students Association, Delta Sigma Hispanic Students in Business and
Economics, Law Society, Long Beach Entrepreneur Sociecty. National Association of Black Accountants,
Real Estate Society, International Association of Students in Economics and Commerce (AlESEC), Financia and Commerce (AIESEC)

Iternational Association of Business Communicators.
The Associated Business Students
Organization Council is a facilitating and coordinating organizization for ABSOC is composed of elected officers from each organization. hrough these student organization each year business students are
provided opportunity to meet epresentatives of business and industry. Prominent executives are,
addition, invited to the campus for dialogue with business students. ABSOC and the Associated ngineering Student Body co-sponso Night." a spring job fair which draw over 60 compananies and several thousand students.
Seta Gamma Sigma: Beta Gamma Wisconsin in 1907 as a business honor society, is the only honor Assembly of Collegiate Schools of Business. Membership is available to business students at California State
University, Long Beach only becaus Universty, Long Beach only because
is accredited by AACSB.
Election to membership in Beta Gamma Sigma is the highest
scholastic honor that a student in business administration can attain. To
be eligible for membership at CSULB be eligible for membership at CSULB percent of their junior class or the upper seven percent of their senior
Class, or rank in the upper ten percen
of those receiving masters degrees in of those receiving mastess administration.
A student organization, The MBA Student Association, has bee graduate business students California State University, Long Beach. The MBA Student Association promotes protessional and social
contact among the students and the organizations that comprise the Southern California metro region Every MBA student is eligible for membership and is ercouraged to
take an active leadership role to enhance personal and association growth.

\section*{Computer a
Technology}

Students in the degree program develop basic undegrstandings and competencies relating to information processitg, the application of
computers in business and government, management information systems concepts, and computer
programming. A computer laboratory
facility is maintained within the School acility is maintained within the
to provide computer access for
business students
business students.
General Policies and Regulations Specific University and School
requirements are detailed in variou sections of this catalog. Every student must develop complete familiarity and understanding of the egulations and requirements by program will be determined. (Also see pertinent section regarding
University General Regulations and University Ges
Procedures).
Impaction:
The School of Business Administration has been declared mpacted at the upper division eve
by the California State University's Chancellor's Office. To be accepted as an Upper Division Business Maio 400 level business courses, a stude must meet supplementary admissions criteria. Application for admissions he University as an Upper Division
Business maior should be filed between November 1st and 30th for admission for the Fall semester, and Spring semester.
Undergraduate students who indicate an interest in a Business maior on their application to the
University will be admitted as pre-business majors if they have not met the supplementary admission outside the required dates Exception to the filing deates. only be made if it is determined that here is space available for addition Continu Continuing CSULB students must emester before becoming eligible for change to the Upper Division change to an Upper Division Business major must file a request for valuation at the SBA Admissions and he student expects to enroll in Uppe Division Business courses. A
complete set of transcripts of all complete set of transcripts of all completed at CSULLB, must be filed with the Evaluation Request. Students may obtain the form and
urther information at SBA Room For the 1992-93 academic year the ollowing supplementary criteria will be A. Completion of 56 semester un
of college or university level work
acceptable toward a baccalaureate
degree at CSULB
listed below under (1) and (2a) unde the Requirements for the Bachelor of Science in
C. Satisfactory cumulative GPA all collegege and university level work accepted at CSULB. Students with a
GPA below 2.40 will not be admed GPA below 2.40 will not be admitted
D. Passage of the CSULB Writing Proficiency Examination. E. California residency. A limited
number of International Visa Students number of International Visa Students
will be admitted if they have a TOEFL score of 550 or higher.
Conditional Enrollment:
Students who meet all sther criteria for admission to the Business major
but who have not yet completed one but who have not yet completed one
or two of the eight lower division core courses, and/or have not yet passed the Writing Proficiency Examination
may be granted one semester of may be granted one semester of
conditional enrollment in upper division Business courses, subject to
the following rules and restrictions: ing rules and restrictio At the end of the conditional
semester students must have: 1) Completed all of the 8 low division required-courses 2) Passed the Writing Proficiency no
later than Februar for Spring and later than February
September for Fall.
2) Maintained a cumulative GPA of 2.4 or better

Students who do not remove all semester will be returned to semester will be returned to
Pre-Business status, and mus reapply for admission to the Business major when all requirements for majo
standing have been satistied tanding have been satisfied. Fhould consult the School of Busines Administration Admissions and Enrollment:
Disqualified students are not permitted to enroll in any upper
division courses in the School of Business Administration. who are required to take other majors courses, and business minors register for classes only if they have
56 units of college or university credit accepted by CSULB for
accalaureate credit
baccalaureate credit. These students also need to complete the designated rerequisite courses.
is allowed only on a space available
basis in the following circumstances: 1) student is in good standing
another AACSB institution or 2) Student would otherwise be qualified to be accepted as an Upper Division
Business major and has not been Business maj
disqualified.
Concurrent Enrollment / Transfer of Credit:
Undergraduate students who wish
to take course work in an mity to take course work in a community
college or other university or college to meet CSULB School of Business
Administration or General Education Administration or General Education requirements must carefuly obsente As noted below under Requirements for the Bachelor of Science in courses must be taken at CSULB and can not be transferred from another taken at other schools may be transferred for credit at CSULEB if a grade of 'C' or better was earned categories of schoools. Courses taken
at \(a\) business school which i AACSB at a business school which is AACSB accredited are generally acceptable
for transfer credit at CSULB. Course for transfer credit at CSULB. Course
to be taken at non-accredited schoo to be taken at non-accredited schoos
must have ACSB prior approval by the dean's designe
Grading Policy:
Business majors and minors mav grading option for courses required by the School of Business Administration in their program. No course taken
Creditt No-Credit grading will be accepted to fulfill a Business requirement.

\section*{Undergraduate}

\section*{Requirements:}

Requirements for the Bachelor of

\section*{Science in Busin
Administration}

In order to graduate with a business Iegree from CSULB, a student must complete a minimum of 30 units her upper division. Twelve of the upper division units must be in business. A minimum of 124 units will be equired for all options in exception of Accountancy, which requires a minimum of 128 units. At least 12 upper division units in business, including MGMT 42
must be completed at CSULB. (1) Lower Division Courses ACCT 201, ECON 201. ECON 202 FIN 222, II 240, MATH 114,

Accountancy majors must take PHIL \({ }^{160 .}\) 170.)
(2) (a) Upper Division Core Surses: 300 , ACCT 310,
SBA (Accountancy majors must take
ACCT 320 instead of ACT 310 ), ECON 333, FIN 324, FIN 362,
HRM 360, MGMT 300, MKTG 300 IS 310, I 301 , (Finance and
Marketing majors must take IS 305 Marketing majors !
instead of IS 301 ).
\[
\begin{aligned}
& \text { (b) The capstone course, MGMT } \\
& 425 \text { (Three units). This course } \\
& \text { must be taken at CSULB as a }
\end{aligned}
\]
\[
\begin{aligned}
& \text { senior and after all of the Upper } \\
& \text { Division Core Courses have been }
\end{aligned}
\]
\[
\begin{aligned}
& \text { completed. } \\
& \text { (c) Completio }
\end{aligned}
\]
\[
\begin{aligned}
& \text { completed. } \\
& \text { (c) Completion of at least one } \\
& \text { option (15-24 units); select from }
\end{aligned}
\]
\[
\begin{aligned}
& \text { option (15-24 units); select } \\
& \text { the options listed below. } \\
& \text { (3) Elective units to make up }
\end{aligned}
\]
\[
\begin{aligned}
& \text { the options listed below. } \\
& \text { (3) Electuv units to make the } \\
& \text { otal } 124 \text { units required for the degre }
\end{aligned}
\]
\[
\begin{aligned}
& \text { total Elecune unit required for the degree } \\
& \text { (128 for Accountancy majors.) Each }
\end{aligned}
\]
\[
\begin{aligned}
& \text { (128 for Accountancy majoss.) E } \\
& \text { sudent is encouraged to select } \\
& \text { electives for expansion of knowle }
\end{aligned}
\]
\[
\begin{aligned}
& \text { student is encouraged to select } \\
& \text { electives for expansion of knowledge } \\
& \text { and intellectual interests as well as for }
\end{aligned}
\]
\[
\begin{aligned}
& \text { electives lor expansients as well as to } \\
& \text { and intelectual interest } \\
& \text { preparation for business employmen }
\end{aligned}
\]

The School of Business
Administration has five departments Accountancy; Finance, Real Est Management and Management;
Information Systems; and Marketing

\section*{The Accountancy Department}

\section*{Option in Accounta}
code 3-2705)
The Accountancy curriculum is
designed to meet the general designed to meet the general
educational goals of those entering
the accounting profession the accounting profession. It satisfies the requirements established by the
American Institute of Certified Publio Accountants and may be used to meet educational requirements for the
California CPA Certificate. The California CPA Certificate. The
accounting program develops an accounting program develops an
understanding of an organization's
management information ysstem on a management information system on a
broad base of general education and broad base of general education and
business administration courses. The program is carefully planned and rigorous, building the conceptual,
analytical, and communication skills necessary to succeed in the accounting protession. It prepares
students for careers in all areas of students for careers in all areas of accounting, including the necessay examinations

Accountancy Option Requirements:
Accountancy Option Requirements:
(2) ACCT 300B
(3) ACCT 400 or 410
(4) ACCT 450
(5) ACCT 470 or 475
(6) ACCT 480
(7) One course from ANTH, PSY,
or SOC

\section*{The Information Systems} Department
The Information Systems Department administers options in Administrative Systems, Business Methods.
Option in Administrative Systems (code 3-2720) The option prepares its majors for positions of responsibility as administrative managers and
managers of office services in musiness, industry, education and government. It is designed to give an understanding of the problems of administrative management and a perception of the principles to solve these problems. The program
includes a substantial number of competencies measured by the Certified Administrative Manager examination in the Ad
Management Society. Requirements:
Administrative Systems Option
Requirements:
(1) IS 331
(2) IS 333
(2) IS 333
(3) IS 365
(4) IS 425
(5) IS 432

Option in Business Computer Option in Business Com
Methods (code 3-2725)
This option prepares students for careers in Management information Systems in business, education and
government. Emphasis is on system information analysis and resources. Fundamentals of business informatio systems, computer hardware, system
software, telecommunications and decision support systems are included to provide the student a solid foundation in this rapidly changing
field. The curriculum is based on both tien DPMA and ACM models. Electives which students in this option
will find especially important are IS will find especially
\begin{tabular}{|c|c|c|}
\hline Business Option Req & Option in Finance, Real Esta and Law Requirements: & approaches to human resources management, (4) to develop aspiring leaders with a strong sense of ethics \\
\hline & & \\
\hline IS 380 & men & \\
\hline IS 385 & & \\
\hline IS & & \\
\hline & & thinking, creative problem solving, \\
\hline Option in Quantitative Methods (code 3-2772) & \multirow[t]{2}{*}{\begin{tabular}{l}
Concentration); \\
(4) Two courses in one of the following concentrations;
\end{tabular}} & and personal development to maners' pertormance in a \\
\hline \multirow[t]{38}{*}{\begin{tabular}{l}
This option leads toward quantitatively oriented careers in business, industrial, educational and government organizations. It provides a foundation for problem solving and decision making using the methods of operations research, business statistics, and computer technology in such positions as operations research analyst, statistical analyst, computer analyst, and business researcher. Emphasis is placed upon concepts and application to the business environment, rather than upon mathematical development theory. Quantitative Methods Option Requirements: \\
(1) IS 410 \\
(2) IS 411 \\
(3) IS 460 \\
(4) IS 463 \\
(5) IS 470 \\
The Finance, Real Estate and Law Department \\
Option in Finance, Real Estate, and Law (code 3-2710) \\
The finance, real estate, and law curricula offer education in the administration techniques and regulations applicable to business, finance, investments, insurance, risk management and real estate. The study of the institutions of American finance, their customs, practices, and legal frameworks gives a basis from which the student builds an understanding of the demand function of finance. The supply function is studied through offerings in investments including analysis of their price trends and turning points. Special concentration is directed toward the study of acquisition, administration, and distribution of funds for the individual business firm as well as the supply of funds by individuals and institutions for investment in private enterprise. The finance, real estate, and law major may direct the concentration toward financial management, investments or real estate.
\end{tabular}} & & ally exp \\
\hline & \[
\begin{aligned}
& \text { financial management: } \\
& \text { I24, 484, 490; } \\
& \text { Investments: FIN 424, 482, } 484
\end{aligned}
\] & \\
\hline & 488, 490; & (1) HRM \\
\hline & Real Estate: (Any three) FIN 424, 444, 448, 449 or ECON 437; & \\
\hline & \multirow[t]{2}{*}{Investments} & \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline & (4) 6 units to be & \\
\hline & \multirow[t]{7}{*}{\begin{tabular}{l}
Real Estate Concentration Requirements: \\
(1) FIN 382 \\
(2) FIN 342 \\
(3) 9 units to be chosen from - FIN 424, 444, 448, either FIN 449 or ECON 437
\end{tabular}} & \\
\hline & & \multirow[t]{5}{*}{external environment in relation to success of the enterprise is considered. Philosophical basis for the practice of management, ethical considerations and human values are stressed. The student's exposure to} \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline & & theory and concepts leads to the \\
\hline & \multirow[t]{2}{*}{The Human Resources Management/Management Department} & \multirow[t]{2}{*}{acquiring of knowledge and skills to assume first professional postiond upper management careers.} \\
\hline & & \\
\hline & The HRM/Management Department offers options in Human Resources Management, Management and Operations Management. & Management Option Requirements: \\
\hline & Option in Human Resources Management (code 3-2740) & \begin{tabular}{l}
(2) 12 units selected from MGMT \\
\(326,405,410,411,412,413,414\). 430, 451, 453, 454, 455.
\end{tabular} \\
\hline & \multirow[t]{17}{*}{The Human Resources Management Option is designed not only for those who have an interest in working in the functional areas of HRM, but also for everyone who wants to become a member of management at any level in either the private or the public sector of the economy. The faculty integrate the theoretical with the practical to produce graduates with highly marketable skills. The major objectives of this option are (1) to provide students with theoretical foundations for understanding how employees are motivated to accomplish organizational goals, (2) to develop the practical skills necessary for employment in positions designed to attract, encourage, develop, and retain human resources, (3) to develop an understanding of the theoretical and practical} & Option in Operations Management (code 3-2758) \\
\hline & & \multirow[t]{16}{*}{\begin{tabular}{l}
The objective of the operations \\
management curriculum is to prepare and stimulate student competence in the conceptual, systematic and analytical tools prerequisite for entry level and advanced positions in goods-producing and serviceoriented industries. Emphasis is placed on the systems approach which stresses the concepts, techniques and policies essential for the economical and effective design, operations and control of the manpower, facilities, materials, capital and informational inputs of organizations. Students are introduced to productivity tools such as Total Quality Control, Manufacturing Resource Planning, Just-In-Time Techniques, Simulation and Animation of
\end{tabular}} \\
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\hline
\end{tabular}
approaches to human resources management, (4) to develop aspiring
leaders with a strong sense of ethics and social responsibility and an necessitate organizational change The curriculum emphasizes critical and personal development to enhance managers' performance in and globally expanding work
Human Resources Management (1) HRM 361
(2) 12 units selected from HRM
\(440,445,446,460,462,463,465,495\) Option in Management
The objective of the management curricula is to prepare students for a
successful career in management of the business enterprise. Attention is given to the need to create and main-
tain a desirable internal environment. interface of that environment with the success of the enterprise is conside ed. Philosophical basis for the considerations and human values are
stressed. The student's theory and concepts leads to the acquiring of knowledge and skills to and progress throessional positions upper management careers. Management O
Requirements:
(2) 12 units selected from MGMT
\(326,405,410,411,412,413,414\), 430, 451, 453, 454, 455, Option in Operations Management

The objective of the operations and stimulate surricentum is to prepare the conceptual, systematic and analytical tools prerequisite for entry
level and advanced positions in goods-producing and serviceplaced on the systems approach ques and policies essentialt, technieconomical and effective design,
manower, facilitites, materials, capital
and informational innuts of organizaand informational inputs of organize
tions. Students are introduced to productivity tools such as Total Qual
Control, Manufacturing Resource Planning, Just-In-T-Time Technique
Simulation and Animation of
\begin{tabular}{|c|c|}
\hline Production Operations, Optimized Production Techniques, Kanban & Option in International Busine (code 3-2703) \\
\hline Systems, Japanese Productivity Techniques, Decision Support Systems. & The objective of the international business option is to prepare students for the increasingly competitive and \\
\hline Option in Operations Managem & \\
\hline Requirements: & \\
\hline (1) MGMT 410, 411 & There is \\
\hline (2) 3 or More units from MGM & to be better \\
\hline \begin{tabular}{l}
(3) Up to 6 units from MGMT \\
\(415,426,430,431,432,433,451\) 453, 455.
\end{tabular} & United States as well as in the U. S. market where much of their competition is from foreign firms. \\
\hline Manufacturing Planning and & \\
\hline Control Specializa & \\
\hline Requirements: & \\
\hline (1) MGMT 310 &  \\
\hline (2) MGMT 410 & well as with cultural diversity and world \\
\hline (3) MGMT 411 & geography \\
\hline (4) MGMT 412 & Students interested in Internatio \\
\hline (5) MGMT 413 & \\
\hline (6) 3 units selected & Advisement Center ( \(985-4514\) \\
\hline 445, MGMT 414, 415, 426, 430, 43 &  \\
\hline 432, 433 & \\
\hline Purchasing and Materials Management Specialization & International Business Opti Requirements: \\
\hline Requirements: & Requirement \\
\hline (1) MGMT 310 & (1) FIN 490 \\
\hline (2) MGMT 410 & (2) MGMT 405 \\
\hline (3) MGMT 411 & (3) MKTG 480 \\
\hline (4) MGMT 414 & (4) Any two of the \\
\hline (5) MGMT 415 & 406 and MKTG 481 \\
\hline (6) 3 units selected from HRM 440, 445,462 , MGMT 412, 413, 426, 430, 431, 432, 433 & (5) One year ( 2 semesters or 3 quarters) of a language important in international business, approved as \\
\hline The Marketing Department & \\
\hline Option in Marketing (code 3-2750) & \\
\hline The discipline of Marketing, which is fundamental to all business & tering the SBA. \\
\hline terprises, is largely a social ocess. The justification of any terprise, be it involved in service or he production or delivery of goods, that it meets the needs of & (6) Choice of the language will rea of the world about which the cudent must study to the extent of a minimum of 4 courses ( 12 units) \\
\hline ividuals or segments of societ & These will be in lieu of 12 other \\
\hline function of marketing is to &  \\
\hline most effective means of informing & general education requirement. \\
\hline ual and potential customers of the & General Education or Elective \\
\hline availability of the servicel an such services and goods. & \begin{tabular}{l}
Courses. \\
Select four courses (12 un appropriate for your choice
\end{tabular} \\
\hline Marketing Option Requirements: & langage. SD \\
\hline 1) Three units selected from MKTG & \[
35
\] \\
\hline & 332, AST 3011, AST 310, AST \\
\hline , 430, 465, 480, & \\
\hline (3) MKTG 470 & \\
\hline (4) MKTG 490 & \\
\hline (5) MKTG 494 &  \\
\hline
\end{tabular}

SPAN 341, PPAN 415, C/TT 440).
Certificate in International
Business: Undergraduate Program (code 1-2000)
Pheromenal growth of
multi-national companies has been apparent in recent years, with increasing internationatizational firms,
business world. Multi-nationa governmental agencies, and varied international organizations express
heightened demand for management personnel with a broad, global perspective. The Certificate in International Business, Undergraduate undergraduate degree with additituanal training in the area of
wint international business beyond that
normally included in a traditional normally included in a traditional
business program. The objective of the program is to enhancee the scope and perception of the business
student to include the internation student to include the international to meet requirements for the Certificuat applernational Busines may also apply toward School of
Business Administration degree requirements.

\section*{Requirements for the} Undergraduate Certificate in
(1) A bachelor of Science degree in
Business Administration. This requirement may be completed concurrently with certificat
requirements
(2) Eighteen units or more of study
at this University in Business to includude: SBA 300 , ACCT 465, FIN 424, FIN 490, HRM 458,
MGMT 405, MGMT 406 , MKTG 480 , MGMT 405, MG
and MKTG 481 .
(3) A grade of "C" or higher will be
(4) The Certificate Program does
not permit use of the Credit/No Credit
option. Students with specific option. Students with specific consider develospment of language competence and cultural understanding relative to their area of
interest concurrent with their Certificate Program. For additio information or for application to the program, interested persons may
contact the Director of International contact the Director
Business Program.

\section*{The Honors in Business}

Program (code 1-2005)
California State University, Long selected group of outstanding students to earrn an Honors in
Business Certificate. Business Certificate
This enriched, more demanding opportunity to participate an in
discussions with discussions with noted individuals in
the community. In addition students cary out a research project and prepare a research thesis It is thus Intended to be intellectually rewarding, hat can enhance the students' future areers.
Admission to the Honors in usiness program
040 students a year. Applicants will be selected for their promise as iteresting, creative students, no equirements for grades. Requirements for Admission:
2. Adminimum to the Business majo 3.5 cumulative GPA in all college and university courses and a minimum of 3.5 GPA in the major. Students with a GPA of
\(3.0-3.49\) may be admitted if the 3.0-3.49 may be admitted if they are
nominated by two tenured faculty members of the School of Business Administration. A maximum of \(10 \%\) o the stidents in the prog
admitted by nomination.
3. A one-page essay describing
yourself and your goals.
Applications should be addressed
to the Marketing Department. School
to the Marketing Department, Schoo
of Business Administration, CSULB
1250 Bellfower Blvd., Long Beach, CA 90840.
Applications are due no later than
May 10 for the Fall sum May 10 tor the Fall semester, or
December 10 for the Spring semester Essays will be judged by a committee
of professors. Apolicants will be of protessors. Applicants will be
notified of admission decisions within 10 days.

Requirements for the Certificate of Honors in Business:
for the major, with a minimum overents GPA of 3.5 and a minimum GPA in the major of 3.5 .
2. Completion of the Honors in
Business Colloquium

This class normally meets \(T H\) -
\(1100-1230\), and requires and an orioinal paper rather than and an original paper rather than
formal examinations. The colloqu brings together scholars and addresses some broad field of study,
usually led by a different lecturer at usually lea by a different lecturer at
each meeting. Each semester, one or more distinguished guest lecturer is invited to the University to participate. 3. Completion of 3 units of required Honors Thesis; and to the
completion of an Hen completion of an Honors Thesis (3 units)
4. Completion of an additional 6 Honors credit has been designated including Management 425, the
5. Completion the 3 unit capstone colloquium USP 4-unit Synthesis, as partial fulfiliment of the University's requirement of 6
upper-division interdisciplinary 6. Students who have failed to enroll in courses for Honors credit for wo consecutive semesters will
hormally be withdrawn from the program.
Certificate in Quantitative Methods code 1-2020)
The Information Systems epartment ofters a Certificate in give students an understanding of the principles, procedures and abilities eeded to solve the problems faced by business statisticians, operations programmers. The Quantitative Method program prepares students
for making scientific analyses and decisions relative to problems that decisions relative to problems that business or governmental
nvironments. It provides a oundation for problem solving and business decision making using the nethods of statistics, operations Operations research analysts, data processing managers, system analysts, and other potential
administrators may benefit from this

Requirements for the Certificate in Quantitative Methods
(1) A bachelor's degree which may be taken concurrently with the certificate requirements; (2) A total of 18 units or more of
Quantitative Methods courses at this Quantitative Methods courses at this
University to include; a) IS 301, 410, University to 460 , 463 ; b) two or more
courses courses to be selected from: IS 341,
380,470, Math \(273, \mathrm{Mgmt/HRM} 413\) 380, 470, Math 273, Mgmt/-RMM 413
ECON 420, ECON \(483 / 583\), or ECON 486/586. Note: Students may receive credit for Math 273 or I IS 341
but not both. (3) A higher will be required in every cours
taken for the certificate program: (4) The program does not perm Any No Credit option. Any deviation from this program program director.
Certificate in Transportation
(code 1-2030)
(code 1-2030)
Requirements for the Certificate in
Transportation: Transportation:
(1) A bachelor of science degree in completed concurrently with the certificate requirements; (2) A minimum of 15 units of
transportation and transportation-related course work at California State University, Long Beach to be selected with the
approval of the Program Directo (3) A grade of 'C' 'or higher will. required for every course;
(4) The certificate program does no
permit the use of the Credit/No Credit permit th
option.
Minors in Business Administration The School of Business Administration has developed minors
available to any no available to any non-business student. Significant preparation for business
employment may be developed through completion of an organized program from one of the following
areas: Administrative Sy areas. Administrative Systems, Marketing, and Quantitative Methods. To declare a minor in business,
students must have completed students must have completed a
minimum of fifty-six semester units of college or university-level work, acceptable at CSULB. (Refer to the section on Minors for
more information.)

Wino in Administrative Systems code 0-2720):
Eighteen or more units including
(2) IS \(240,301,331,333,365,42\)

\section*{Minor in Human Resources}

Management (code 0-2740)
(1) HRM 360,361 , and
(2) Twelve or more units selected
rom HRM \(440,445,446,460,462\), \(463,465,495\).
Minor in Marketing (code 0-2750)
Eighteen or more units incluaing: KKTG 300; 15 or more units selected om MKTG \(310,330,340,420,430\)
\(65,470,480,490,492,495\) or SBA 300 as approved by the Marketing Department. It is the student prerequisite requirements listed below (1) IS 310 is a prerequisite for MKTG 470;
(2) SBA 300 is a prerequisite for
MKTG 480 and MKTG 481;
\[
\begin{aligned}
& \text { (3) SAB an0 and MKTG } 480 \text { a } \\
& \text { prerequisites for MKTG 48; }
\end{aligned}
\]
\[
\begin{aligned}
& \text { (4) MKTG 300 is a prerequisite for } \\
& \text { KTGG 420,430, 465,470, } 480,481 \text {, } \\
& 490 \text {, and } 492 \text {. }
\end{aligned}
\]

\section*{Minor in Quantitative Methods}

Eighteen more units to include: 463 , and
(2) Six or more units to be selected
om IS 380 ; 470 ; Math 273 or IS 341 ; gmt/HRM 413: ECON 420; ECON 483/583; or ECON 486/586. Note: Students may receive credit for Math
raduate Programs

\section*{raduate Programs}

The School of Business eading to the Master of Business Administration (MBA). The degree
offered by the School of Business Administration is accredited by the merican Assembly of Collegiate Schools of Business
The MBA is designed to serve the community by providing graduate
business education to persons who show promise of leadership and
 School of Business Administration has established rigorous standards of admission

\section*{dmission to Graduate Study}

In addition to admission by the
University Office of Admissions and
ecords, an applicant for graduate se admitted by the School of Business Administration. It is the
responsibility of the student to purchase a current CSULEB catalog or Handbook which sets forth the
policies of the University and the policies of the University and the
School of Business Administration graduate program.
Admission Procedures:
(1) Students interested in applying
to the MBA program at CSULB should to the MBA program at CSULB should equest a University application and MBA office. Students must complete and submit both applications in order he graduate program in business. Students should submit Part A and B of the University Common Admissions Dffice. Students applying for the MBA should mark "other masters" as the degree objective, and 05011 as the
maior code. Students should submit major code. Students s.ithould submit
the MBA application with two letters of ecommendation directly to the MBA ffice.
(2) Two complete sets of official transcripts of al college work
attempted are required. One set must
be sent to be sent to:
California State University,
Long Beach
Oftice of Admissions and Records Long Beach, CA 90840
The other set of official transcripts
must be sent directly to the MBA California State University California State
Long Beach
School of Business Administration MBA Office
1250 Bellflower Boulevard Long Beach, CA 90840 (3) Graduate Management
Admission Test (GMAT) scores must be forwarded directy from the Educational Testing Service or fro he University test \(O\) tficere to the Schoo of Business Administration MBA
Office. Test scores over 5 years old Otfice. Test scores ov
will not be considered. (4) Foreign students should first contact the Center for internationa deadines. Foreign students are required to take the TOEFL test and achieve a score of 550 , in addition the steps above required of all
applicants to the MBA program Deadlines for International applications are

November for Fall Semester August for Spring Semester All transcripts, the MBA Application
Packet, GMAT score and TOEFL. score (if applicable). must be filed in score (If applicable)
the MBA Office by:
October 31 for Spring Sem April 30 for Fall Semester admission to the MBA program it is apolication to the program early. action can be taken on applications until all required documents are submitted apter these dates will be submitted a ater these dates will admitted as time and space permits. Criteria:
Admission will be granted to
students showing high success in post-baccalaureate business study. Each applicant's potential for graduate management
education is evaluated on the basis o five major criteria:
(1) Past Academic Record, as
(2) Graduate Management
(3) Managerial Experience: (3) Managerial Experience: of responsibility.
clearly identicy the applicant's leadership potentiaplicant's goals and academic strengths.
(5) Two Letters o

Upon completion of evaluation by the School of Business Administration MBA office, the student is notified by accepted, the letter includes an evaluation listing prerequisites met by the student in previuus course work Course work over ten years old at the time of acceptance will not be
considered for satisfaction of the First Ynrollmen
Admission to the University as a graduate student does not constitute admission to graduate study in the
School of Business Administration. Courses taken prior to admission to the MBA Program of the School of Business Administration may apply
only in a very limited manner toward degree requirements. Before any course taken will apply to the MBA curricula, competency must be
xaminations on any course taken ost baccalaureate
dimssion to Graduate Courses Only students who have been
admitted to the MBA program may ake graduate courses in Business Administration. The only exception is
hat students who have been admitted to other Master's program CSULB may take select graduate meet the requirements for their programs, with the permission of the
major advisor and the MBA office Enrolment in Enrough the Open University will be permitted only for students in an ASSB accredited graduate program elsewhere with a letter of permission
from the Associate Dean/Dean of the tudent's home university. Courses ken through the Open Univers equirements for the MBA at CSULB Continuous Enrollment:
Once a student is accepted and
enrolled in the MBA Program, he/she enrolled in the MBA Program, he/she
is expected to attend classes both semesters of the academic year. (Fal and Spring semesters are considered the regular semesters of the academic year; Summer attendance
is optional.) Registration and completion of at least one course each semester satisfies the
If a student is unable to continuous enrollment requirement, he/she must complete the
Educational Leave of Absence Educational Leave of Absenc
procedures detailed below. Continuous enrollment status will only be preserved if the student's absenc
from a regular semester has from a regular semester has been
processed and approved through the procested and approved through the
Educational Leave of Absence procedures.
Sontinuonts failing to maintain Continuous enroilment status will be MBA Program. Registration privileges will be revoked. Students planning to
continue in the MBA Program whe have been administratively removed due to the violation of the Continuous enrollment condition will be required Leave of Absence
Any MBA student in good academic standing may request an Educadioma
Leave. Students requesting an Leave. Students requesting an Educational Leave must complete an
Educational Leave Form, in advance, including an explanation of their
reasons for seeking the leave and reasons for seeking the leave and
statement of when they intend to
esume academic work The completed form is to be submitted for
approval to the MBA Office and the University Admission \& Records Office The minimum initial leave will bey. full semester; the maximum will be one calendar year. A student may request, in writing, in advance, an
extension of leave. Under no circumstances will the total number of approved educational leaves exceed wo, nor will the duration of approved two calendar years.
Students returning from an approved one semester educationa eave are not required to submit an
application form. Students on leave onger than one semester must apply or re-admission to the university. or which an educational leave was
or appropriate but not approved in advance must complete the entire
BA admission process.
oroperly requested and processed allows a student to satisfy the continuous enrollment requirement ood standing status. Students on an approved education leave of absence will continue to receive he VRR system until the authorized eave time expires.
Graduate stucdents who plan to
enroll for credit at another institution higher education during the leave period must obtain prior approval for he transfer of course credit to the student's program for the department
hair in question and the MBA Director.
The period of an educational leave counted in the calculation of governing the seven year maximum governing the sever year maximum egree requirements.
For the period of an educational
lave the student's rights under the "Election of Regulationt rule are preserved, maintaining the right of the dent to mect regulations as if he o she had maintained continuous
attendance. See the CSULB Bulletin General Rules and Procedures section, for a complete explanation of
the Election of Regulation - "Catalog Rights'.
An educational leave presupposes expenditure of University resources or faculty and staff time in behalf of
he student during the period of the eave. In addition, no computer

Toilities, no library privileges, and no student services are available to
Transfer Credit:
Assuming the Continuous Enrollment requirement has been
satisfied a maximum of six satisfied, a maximum of six credits
that closely complement the student's degree objectives may be applied toward the requirements for the MBA degree beyond the First Year C
under the following conditions: 1) the credits under consideration must be graduate credits 2) the course work must be taken at an AACSB accredited graduate
from the MBA Dioval mus
4) prior approval must be obtained from the department chair of the
course work being transferred The remaining gits serred completed in courses at CSULE reserved exclusively for graduate students Scholastic Stan
Disqualification:
A student who \({ }^{\text {ails }}\) to maintain A student who fails to maintain a
cumulative GPA of 3.0 or higher in all
work work completed as a graduate
student at this University or in struant at this University or in all
transferred work applied to the program will be placed on academic probation. The semester in which the
student's GPA falls below 30 is the First Probational Semester A student on probation, who at the
end of the Second Probation end of the Second Probationary Semester (or summer, if classes are
taken) fails to obtain a cumulative GPA of 3.0 or higher on all units attempted in post-baccalaureate work
at CSULB, will be disqualified and femoved from the disqualified and The student should note that the cumulative GPA is calculated by the
University Admissions and University Admissions and Records
Office and includes all upper division and graduate courses taken while enrolled in the graduate program. A grade of 'C' or better is required
in any course taken to satisty first or second year Core requirements. A grade of ' \({ }^{\prime}\) ' or better is required in
GBA 699 . If either of these GBA 699. If either of these requirements is not met, a student
must take the course a second time or withdraw from the program. A second failure to achieve the
requirement grade will result in equirement grade will result in
involuntary separation from the program. This requirement operates dependently of the requirement

Master of Business Administration
The Master of Busines
The Master of Business competencies essential to functioning professionally in a complex and
The program prepares students for responsible administrative positions and provides the background Professional management careers. degree encompasses a program of breadth which builds a wide range of
competencies required for effective management while permitting students to specialize in a functional area.
The Master of Business Administrathe graduate without an undergraduate degree in Business. Each student is urged to purchase the Scho
Business Administration MBA
Handoook and to consult with the
MBA office, SBA 231, (310) 985-1797.

\section*{Requirements for the Master of}

The Master of Business Administration program requires completion of minimum of 33 units of graduate
approved by the School of Business
Administration MBA office. The MBA program must incluc
i. First Year Core ...
III. Second Year Core
III. Advanced Study
IV. Capstone Course

Total units
. \(0-27\)
18
................. 3
\(. . . . . . . .33-60 ~\)
First Year Core: Common Body of Knowledge
The masters degree presupposes knowledge. Students with a bachelor's degree in business from this University or from other ACSB accredited universities within the last the First Year Core requirements. Individual business Administration courses taken as an undergraduate
student at another AACSB institution may also meet specific First Year Core requirements. Upon acceptance to the program, a student's transcripts
are reviewed for completion of the necessary course work for mastery of the common body of knowledge. A grade of criteria.
Waivers of First Year Core are
based upon previous educational
background at either a graduate or
avers and MBA Placement Exam qualifications may be obtained d rom the School of Business Administration
MBA Office. Placement examinations may only be taken prior to the first rogram. Examinations will be given uesday, Wednesday, and Thursday late afternoon and evenings tho
Students who have not met the entire common body of knowiedge MBA Program will be required to enroll in the appropriate First Year Core courses. This core should be ompleted before e
ACCT 500 Managerial and Financia Accounting
ECON 500 Business Economics FIN 500 Legal and Socia
FIN 501 Finance Survey
HRM 500 Human Resource Management
IS 500 Management Information ystems
IS 501 Applied Statistics and
MGMT 500 Business Policies,
perations and Organizations
MKTG 500 Marketing Concepts
Second Year Core
Upon completion of the First Year xam or graduate course work, tudents move directly into the Second Year Core. (See section on core consists of six courses (18 units) which provide the breadth
requirements for the MBA degree at equirements for the
ACCT 510 Advanced Cost Accounting, Budgeting and Control FIN 631 Seminar in Business inance
HRM 652 Seminar in Human
anagemen
IS 502 Management Information
MGMT 647 Seminar in Management MGMT
Planning and Control Systems
MKTG 661 Seminar in Marketing
olicies
ili. Advanced
The General MBA is designed fo students with an undergraduate
business degree or any other studen desiring a more broad-based MB equires 12 units of graduate course
ork in four different areas within the school of Business Administration
ubiect to approval by the MBA Director to approval by the MBA nternational Focus could be achieved by selecting the internationally designated courses from Finance Human Resources Manageme
Specialization
The specializations requir
t graduate course work in one area. Each specialization should be
lanned in consultation with the MBA planned in consultation with the MBA
Director. Specializations are available in the following areas:
Finance
Human Resources Management
Muman Resourt
Marketing
Engineering Systems: The engineering systems
specialization allows students with asecializalingineering backgrou
a stresecialize within the MBA program in an area that may more closely match their career
objectives. This specialization consists of four graduate courses within the College of Engineering, subject to
Director.
Students may count 3 units of Directed Studies (697) toward the Advanced Study requirements. specialization requirements must be approved by the MBA Office through the completion and acceptance of the studen
form.
V. Capstone Course: GBA 699 Integrated Analysis: Integrated Analysis, GBA 699 is laken as the last or capstone course
in the program. Students should plan in the program. Students should plan oefore enrolling in GBA 699 . This
bell critical course is given during the \(F\)
and Spring semesters. In this comprehensive analysis, the stude will integrate the knowledge obtained in the functional areas. This capst
course serves in place of either comprehensive examination or the as the required evaluation of candidate competency. In addition to
completion of the required \(G B A 699\), completion on the required GBA complete a thesis for a minimum of our units credit
Application for acceptance into GBA before the end of the fourth week of before the end of the fourth week of
enrollment in the course. Application orms and advisement relating to this
mportant requirement are available in important requir
Advancement to Candidacy: Students admitted with all First Year
Core requirements completed must file an application for Advancement to Candidacy for the degree after completion of their first 6 units. Other
students must file the apolication sudedis must tile the apopication
during the semester in which the First Year Core requirements are to be completed. Prior to advanc
candidacy, a student must:
1) Be accepted into the MBA Program.
2) Maintain an overall minimum 3.0 cumulative GPA, including work ansierred from other institutions, and
minimum 3.0 GPA in all work completed at this University. 3) Complete all First Year Core
Requirements, with no grade lower than ' C ".
4) Pass the Writing Proficiency
Examination. (See next section)
5) Prepare an official student
program in consultation with the MBA
Director. This program must include the Second-Year Core in effect at the time of Advancement to Candidacy,
the 12 unit program for the area of the 12 unit program for the area of
Advanced Study and the Capstone Course, GBA 699, for a total of 33 units.
6) File the application for Advancement to Candidacy with the Director.
Time Limitation:
All courses on the official student
program must be completed within program must be completed within the first class toward fulfilment of the Second Year Core requirement.

Writing Proficiency Examination: The Writing Proficiency Examination
(WPE) is a unique requirement of this University. Satisfactory completion of the WPE is required before a student may Advance to Candidacy. Therefore, graduate students should
register for the WPE in person when tegister firs arrive on campus. CSULB
will accept certain Gradut will accept certain Graduation Writing
Assessment Requirement (GWAR) Assessment Requirement
Tests offered at other CSU campuses. The test must have been taken prior to your intitial enrollment at
CSULB. The staff in Admissions and Records (SSA-101) can clarify documentation required from each campus. Graduates must present the
requirement documentation to the MBA Office as part of their application for Advancement to Candidacy
There are no exemptions to the There are no exemptions to the
requirement of an approved form requirement of an approved
writing proficiency exam. School-Based Course Undergraduate -
Graduate - GBA
130. Current Concepts Business (3) F,S An overiew of SBA options, including professional Preparation and employment
oppotuntites.
Orientation to current SBA programs and requirements. Development of an
understanding of contemporary business issues, understanding of contemporary business issues
including an introduction to maior busines functions. Strongly recommended for student 300. International Busi (3) F,S An introcuuction to the nature, dimensions, and environment of international business. Emphasi on business functions, practices, and decision
as they are influenced by cultural. poltical economio, social, and institutional tactors various parts of the world. Diffuion of
nifomation technology. Tradtional gracing Same course as Marketing 380 . 491. Honors in Busine
Colioquium (3) F,S

Pretequisites: Admision to the Honors in considering impotant contemporayy issues
493. Business internship (1-3)

Prerequisites: Classified Business Maior and Instructor consent. Qualifying students will be tivate or publiciceacenciess or busineseses. An rganized plan utiliking a series of seminars and elected deading and wititing assignments.
ninimum of 120 hours paid experience per minimum of 120 hours paid experience per
semester is required. (May be repeated for a emeximum of sixu units
498. Thesis (1-3) F,S

Prereauistes: Three units of Independent Study.
Hanning, preparation, and completion
 aditional grading only.
601. Applied Research (3) F,S Pretequisite: is 500 or equivalent. Scientific
methods of research methocology and design. Te application of research findings to maior Emphasis is on enperimentation and sorveys.
Utilizes background of speefifio statisticical tolols
 and techniques.
will be utilized.
698. Thesis (2-4) F,S

Prerequisite: GBA 601. Planning, preparation,
and completion of a thesis in business ration
699. Integrated Analysis (3) F,S Prerequisites: Classified MBA status in the last
semester or within six units of completion of the 33-unit minimum urad of completion of the
avanced to candididacy A comporam and which serves as the required termminal examination for School of Business
Administation graduate candidates. A roiect is required. A study of a cinder ranges. of proviness is problems and formulation of solutions to them.
The object of this course is The obiect of this course is to assess studient
skills in in integrating knowedge from all functional areas of business and applying them to complex business problems arising out of changing
technology, compeetive makret conditions, social
 methodology may include cases, business
simulation, and team teaching. A grade of ' B or simulation, and team teaching. A grade of 'B' or
better is reavired for successtul completion.
studento Students must file application tor enty intoe GBA
699 no later than the fourth week of instruction in
 the semester preceding the one in which GBA
in the MBe Matice. Application forms are avaliable

\section*{Accountancy}

\section*{Department Chair:}

Department Office: SBA 410
Telephone: 985-4586
Faculty: Professors: Michae Chase, David Davidson, Truman O. Hickerson, John E. Hinds, John Lacey, Sitikantha Mahapatra, John Moustafa, Jae K. Shim, Robert W. Vanasse; Assoclate Professors: Steven Fisher, Peter P. LaPage; Assistant
Emeritus Faculty: Edna M. Andrews, Serafina \(Q\). Gunter, Aren A. ,
Department
Juanita Daly
For all degree requirements see
Business Administration
Courses (ACCT
Lower Division
201. Elementary FInancial Accounting (3) F,S
Introduction to financial accounting theory, class computer applications are a requirement of class compu
Upper Division
300A-B. Intermediate Accounting
(4,4) F . \((4,4)\) F,S gradequister: 3 "COA: Acot 201 or equivalent with a grade of "C" or beter: 300B: ACCT 300A with a
grade of "C" or beter. Accounting theory Hcluding recording, vatuation, and statiement cesentation of assets, liabilitioses, capital, compound interest theory, and applications.
aboratory andor clase computer applications are a requirement of the course.

\section*{10. Managerial Accounting} (3) \(\mathrm{F}, \mathrm{S}\)
ierequistes: ACCT 201 or equivialent. Use and otpecountiong information systems; accounting and anaysia of costs \(j\) managenial use of acoounting data otor planningand decision
making. Not open to accounting maiors for maukse or unit creditit Labooratory and/or class computer applications are a requirement
course.
320. Cost Accounting (4) F,S Prerequiaites: ACCT 201 or equivalent with a
grade of \(" C\) or better. Theory and practice of
counting data for planning, controlling and
Emphasis on
making decision making. Emphasis in cost yystems. Laboratory andor class computer
applications are a requirement of the course.
400. Advanced Accounting
(4) F,S
reerequistes: ACCT 300 B with grade of """ or etter. Specialized problems in parattiership and
 acounting and selected topics. Laboraton nquirement of the course.
410. Advanced Manageria

Accounting (4) \(F, S\)
Prerequistres: ACCT 320 with a grade of """ or better. Managerial accounting concepts as they waluation and control. Laboratory andor class course.
50. Federal Tax Law I (4) F, Prerequistes: Any upper division acoounting course with a arace of "cin or beter. Feveral
hcome taxation of the individual taxpayer. Laboratory and/or class computer
are a requirement of the course.
451. Federal Tax Law II (4) F,S
ferequistes: ACCT 450 with (4) F,S
 corporations, estates and trusts. Laboraton
andor clases applications are a requirement of andor clase
60. Accounting for Not-for-Profit Organizations (4) F,S
 and manaegerial concepts as they apply to roganizations whose objectives are primarily to provide sernice rather than generateo profic
Laboratoy and/or class computer application 465. International Accounting (4) \(F\)
Preerau

Prerequistes: Any 300 -evel accounting course with grade of "C" or better. contemporany Iternational pyel spotive. Comparative on prevailing practioe in the United Statees Anaysio of international accounting and audsting
tandards. Laboratoy andlor class computer standards. Laboratory andlor class comp.
applications are a a equirement of the course. 470. Auditing (4) F,S Trerequivites: ACCT \(3000,300 \mathrm{~B}, 320\) with grade of ""C"ion better. Problems of verification
valuation and presentation of financiel intormation in reports covered by the opinion of

475. Operations Auditing (4)

Concepts, methods and techniques of control tool. Maration con aucopits of as a mananaiagemement nd its relationship to the opefational audit
Responsibilitioes of the internal auditior, public cabountant and rules of profeossional conduct
laboratory
andaros Laborationy and dor clasaroom computer
applications are a requirement of the course. 480. Accounting Systems and Data Processing (4) F,S Preerequisites: IS 240 , ACCT 300 B and 320 with
grades of "C" or better. Course is designed to gramiliarize students with the accounting Iformation systems development process. Maio opics indude analysis, design, development ata
mplementation of accounting intormation systems. Consideration will be given to the
automation of accounting information syytems hrough the use and application of computers aboration and claseroom compuler 493. Accounting Internships (3) \(F\)

Prerequisite: Accounting 300B, Accounting GPA
3.0, Vverall accounting or accounting divisions of pivial industry or governmental agencies to gain Class semininar ananaysis, evaluation of acadien theory in terms of the real world emvironment Selected Topics (l-3) F,S Prerequistes: Consent of instructore and a 3.0
GPA in accounting. Toppics of current intereest in accounting selected for intensive study. May be
repeated for a maximum of six units. Topics will 497. Directed Studies (1-4) F,S Prerequisites: Consent of instructor and
department Chair, on Deans' List and 30 GAP or
highe in higher in accounting. Indvidual projects, study
and research of acvanceed nature in accounting.

Graduate Prerequisite Course: 500. Managerial and Financia Accounting (3) F,S
Preerequisite: MBA standing required. Evaluation of accounting systems, preparation of financial analysis and interpetation of accounting intormation as an aid to business decisisiona
Laboratory and/or class computer application Laboratory and/or class comme
are a requirement of the course.

Graduate Division 508. Contemporary Problems in
Management Accounting (3) F,S rerequiste: ACCT 500 . E (3) \(\mathrm{F}, \mathrm{S}\) Iteraturuse on proftit lanning, control, and decisision aking. Current problems in management
 accounting. Laboratory and//or class computiog
applications are a requirement of the course. 510. Advanced Cost Accounting Budgeting and Control (3) F,S
rerequisite: ACCT 500 or equivalent with a
 budgeting and cost control for decision making emphasis on evaluation of the accounting
information systemat Laboratory ando nlass
computer applications are a requirement of the computer
course.
12. Accounting Theory (3) F,S Prevequistes:ACCT 500, or equivalent. The heory; problems in valuation, incomme termination, and financial dileclosure. equirement of this course.
513. Advanced Auditing (3) F,S Prerequilites: ACCT 477 , with a grade of "C" of
better. Exension of the basio auditing course beyend principles and procedures into areas of weory and practice. Adoditional concoern has to do With the forces having an interest in, and an
hfluence on, the external audit proceass laboratory and/or class computer application
are a requirement of the course. re a requirement of the currse. 25. International Taxation (3) Analysis of the tax treatment of foreign income of
 rules, and the effece of treaties will be studied
Tax concopts and principes related to selected current tax topics. Laboratory andlor clase
computer applications are a tequirement of the computer
course
580. Accounting information Systems (3) F, S
Prerequisite: ACCT 510 and II 500 . Information requirements and transaction processing
procedures olevant to mitegrated accounting ystems, including computer systems analyis
612. Tax Research and

Prerequistes: ACCT 450, 451. The study of the Prerequistes: Acct 450, 4t1. The study of the
primar surces of income tax lawt heir use and
interelationship in researching problems arsing interrelationships in researching yroblemsem arising
under the federal tax laws. . .esearah techniques will be applied to compliance and tax plalaning
problems of individuals, business organizations, problems of individuats, business orgarizations, estates and trusts. Analysis of the organization of
the Internal Reverue Serice and the procedures
 Prosecutions and federal tax litigation. Laboratory
andlor olass computer applications are a requirement of the course.
695 . Special Topics (3) F,S
Prerequisite: MBA standing and consent of
instructor. Topics to be annuuncedd in the
Schedute of Classes. May be repeated once instructor. Topics to be announced in the
Scheruifor Classes. May be repeated once
under a different topic 697. Directed Studies (1-3) F,S Prerequisite: MBA standing and consent of
instructor. Individual study under the direction of the faculty

\section*{Finance, Real Estate and Law \\ School of Businesss Administration}

Department Chair: L. R. Runyon Department Office: SBA Faculty: Professors: Earl Beecher, Virginia M. Belt, Robert \(H\). Deans, Barbara C. George, Charles
V. Hariow, Michael L. Kearney, Arthur M. Levine, Wendell \(H\). McCulloch, Jr., David E. Pastrana, Thomas J. Rhoads, L. R. Runyon, Darshan L.
Sachdeva; Assoclate Professors Sachdeva; Associate Professors
Hamdi Bilici, Son V. Le, Gene P. Morris, Thomas A. Rhee, Lawrence F. Sherman, Robert R. Trippi; Yang; Emeritus Faculty: Harold Dilbeck, Raymond R. Farrell, Richard J. Teweles.

For all degree requirements se Business Administration.
Courses (FIN)

\section*{222. Legal Aspects of Business}
introcuction to law and the legal syster paper.
Upper Division
300. Personal Finance (3) F,S Financial analysis planning and management for
the individual. Topics incluce owning and financing a home, minimizing taxes match income and expenses, deveveloping ance determinino life, heath, home and auto nsurance needs, planning retiremer (3) F,S

Principles of isk-bearing and insuranco: life and
property-liability insurance needs of the property-liability insurancee needs of the
individual. Types of carriers and insurance markets; organization and functions of carrier
3091. Consumer Survival in the Legal and Economic Enviro
Selected Topics (3) F,S,SS
Prerequuishes: ENGL 100 and upper division
status. A general consumer surnival course with consideration of selected topics including the consumer as buyev of goods and senices, the
consumer as investor, and the consumer in personal patriers
3091 and HEC 30 S
324. Legal Aspects of Business Organizations (3) F,S
Prerequistas: FIN 22. Introduction to buviness consideration of social and economic influencese on domestic and mutinational corporationsiza an relationshipe, employment law, business agizations, and consumer protection (3) F,S
\[
\begin{aligned}
& \text { (3) F,S } \\
& \text { overiew of real estate markets, institutions and } \\
& \text { activities trom the perspective of the decision }
\end{aligned}
\] activities fom the perspective of the decision
makers involved in real estate development, financing and evuity ininestinent. The
fundamental phyyical. legal, fundamental physical, legal, regulatory,
economic,
and
tatation considicaration infinuencing real astate docibion
and values are investigated. The real estate and values are investigated. The real estate
docision support areas of brokerage, property management, appraisal and counseling are examined.
360. Capital Markets (3) F,S Preerequibite: FIN 362 . Capital tormation, rates,
makrets and institutions. Flow of fund analysis,
 362. Business Finance (3) F,S

Prerequiste: is 310 can be taken concurrenty.
Prerequiuste: is 310 can be taken concurrenty.
An intoructory course for an busisess majors,
integrating computer applications and
and integrating computer applications and
management information systems to the management information systems to the
following areas of finance: (1) TMe value of
Money, Risk. Valuation. Cost tof Contal Money, Risk, Valuation. Cost of Captal., Capital
Structure: (2) Capial Budgeting; (3) Long-Term
 and Management; (5) Financilial Analyyiis and
Planning: (6) Speocial topicis including: Mergers,

382. Investment Principles
(3) F,S
transactions; fources of investment matkets and and advice; returus vs. risk; margint inadingation and equities and freed income securtities; speculitative tax-shetered investments; goold; and other
 above areas, including accossing various databases avalable to the investor. 424. International Legal Environment of Business (3) F,S Prevequistes: FIN 324 . A study of the
international legal envirommert in which mutinational firms operate. Solected topics
include treaties and laws, goverment policies. resocution of legal disputee, regulation of
competition, entocrementent of property rights and
issuues
invol
ethical
(3) \(F\),
rerequisite: FIN 342 . Basic principles of the law real estate as related to conveyancess, thites, escrown community property and financial ransactions

\section*{(3) \(\mathrm{F}, \mathrm{S}\)}

Preerquiste: FIN 342 . Determining real pro Preerequiste: FIN 342 . Determining real propethy purpose of appraisals, anayysis of tactors
wvoved and their relationship to trends in property values. Gross rent mutitipier analysis in sidential and income property. Emphasis on F.S
rerequisites: FIN 342 . Examination of methods Itraditional Fand modern decision methotos to nalyze the investment in real estate by
ndividuals, corporations., and government Through the anaysis and discussions of
investment methocs in light of modern financial heory and practice, the decision to investment in real estate is considerered. Adolitional topics such as saleleaaseback, leasing, dibcounted cash flow. nalue modelsise are evaluated. Itruvestment strataeg and analysio is integrated to enable the enovation, or to hold docisions Economic and Conventional and developing wapproacheo Tradtional grading only.
448. Income Property Valuation (3) \(\mathrm{F}, \mathrm{S}\)
ecerquisites: FIN 342 and 362 . Analyois of commercial and induustrial properties. Appraiasal principles and procedures are developed and homes, apartments, office and commercial
449. Real Estate Finance and

Investments (3) F,S
Preerequibine: FINN 342 and 362 . Survey of markets astitutions. instruments and techriques asaciated with finanaing real property opportuntities. property type, finananding strategy
business riak and taxation in comnection with ausinoss risk and taxation in connection wis
maximizing return an capita人 imvested in real noxate. Financicial modediling of the real estate
huestment decision ued to identity investment investment docision used to identiy investment
strategesen that achieve superior portolio
pertormance.


Information Systems

Department Chair:
Department Office: SBA 423 Telephone: 985-4993 Faculty Professors: Paul R. Gilon, Emma Jean Gunderson, Mohammed B. Khan, Jerry Mandel, Efraim Turban, Richard D. Wollmer; Assoclate Professors: John
Gessford, Jeanette W. Gilsdorf, Kenneth L. Pickard, Dee Bruce 'Sun Assistant Professor: Robert T. Chi R. Michael Go
Moshivaziri.

Emeritus Faculty: Darrell V. Burras Lincoln L. Chao, William R. Doud Braxton Cal . Henderson, Ronald L.
King, Dale E. Nelson, Carl R. Payne, King, Dale E . Ne
Perri J. Stinson.
Department Secretary
Debbie A. Swiderski
Courses in Information System (IS)
For all degree requirements see Lower Division
233. Introduction to Computer Systems and Applications (3) \(\mathrm{F}, \mathrm{S}\)

An introduction to the use of DOS and word
processing. spreadesheet. and database
 240. Management Information Systems (3) F,S
An introduction to information systems in
organizations, the system develoment organizations, the system developpment ifice cyclo, implementation and documentation, social
Consecuuences of MS, trends and future prospects.
Upper Division

\section*{3p1. Busines}
301. Business Communications (3) \(F, S\)

Analysio of the principles of collecting, roganting
and presenting buviness data. Oral and witten reports intinvoving poroblem. socking in withen
adinistrative management procoss. Tradtional grading only.
305. Written Business

Communication (3) F,S
Study of witten communication media utilied in
business; emphasis on developing skill in business: emphasis on developing skil
business witing. Tradtional grading only.
310. Business Statistics (3) F,S Prerequisities: MATH M14, MATH
Application of stataitics to business probleme with use of some statistical sootweare packiages. Review of probability theory, measuruse of central tendency and dispersion, hypothegis testing and
estimation, and simple regression, and
31.
331. Administrative Management (3) \(F\)
rganination, function, layout and equipment of coministative dopartmentits: general introduction in the administrative managemenent processs: improvement of efficiin
management process
333. Office Systems Applications (3) F
ferequisite: is 240 . Applications of office atomation technologies Applications of office Corpective, relationship of autometed echnologies and corporate goals; comperative
and evaluative techniques for appropiaite slection of software and harowware with an 31. Coboll (3) F,S

Prerequistes: Is 240 . introduction to the cobol language. Fundamental cootcoepts the through control breaks and tables. Dosign and typical business problems. Emphasis is on Hye, top down design, and modular design. 342. Application Program
Development II-COBOL everopment II-COBOL (3) F,S
 and indoxed NSAMM fies, report generation, soting/merging, and use of external bironment.
65. Systems Analysis (3) F,S Prerequisities: IS 240 . Aplication of both
classical and modern structured tools and llassical and modern structured tools and stems. Overview of systems concoppts and the 80, Database I (3) F,S
380. Database I (3) F,S creating, modilining, and queving the database Database modelels covered incluve hiearchial. and use.
385. Systems Analysis and Design
(3) F, S Prerequisites: IS 341 , IS 380 . Sytems concepts and systems developpenent proceses. Apppication
of both classical and current tools and
ystems design techniques, Dervation of logical ata flow diagrams.
410. Probability and Decisions

\section*{Prereauist}

Prerequisites: MATH 114 AND MATH \(115 B\) B
Probability theory with emphasis on logice Mobabirity theory with emphasis on logical aprications of probability modelels to business and decision making. Topics includ
 random variables, a
and their properties.
411. Statistical Decision Theory
\(411 . S\)
(3) S
Prerequis
Prerequisites: IS 410 . Statistical tools for the analysis of data and for business decision 425./525. Administrative
theory and practice of behavioral communication Theory and practice of behanvioral communication
involved in the adminitrative managemen Process; emphasis on problems in communication invoving interaction, persuasion 432. Administrative Information Systems (3) S
Prerequisites: is 240 . Provides a review of
modern data processing theory and technolog . Aroas covereded are information proceossing concepts; data base concepts; systems analysi, valuation, design and implementation; ata systems and methodology.
450. Data Communications (3) F,S

Prerequistes: Is 335 . Elements of data
communications and teleprocessing: featurues or
 ntormation systems. Emphasis is given to local Technology on the design of intormation systems lechnology on the desil
Traditional grading onl.
460./560. Operations Research:
Deterministic Models (3) F Prerequisites: MATH 114 and 116 or 123 , IS 410 theory and applications of operations research as an aid to management decision making
Emphasis on the application of deterministo Emphasis on the application of deterministic
models such as newwork analysies, linead
programming. programming, chyamic or propramming
PERT/CPM, and introcuution to game theory. 463./563. Operations Research 463./563. Operations Resea
Probabilistic Models (3) s Prerequistes: is 410 . Continuation of 15480 with extensions to probabistic models such al
nventory, queveing theory, Markov chains, and invertory, queveing theory. Markov chains, and


Graduate Division

\section*{500. Management Information}

Prerequisites: MBA standing required. Management of intormation as a a required.
Organizational issues surtounding MIS. Practical Organizational issues surrounding MIS. Practical
application of computer technology; analyyis, dedisign, programming. testithg, and implementa-
tion of management intormation systems (MIS) in tion of management information systems (MSS) in
a ' hands.on' environment. Devevopment of MIS ,
 501. Applied Statistics and 501. Applied Statistics and
Decision Analysis (3) F,S Preerequistes: MBA standing or consest of
instructr: background in finte mathematics and instructor: background in fintit mathematics and
introcuctory calculus is assumed. Appolication of introductory calculus is assumed. Application of
statistics to business problems, with use of some statistical software packages. Topics include
review of probabbility concepots, distribution review of probability concopts, distribution
functions, measures of contal tendency and
disenersion, hyyoothesis teeting and estimation. functions, measures of certrat tendency and
dispersion, hyyothesis testing and estimation,
Bayesian decision analysio, and Bayesian dec
correlation.
502. Management of Information Systems (3) F,S
Preequisite: is 500 . Importance of information systems management: strategic issues: manage-
ment of ackanced information technologies: management of systems deveriopmentit manage-
ment of end user computing \(/\) information centers: ment of end uver computing information cente: 525./425. Administrative

Theory and practice of behavioral communication
involved in the admisitative management invorved in the administrative management
procosssi
ccmmphication involving interaction, persusuasion communication involving interaction, persuasion.
and human relations. Tradtional grading only. 530. Information Systems 530. Information Systems
Planning and Management Preerequisite: is 502 or consent of instructor. Rerequisiste. of intormation consentems plinstructor.
the overalil business goals and objectives; the decision-making proceess regarding maior
 grading only.
532. Administrative Information Systems (3) S Prerequistes: Is 500 . Provides a review of
modern data processaing theory and technology. modern data procossing theory and technology.
Areas covered are information processing
 evaluation, design and implementation; and systems and methodology.
560./460. Operations Research
Deterministic Models Deterministic Models (3) F,S Pereequisites: Graduate standing, MATH 114
and 116 o 123, , 1540 . or
ansent of instuctor. Theory and applications of operations research as an aid to management decision making.
Emphasis on the application of deemministio Emphasis on the application of deteministic
models such as network analysis, linear
procramming Programming. dymamic programmin
PERT/CPM, and introcuction to game theory.
563./463. Operations Research: Probalisistic Models (3) F,S Prerequistes: Graduate standing. IS 410 , or
consent of instructor. Continuation of \(15460 / 560\)
 with extensions to probabilistic modelles such as
Iventory, queueving theory, Makrov chain, and
imulation simulation.
80. Management Informatio

\section*{Systems}

Prerequisites: IS 342,501 . Fundamental organizations. Relationshohip of computer-b.based information systems to crganizational objecectives and raganizational structure. Study of key MIS iscues treauenty occurring in organizations
Computeb-based projects to reinfocree selected 15 concepts.
581. Advanced Data Base
Concepts (3) Fs oncepts (3) F,S
rerequisites: is 500 . In-depth study of
database concopts, including databasese design data structures found ind in datitababatab, logging, and
astem fecover. Current literature and state of system recover. Current literature and state of
research in database syytems. Maior proiect.
using a data base management system. doditional work required for gracuuate students. 584. Data Base Program
Development (3) F,S
 hcluding: Data base design, data base modolets
data definition languages, data manipulation data defintion languageses. data maninulation
languagen, and commercial data base systems.
Documentation Documentation standards for sotware. Several
computer propects using data base management
ontem on computer projects using daz
pystemo CSULB Compu
COBOL is recommended.
585. Information Systems Project
(3) F,S rerequiste leeraquistes: is 500 . A compretensive
 moderate complexity. Development of database to oupport the system. Additional work 625. Problems in Busines Communication (3) F Prevequisite: Graduate standing. Contemporary
business communication theught and research
oplied in the solving of arganiztional polied in the soling
670. Seminar in Operations (3) F Pierequisites: Graduate standing and consent of instructor. Contemporary issues, probberssen and
tends in operations research and statisicics. 695. Selected Topics (3) F,S 695. Selected Topics (3) F.S retequiste: Graduate standing and consent o instructor. Topics
Schedule of Classes.
697. Directed Studies (1-3) F,S Prerequiste: Graduate standing or consent of
instrutor. .ndvidual study under the direction of
the facuity he faculty.

\section*{Management and Human Resources Management}

Department Chair: Herbert Ston Department Office: SBA 313 Telephone: 985-4557 Faculty: Professors: Filemon C. Campo-Flores, Donald L. Bates,
Charles \(D\). Hamburger, John \(F\). Herrmann, Linda McCallister, Jonathan S. Monat, Michael T.
Quinn, Roger D. Roderick, Robert J. Smith, Roger R. Stanton, Herbert L. Stone; Associate Professors: David J. Abramis, Phillip S. Chong, Rober J . DeVoe, Gerald L. Ford, Salah
Kukalis, Ralph J. Lewis, Dan L. Madison
Emeritus Faculty: Carl E. Gregory, Reinald C. Heise, James J. Kirkpatrick, Arthur C. Laufer, Vernon
A. Metzger, Wesley Morse, Robert J. A. Metzger, Wesley Morse, Robert S. Teel, William J. Traynor, Susanne Whitcomb, Dale M. Yoder. Secretary: Maryan St. Claire For all degree requirements see For all degree requiremen
Business Administration. Upper Division
300. Principles of Management (3) \(\mathrm{F}, \mathrm{S}\) Preerequisite: is 310 . Analysis of principles and
theocies of management, organization theedy theories of management. organization theorl,
planning and control techriques. Consideration Planning and contion fecciniques. of the overall
will
organization and to mane procuuction/operations arganization and the
sytems of organizations.
310. Operations Management

Prerequiste: MGMT 300 or equivalent.
Introcuction Introcuction to production and oporeations
management functions that are applicabie o types of organizations. Surney of basicic modelts and tools with special emphatis on the
inturouvtion of supporting computer resources. introduction of supporting computer resourcus
Af students will work "hands-on" computer exercises in torecasting, material requirements
planning. aggegate planning, and other planning, agregate planning, and
operations management areas.
326. Management and Society (3) \(\mathrm{F}, \mathrm{S}\)

\section*{(3) F,S}
lssues of concorm to business managers in
dealing with the social lenvironment Analyoil dealing with the social environment. Anayyis of
business tesponsibily to stockholders, employes, customers, the goverchment, and
sociey. issues include: profits, consumerism. sociery. 1 ssues include: profirs, consummerism,
product safery, polution, govermment tegulition,
*405. International and Comparave Management (3) F,S Prerequisite: MGMT 330 and one of the following
three; MKTG 380 . MKTG 480 , ECON 471 Maycis of the functions of managemenent in Iternational business; comporative manageement tanage ement performance.
\begin{tabular}{l} 
406. International Business Policy \\
\hline
\end{tabular} \(F, S\)
erequistes: MGMT 405. An integrative course cesigned to provide insight ingo the scoupe,
omplexity, and problems of formulating and mplementing mutinational strategies and International emoconomices, ceconomios devevtopment, Itemational marketing, international finance, and Willinational plaverning, organization. and control. Iermational transactions, economic and political tegration, the compertivenens of countries. Cases and research projects will be used
extensively. Traditional grading only.
410. Materials Management (3) F Prerequiste: MGMT 310 or equivalent. Analysis of beasio trameworks for managing matereial flow into, withini, and out of organizations, Study of
inventory models for independent demand tims, matetial requitement planning, and distribution
systems. Heary emphasis on learning supported systems. Heary emphasis on learning suppoial
11. Production Planning (3) S managemene tand production playnining promalims Study of torecaating tools and techniques using
vailablo computer resources. Concepts of avalatie computing, master scheocuing, and
agareogate pland
capacity planning will be examined using the capacity y planning will be exam
412. Production Control (3) F
rerequisief: MGMT 410. Anaysois of tools and
 svaluating manutacturing activites at the
shop-floor level. Shop order release, dispatching prioity control, queve management, and MRP II software Job sequencing and scheduing lechniques will be examining and avalialie sotware and simulations employed. Justin-time
prodeduction Kamban control and optimied.
. production, Kanban contiol, and or
production-technology (OPT) will be prese 413. Managing Qualily
Productivity (3) S
reerequiste: MGMT 310 and 15310 . Analysis of the realitionstio belweon productitity and dualty.
Examination of the qualiryasurance function Samititalion of the quaity-assurance tunnction, study of the relationship between productivity improve
stategy
414. Purchasing Management 3) \(F\)
reerequisite: MGMT 410. Analysis of functions Study of the relationships of purchasing to othe
management tunctions. USe of MRP II systems to mimulate purchasing decisions, monito
415. Analysis of Purchasing
415. Analysis of
Problems (3) S

Prerequisine: MGMT 414. Study of the methods
for purchasing research and negotiations. Procurement and management of transportation and trafic management.
421. Management of Small
Business Enterprises (3) \(S\)

Preerequisite: MGMT 300 or equivalent. Analysis of the formation of manaaement functions and 425. Business Strategy and Pol \({ }^{425}\) (3) F,S
Prerequisite: Completion of Business core equirements, senior standing. This courve is theories and tecchniques derived flom the estudy business discipilines. The casem method and business simulations are used to formulate
business strategies and plans. Wirthen reports are
26. Management and Information Systems (3) F,S
Prerequisifi:: Serior standing and BASIC programming experience. Evaluation of concept
io evaluation and design of decision suppor systems. management decision models
sociotechnical tstateoies for implementing sociotech hnical strategies
itformation system changes.
*430. Project Management (3) F,S Preeraquiste: Completion of business cor equirements. This course descoibes how idea
are selected tor rociects and how the proiects ar are seleceted to propects and how the proiects ap mplementied. It exploteres the 1 ore of the propect vaicus ways projects can be coganized and
pianned. The project implementation takis of
 controlling are explored incuuding computerized
network models and project management network modeles and proiet managemen
sotwware packages. Final project anaysis and
termination are addressed. irmination are addressed.
431. Current Topics in Operations Management (3) \(s\)
Prerequisites: MGMT 310 and 410 or consent of
the instructor. Sunvey and analycis of current lopics in opeoraion M Management. Sturry of
pevil developed and developing tools and newly developed and deverioping tools and
techniquese improving productivity, quality
and compettive poostion.

495. Selected Topics (1-3) F,S Prerequisites: Consent of instructor and GPA of
3.0 in manaagement and operations management Topics of current interest in management selected for intensive study. May be repeated for a maximum of 6 units. Top.
497. Directed Studies (1-3) F,S Prerequisites: Consent of instructor and Depart
ment Chair. Study of advanced nature in
Graduate Prerequisite Course 500. Business Policies, Operation and Organizations (3) F,S Prerequisites: MBA standing. Recommended preparation: is 410. Theory and philiosophies of
administrative organizations systems, information symtems. managemement functions, decision making, strategy and policy formulation
operations planning, and control systems. Graduate Division
510. Management for Engineer \(510 . \mathrm{M}\)
(3) S
The transition of the engineer to manager The transtion of the engineer to manages:
planning and organizing teechnical activites;
selecting and managing proect electing selecting and managing propects, selecting and
nanaging teams, techniques of control and managing leamems, techniques of control
comunication. Not open to MBA students. 511. Project Management (3) F Theory and philosophies of project management
The problems of assembling an effective team The problems of assembing an effective team
and the control lisues, techniques, and tools appropriate for the preproiject proposal stage to MBA students.
512. Engineering Management Information Systems (3) S Stucy of the development a and management management of technological and scientifio
manizations in the control of many tacets organizations in the control of many facets 513. Cases in Engineing 513. Cases in Engin
Management (3) F

A course that permints application of new
accuired technical skilis. It involves casees tro
 houstrial firms of goverment agencies. The
cases may be from new venture as well mature firms in both new verodurues and prolcoess as
develoment Not pent 541. Industrial Logistics (3) Prerequiuites: MBA standing. plus minimum of
three units in operations management and three therequinitses. in operations management and three
units in marketing oo consent of instructo units in makketing or consent of instructo logistics aystem ocontaning the marketing, proa
duction, and transportation activities. Emphasia duction, and transportation activities. Emphas
placed on definition of system components placed on definition of system componentis
outputs, actuvies and inputs and the specifica
vion and quantification of the tipon and quantitication of the major function
relationships interelating these components.
542. Enterprise Structure and Operation (3) F
Prerequisites: MBA standing. Systems analysis and synthesis of the general enterpise system
composed of the logistics, money, information,
tole talent and decision subsibsystemes. Emphasis on
the examinatition of the componentis. of each of the sub- systems and how they interelate in the operation of the total enterprise. Systems approach of defining outputs, activitie
inputs is used as the vehicle for analysis.

\section*{543. International Business Policy
(3) F (3) \(F\)}

Prerequisites: MBA standing, plus nine units of
\(500 / 1000\) level courses in the area of titerantional
busineess sou/s00 level courses in the area of international
buxiness. Analysis of current theory and
pincipes of interational buinese mene principles of international business management
pertaining to problems of formulating policy and deveveloing strategies and tactios in the muttinational corporation; cases studies, readings,
logistic analysis and research report. 645. Seminar in Manape Policy and Problems (3) F,S Prerequisites: MBA standing, plus MGMT 500 .
History of management thought, business History of manaement thought, business
organization, strategies and policies, executive organization, strategies and
control; managesial problems.
646. Seminar in Organizatio Analysis (3) F,S
Prereauistes: MBA stal Prerequisitese: MBA standing. plus MAMT 500 .
The management tunction; auditit of managaement The managen
pefformance.
647. Seminar in Management

Planning and Control Systems (3)
F,S F,S
Prerequisites: MBA standing, plus MGMT 500 .
Analysis of planning Analysis of planning and control systems in
management. Cases and problems will be
examined. examine
695. Selected Topics (3) F,S Prerequistres: MBA standidg. Topise to be
announced in the MISchedule of Clases. Topics change each the MISching ande of Classees. Topics
significant duplication the the absence of significant duplication
repeated once for credit.
697. Directed Studies (1-3) F,S Preerequisites: MBA standing, plus consent of instructor. Individual study under the direction of
the faculty.


\section*{Upper Division}
360. Organizational Behavior An oveniew organize of the dynamics of human behavio in organizations and implications for managing perception and attuctes, nature of work groups groups norms, communication

\section*{361. Managing Human Re} In Organizations (3) F,S An overiew of human resource functions that are
designed to attract, motivate, develop and retai employees. Topics include human resourren planning, Iob analysis, recuitment, selection
placement, appraisal, compensation and bene admement appraisa, compensalion development communications, labor management relations
and the international environment. Discusion case studies and student presentations are ueed
to develop ortical thinking and probolem-oolving
(3) \(\mathrm{F}, \mathrm{S}\)

Examination of the roles of management, labor
and government in structuring work environand government in structuring work envirionmentis. Nature of the procoses on *445. Compensation
Administration (3) F,
Preerequistit: HRM 361 . Compenastion and
benefits management is viewed as an integration heneifis management is viewed as an integrating
human resource menagement process.Emphas
sis is on the develocoment and administration of sis is on the development and administration on
equitable compensation and benefit program
 Examined are iob analysis and evaluation, pas stion, incentive, systems and benefits adminisistra tion. Discussion, case studies, simulations. 446. Leadership and Motivation in
Organizations (3) F,S rganizations (3) F,S
Preerequisite: HRM 360 . Critical examination of
the determinants of effective leadership an the determinants of effective leadership and
succoessul methods of motvating employeen to
achieve organizational goals Special attention given to identitying appropriate styles of leadership and methodspor for developping and applying leadership skills. An interactive class
using case studies, research, and simulation uxsing casises.
exer
458. Managing Organizational Culture and Cultural Diversity (3)
Prerequisith Pererequisters: Juniorsenior standing. This
course examines the impact of cuture and ethnic origin on the work experienco, antidit and doesingiod
to better propare indididuals to meet the to better prepare individuals to meet the
challenge of cultural diversity in the mocte chalienge of curtural diversity in the modern
oggatetion. Atterion in given to how language,
gender, race, tradition, education, economic gender, race, tradition, education, economic
structure, and organizational philosophy interacial to create a set of rulues for acceeptabie behavion
and five oultures chosen by the students are
examined. Open dialogue, vigorous debate examined. Open dialogue, vigorous debate
outside researc, and group presentations ar
reequired. Traditional grading only. Traditional grading only. 460. Current issues in Human
Resource Management (3) F,S Prerequisite: Either HRM 360 or HRM 361 . Citicical examination of current and emerging issues conceening the management and
development of people and organizations Interactive course involing discussion, projectis and outidide research. Topics include motvation
leadershio
performance
hiring
 tranpenseation, perammane
quality of work life.
462. Lab
(3) \(\mathrm{F}, \mathrm{S}\) Prerequisite: HRM 361. An overview of the principles and practices influencing
labor-management relationshipes.
Developoment aims, structure, and functions of labor and employer organizations: the collective bargaining
proceses; labor law and government proceses; labor law and govermenta
intervation: impasse resolution:
minions and and minotitios: employee organizations in government
and profesoional
oectors:
comparative and profesional
international sytems.
*463. Organizational Training and Development (3) F,
Preerauisite: HRM 360 . Review of the freld of training and development including learning
theory, training needs assessment, doesign and delivery of training and develogment programs evaluation, and program management. Includes
career development and andizational career development and organizational
development Case esturies, research, simulation
exercices, and student perestations.

\section*{*465. Personnel Selection and}
*465. Personnel S
Appraisal (3) F,S
Prerequiste: HRM 360 . Cirtical examination of
theories and techniquas syuiding persomnel
selection and apoparial proesses selection and appraial processes. Students
develop expertise in determining staffing need conducting job analyses, writing iob description developing recuitment strategies, attirmatio
action plans, and designing resumes. Attention action plans, and detigning gesumes. Atrention and conducting productive
appraisals. Cases and simulations.
495. Selected Topics (3) F,S

Preerequiste: GPA of 3.0 in HRM courres, plus
consent of instructor. Topics and issues of critical \(i\) importance to human resource
manaegement. Topics to management. Topics tor each semester are the deverlopment
speaking skils.
497. Directed Studies (1-3) F,

Prerequistes: Consent of instructor and
Dopoarment Chair, and 3.0 GPA or higher in Prerequistes: Consent of instructor and
Deparment chair and 3.0 GPA or higher in
human respurces management courses
 manancogement.
-raduate Prerequisite Course 500. Human Resources anagement (3) F,S
Aerequisitites: MBA standing. Dynamics of
himan behvior in organkzations and

 ganizational change, iob deosign, businese thics, noms and sociailization, power and
politios, conflict, communication, learning, and Erganizational culture. Emphasizeo
Graduate Division
10. Behavioral Science for

Engineers (3)
Prerequisites: MBA standing. Examination of the designs, and interpersononal relationshnipss that are Pouliar to managing and directing professionals mphasis on managerial applications of Sehavior Scieince concoepts and
findings. Not open to MBA students.
2. Comparative Labor Relations

Systems (3) \(F\) Preerequistes: MBA standing, plus HRM 500 .
Comparative survey and analysis of the history, Comparative survey and analysis of the history,
structure
instututional
arrangements
and structure, institutional arrangements and
philsophy of the labor relations systems in
advanced, developoing and underdeveloped dvanced, developing and underovevelopoc cunties. Comparative survey and analysis of overnment in in industrial relations.
650. Seminar in Labor Relations (3) S

Prerequisites: MBA standing, plus HRM 500
intensive anaylyis of current problems of labor tensive anayysis of
552. Seminar in Human Resources Management (3) F,S
rerequistes: MBA standing, plus HRM 500 rom a general manager's. peerspective, an ppact upon managing peopole Proctioms mpact upon managing people. Problems of development, emploe commitiment, employen compensation are considered. Priccosses development, pertormancoatappraisal, counseling, eadership and motvation, reward systems,
 54. Negotiation and Conflic Management (3) F
rereequistes: MBA standing, plus HRM 500 . A examination of various forms of opposition terpersonal, intragroup, and intergroup conflicic Interperssonal intriagroup, and intergroup conflica Yystunctional conflict, iveontifing sourcoses and
 Discussion,
presentations
\begin{tabular}{|c|}
\hline \begin{tabular}{l}
655. Seminar in Em Motivation \\
(3) F
\end{tabular} \\
\hline 俍equistes: MBA standin \\
\hline view and anaysis of theories \\
\hline change, application of those thent \\
\hline \\
\hline dude: individual motivation, sup \\
\hline motivating, and \\
\hline \\
\hline \\
\hline simulations, and presentations. \\
\hline 657. Seminar in Leader \\
\hline \\
\hline өs: \\
\hline dy of lead \\
\hline \\
\hline \\
\hline \\
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\end{tabular}
658. Seminar in Managing
Cultural Diversity (3) F , S

Prerequisites: MBA standing. This course
examines the impact of culture and ethnic origin
 better prepare indididuals to meet the challenge
of cuttural diversity in the modern organization. of cultural diversity in the moderer organization.
Attention is given to how language, gender, tace,
tradtion education, economic stucture, and trastition, education, economic, structure, and
organizational philosophy interact to create a set, organizational philosophy interact to create a a et
of rules tor accoptable behavios in complex
organizations. The American culture and five organizations. The American cuiture and five
cultures chosen by the students are examined. cultures chosen by the students are examinea
Open dialogue, vigorous debate, outside Iosen dialogue, vigorous debate, autside
research, and group presentations are required.
Tradtional arading only 695. Selected Top
695. Selected Topics (3) F,S Pretequisites: MBA standing. Topice to be
announced in the Schedule of Classes. Topiciss announced in the Schedulie of Classes. Topices
change aech term and in the absence of
significant duplication the course may bo significant dupication
repeated once of coredit.
697. Directed Studies (1-3) F,S Prerequisites: MBA standing, plus consent of
instructor. Individual study under the direction of instructor.
the faculty.

Department Chair: Richard L. Celsi Department Office: SBA 335
Telephone: (310) 985-4769
Faculty: Professors: Alan R. Andreasen, Edmund A. Cotta, Zohrab S. Demirdjian, Forrest \(E\).
Harding, Richard Siller, Terrence \(H\). Witkowski; Assoclate Professors: Witkowski; Assoclate Professors:
Eric Asnould Richard Celsi, Pamela Homer, David Horne, Praveen Soni; Assistant Professors: Mary
Wolfinbarger, Alice Wright. Emeritus Faculty: William D. Ash Benjamin C. Butcher, Robert T. Holmes, Charles E. Wolf Department Secr
Irene Bjerregaard
For all dogaard Business Administration. Students desiring information should contac the department office for referral
one of the faculy advisors.
Courses (MKTG)
Courses (MKTG)
300. Marketing (3) F
300. Marketing (3) F,S
Recommended preparation: ECON 200 or 201 or
300. Interdependence of elements in the fifmis 30. Interdependence of elements in the fimms
marketing system. Relation of the makketing system to other activities in the firm. The firm's riole in domestio and world marketing
envirinments Economic and social effects on marketing. Human behavior as it affects
makketing, marketing communications, maketing information systems, marketing management
problems and their solutions.
310. Retail Concepts and Policies (3) F,S (3) \(F\),

An overiew of the retail system. Retail decision makng emphasized in relation to the following merchandise assootment and pricing: store location and layout; actertising and sales
communication; consummer anaybis; retail informatio
330. Mass Marketing

Communications: Advertising (3) \(\mathrm{F}, \mathrm{S}\)

Principles and practices of advertising. Social
and economic in and economic importance of advertising and its
relation to modern tusiness, organization:
importance of an advertising plan: prenation importance of an advertising plan:; preparation of
advertisements, copy and layout, media planning and application of intormation technology.

\section*{Marketing}

\section*{School of Business Administration}

\section*{340. Transportation Systems}
(3) F,S

Management of the physical distribution system,
pricing and rate
development development, cariier management, logaistics and optimization models, and buying transpotration

\section*{420 . Sales Management (3) F,S} Prerequiste: MKTA 300 . Managing the saies account and territory management: negotiations; integrating the personal computer into the sales
function: computer simulation of the decision function; computer simulation
process in in sales management.
430. Promotion Strategies (3)

F,S
Preerequiste: MKTG 330 . Management of the
promotional mix. Behavioral and databased preeroquisional mix. Behavioral and data-based
foundations for promotional strategies: budgeting; alloation of promotional rescurces:
media modeds; integration of promotional meata mediels; integration of promotional intormation-based techologies and tools for
analysis.
465.
65. Industrial Marketing
(3) F,S

Prerequiste: MKTG 300 . Analysis of industial
products, makets, institutions, and stategal comparison wikth consumer marketing. Emphasis comparison with cobsummer marketing. Emphasas
on business-t-obusuiness negotiations and promotions. Integration and application of

\section*{470. Marketing Researc}

\section*{(3) F,S}

Prerequisites: MKTG 300 , is 310 . Fundamentals of marketing and industidia research a a an aid to to
problem-sosing in business. Familiarization with problem-soding in business. Familiartzation with
current industy research efforts. Data collection, current industry researche infors. Data colechion,
interiewing. and report-generation sofwaer. Analysias of data
sampling designs.
480. International Marketing (3) F,S
Preerequiste: MKTG 300 . The study of marketing systems and marketing operations in various
counties and mutinational market groupe.
 technologies. Indepth international marketing
studies and formulation of appropriate strategies. 481. International Marketing Management (3) F,S
Preerequistes: MKTG 300 , SBA 300 and MKTG
MKTG 481 480. MKTG 481 provides students with a
problem solving approach to asessing and problem solving approach to assesing and
exploting gloal mal mateoing opportunties. The
coure exputsing ocuses on doveloping a strategic
marketing plan for enteringmaintaining foreign
markets. The currse wil be taught as a special
topics seminar. Traditional grading only.
39) F. S
(3) F,S

Fereaquistie: MKTG 300 . Application of conomice theorios to to te unddorstatading of Sonsumere beharior. Conisideration of persosalily demodraphic factors. Review of comprehening (3) F,S

Prerequisite: MKTG 300 or consent of instructo Prerrequisite: MKTG 300 or consent of instructor
Entrepeneurship: innovation management; the acoss and strategy of new product or senices product or service introduction.

\section*{(3) F, S}

Prerequisistes: MKTG 300; senior marketing
maiors oc consent of instructor. Strategies and technicues in marketing management
Application of prior material from marketing Application of prior material trom marketing problem identification and solution. Traditione
grading only.
95. Selected Topics (1-3) F,S Preerequistes: Consent of instructor and a GPA of
30 in makketing. Topics of current interest in 3.0 in marketing. Topicis of current interest in narketing selected for intensivestudy. May be
eppeated for a maximum of 6 units. Topics will be lepeated for a maximum of un its. Top
announcod in the schededive of Classes. 497. Directed Studies (1-3) F,S Pererequistes: Consent of instructor and
Department Chair, on Deanis List and a 3.0 GPA Department Chair, on Dean's List and a 1.0 GPA
o highee in makreting. Indiduau project, study
and research of atvanced natur in in marketing. Graduate Prerequisite Course 500. Marketing Concepts (3) F,S Prerequisist:: MBA Alanding requirec. Oveview of the decision process in marketing
Consideration of functional areas and their inseractian with the tatal operations of the firm.
Applicioion of inforation techology to the
development of makeeting strategy and planning. Graduate Division

\section*{506. International}

Concepts (3) F,S
Terequisites: MBA stan Prerequisites: MBA standing and MKTG 500
Cititical stucy of international business active and business practices in
environment. Cases and projects.
661. Seminar in Marketing
Policies (3) \(\mathrm{F}, \mathrm{S}\)

Policies (3) F,S
Tereauiste:
MKTG
Prerequisie: MKTG 500 . The solving of
practical proft-criented problems in marketing
Sophisticated poet-oriented problems in marketing.
Application of marketing principises and technologies, including intormation systems
databasees, behavioral theories, and managemeri
chniquee
663. Seminar in Advertising
663. Seminar in
Policies (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: MKTG 500 . Discussion and
analysis of advertising situations, objective
analysis of adverising situations, oobjective seting, creative strategios, mepicia strategies and
communication theories. and marketing
665. Seminar in Marketing

Research (3) F
Prerequisites: MKTG 500 and IS 501 . The role of
research in the solution of marketing problems. Research in the solution of marketing problems Research methods in collecting, anayyzing, and interpeting intiormation for business ues. Surves
66. Seminar in Internationa
666. Seminar in
Marketing (3) S

Prerequistes: MKTG 500 and MKTG 500
Analysis of problems and oppotuntites in
nternational maketing operation. Consideration Iternational marketing operation. Consideration omestication, and nationalization probilems. US of marketing information syystems to evaluai
668. Seminar in Consumer Behavior (3) \(\mathbf{S}\)
Prerequiste: MKTG 500 . Topics in the behavioral of posychological, socilogicolat ant Application and economic theories and models to the and economive theories and models to to the
understanding of beyer behavior and the
develomenton of marketing development of marketing strategy.
669. Seminar In Strateg

Planning (3) F,
Prerequiste: MKTG
Prerequisite: MKTG 661 . The role and use of
marketing research and information systems as marketing research and intifmation ystems as
the basis for development and implementation of
marketing marketing sitrategy. Case studies and/or clas
projects required. 695. Selected Topics (3) F,S Prerequisites: MBA standing, consent of
instructor. Topics to be announced in the instructor. Topices to be announcoed in the
Sorevie of Classes. Topics change each
.

697. Directed Studies (1-3) F,S Prerequisites: MBA standing, consent of
instructor and Department Chair. Indwidual instructor, and Department Chair. In
stucuy under the direction of the facuity.

Dean: John Sikula Assoclate Dean-Graduate Studies and Research Assistant to the Assoclate Dea Jeanne Kaplan Director of Support Services, Curriculum and Planning: John A. McAnlis
Assistant to the Director Delores Blanchard
Director, Educational Psychology Clinic: Gary Greene Services: Judi Walker Credential Analyst: Carol Riley Secreary to the Dean Belen Estrada
Departments
- Educational Psychology and

Russel Orpet, Chair
- Instructional Systems Technology (EDST \& L L)
Sinard Jubison, Chai
- Single Subject Teacher

Conroy, University Coordinator
- Teacher Education (EDEL \&

EDSE): Robert Roth, Chair The Graduate School of Education (GSE) prepares students for protessional careers in the field of
public and private education. The mission of the School is to promote effective and equitable teaching and
the pursuit of learning from preschoo the pursuit of learning from preschool seeks to accomplish this mission through its undergraduate and
graduate courses, credential and graduate courses, credential and
certificate programs, and the colleg and creative activities of its faculty, by
recognizing the high priority o
preserving, fostering, and
transmitting the cultural and
transmitting the cultura
intellectual bases of our
pluralistic, interdependent, and
changing world:
changing world:
- actively recruiting, advising, and
counseling quality students counseling quality ystudents
representative of Californa's diverse population into programs of the GSE and in
- promoting school reform and improvement by integrating recent research, theory and the the professional preparation o educators, including international/ multicultural perspectives and the infusion
echnology
- enhancing faculty research
professional development opportunities
- enhancing professional growth practitioners in schools, industry, and government through strong advanced degree programs
- promoting leadership and understanding of p
development and implementation in education, counseling, and related fields
- providing leadership and
service within an all-University plan for coordinated development, innovation, and improvement of program changing needs of the changing needs
- seeking national accreditation as recognition of appropriate
standards tor its professional preparation programs. The Graduate School of Education provides undergraduate and graduale studies in the field of education. It offers specilic curricula focusing eaching and educational sevvice in te pre-school, elementary, middle and high schools, community
colleges, adult programs, other educational agencies, and program or training program developers and instructors in business, industrial, in heath and governmental areas. In and a variety of teaching and service Arts in Education degree with various options, and two Master of Science degrees (special education and counseling). A/ GSE graduate
level courses ( \(500 / 600\) ) are assume
o be traditional grading only unless
stated otherwise. Descriptions tha
clude prerequisites and
certificate, and degree program ar isted in this Bulletin in the GSE epartment that houses the particular

Degree Programs
Master of Arts in Education with Options in:
Educational Administration
ducational Psychology
Social and Philosophical Foundations
Education
Specialization in Internationa
Education
Specialization in Language
Literacy, and Culture Specialization in Urban Education Elementary Education
Specialization in Curriculum and
Instruction Specialization in Early Childhood
Specialization in Early Chin
Education
Specialization in Reading
Specialization in Reading
Secondary Education
Specialization in Curriculum and
Specialization in Reading
Instructional Systems Technology
Specialization in Design and
Develoopment
Specialization in Library Media Specialization in Computer- Based Mechiog
Master of Science in Special
Master of Science in Counseling:
General Counseling Option
Specialization in School
Counseling and Guidance
Specialization in Student Development in Higher Education Marriage, Family, Child Counseling (Mte Credentials
Basic Teaching Credentials: Elementary:

Mutiple Subjects Credential
with Bilingual Emphasis in Multiple Subjects Internship
\begin{tabular}{|c|c|c|}
\hline Secondary: & arship & ovember 1 in the Office of Graduate \\
\hline Single Subject Credential w Bilingual Emphasis in & Several scholarships are available to students enrolled in the Graduate & Studies and Research, and should be completed and submitted by March 1. \\
\hline English/Spanish & School of Education. & Educational Psychology Clinic \\
\hline Single Subject Internship Single Subject NTE Waiver & The Clyde Sanfred Johnson Memorial Scholarship fund, & The Educational Psychology Clinic is housed in the Graduate School of \\
\hline  & blished in 1 & \\
\hline En & & \\
\hline Comparative Literature, Creative & Education, provides monies tor & \\
\hline & & \\
\hline iterature, Radio/TV, Speech): & Psycholog & cholog \\
\hline reign Language (French, & scholarships are awarded to graduate & (learning disabilities), elementary and \\
\hline Health Science & personnel services prog & The secondary purpose of the Clinic is \\
\hline e Economics: & basis of scholarship, leadership & serve the wider c \\
\hline Industrial and Technology & (which includes personal
characteristics), and need. & Angeles and Orange Coun providing services in the a \\
\hline Lite Scie & The Williom & is refused \\
\hline hematics & & \\
\hline Music; &  & Parents, as well as children and \\
\hline Physical Education (Adapted P.E. Dance, Elementary School, Secondary School): & former Chief of the Bureau of Pupil Personnel Services who retired from & adolescents, participate in the clinic program through parent education groups in order to become better \\
\hline Physical Science (Chemistry, &  & ned about their childrens' \\
\hline Science, Physics); & & ems. \\
\hline Social Science (covering Anthropology, Economics, Geography, History, Political Science, Psychology, Sociol & of need, academic record, and activities on and off campus in counseling related areas. Applications for the McCreary and & Included in the instructional program of the clinic is extensive monitoring, audio taping and video taping of student progress in working with \\
\hline Specialist Teaching Credentials: & Johnson Scholarships are available & didual clients, client groups \\
\hline Adapted Physical Education & Administration Department Office & he microcomputer with the learning \\
\hline \begin{tabular}{l}
Early Childhood Education \\
Reading
\end{tabular} & For prospective elementary school teachers the Sam Pollach Memoria & disabled is also included. The Adult Learning Disab \\
\hline Learning Handicapped & holarship has been e & gram provided for CS \\
\hline Severely Handicapped & a tribute to Dr. Pollach, a long time & dents is also housed in the Clinic, \\
\hline Special Education Internship (Bilingual focus) & member of the department. The Pollach scholarship is limited to & although largely supported by the Office of Disabled Student Services. \\
\hline Resource Specialist Certificate of Competence & multiple subject credential candidates who are cleared for the student & Presently 35 students are offered services including academic \\
\hline Services Credentials: & hing program, and are award & visement, personal counseling, \\
\hline Preliminary Administrative Professional Administrative & The Steven & versity faculty and sta \\
\hline Library Media Teacher &  & mation processing skill \\
\hline Clinical Rehabilitative (Communicative Disorders) & Warren, provides money for & weekly monitoring of progress. This program has become a model for The \\
\hline Health (Nursing) & Warren scholarships are & fornia State University System. \\
\hline School Counseling & his all wakin wis & Educational Career Services (ECS) \\
\hline School Counseling internship
School Psychology & hing and in working with childr & in the Graduate \\
\hline School Psychology Internship & The Norman Cahn Scholar & rvices assists students and alumni \\
\hline Other Credentials \& Authorizat & Fund is limited to muttiple subjects & heir search for teaching positions \\
\hline Designated Subjects (Adult and Vocational Education, ROTC, Supervision and Coordination) & credential candidates who are cleared for the student teaching program, and are awarded based on financial need. & and helps employers locate qualified candidates for professional positions ECS serves students currently \\
\hline Certificates & scholarships for prospective & \\
\hline Career Guidance Specialist (Graduate) & donations from the California Retir & positions as administrators, counselors, college instructors \\
\hline 佼utional Technology & iation, education honorary & and school psycholog \\
\hline Teaching of Reading and & societies, anonymous donors, and & hers in elementary, \\
\hline Language Arts (Graduate) & state and federal agencies. These & secondary, and special education \\
\hline
\end{tabular}

November 1 in the Office of Graduate Studies and Research, and should be
completed and submitted by March 1 . Educational Psychology Clinic is housed in the Graduate School of Education (ED2, Room 155, (310)
\(985-4991\) ) and serves University and public school students. The primary practicum experience for CSULB stadents in the areas of school learning disabilities), elementary and The seconddary purpose of the Clinic is Angeles and Orange Counties by a reduced rate. No client is refused ho can meet the criteria for acceptance but lacks the finances.
Parents, as well as children and adolescents, participate in the clinic roups in order to becont educalior fobmed about their childrens

Included in the instructional program udio taping and video taping of student progress in working with family groups. Introduction to the use abled is also included.
Program provided for CSULB
though largely supported by the . services including academic career counseling, liaison with university faculty and staff, iformation processing skills and weekly monitoring of progress. This
program has become a model for The Educational Career Services (ECS Edocated in the Graduate Sch Sevvices assists students and alumn and helps employers locate qualified candidates for professional positions. enrolled as students tearrently provides services to those seeking positions as administrators,
counselors, college instructor Student teachers in elementary, should establish a placement file and
attend an orientation meeting. Othe candidates should register with the
office iust prior to graduation or completion of an advanced credential. Services offered by ECS include:
duplicating and mailing professiona duplicating and mailing professional vacancy notices, conducting
workshops, individual advisement, providing information about professional educational opportunities. Appointments may be scheduled with an Educational Caree
counselor to obtain information about counselor to obtain information about
the current job market within the field of education. The office is located in
ED1 Room 17 and is open 8 a.m. to ED1, Room 17 and is open 8 a.m. to
5 p.m. Phone (310) \(985-5772\). The 24-hour job tape hot line telephone number is ( 310 ) \(985-5320\).
Credential Processing Center
The Credential Processing Center The Credential Processing Center
(CPC) is responsible for processing al
initial elementary and secondary initial elementary and secondary teaching and service creedenilion on
applications to the Commission applications to the Commission Credential candidates completing
requirements by the end of the fall requirements by the end of the fall semester of any year should register
prior to March 1, and spring and prior to March 1 , and spring and
summer candidates prior to October 1. Muttiple and single subject candidates complete this registration
process as part of the student process as part of the student
teaching application. Following registration with the CPC, a credential evaluation will be completed and
results forwarded to the candidate indicating remaining University and state requirements. After all requirements are met, a verification of used by school districts and county offices for purposes of employment. The CPC is located in ED1, Room 42, and is open for service Monday
through Thursday from \(8-12\) and \(1-6\) and on Friday from \(8-12\) and \(1-5\), unless otherwise posted. The telephone numbor (310) 985
Master's Degree Programs
Master's degree programs ar
offered in each of the three departments within the School General procedures, admission, and requirements, and generic requirements for the Master of Arts in Education degree follow the list of in each department.
The Department of Educational
Psychology and Administration offers two Master of Science degrees: MS
in Counseling, with Options in Genera

Counseling and in Marriage Family, and Child Counseling, and MS in
Special Education. One Master Arts in Education degree is offered with Options in: Educationa
Administration, Educational Psychology, and Social and Philosophic
Education.
The Department of Instructional Systems Technology offers a Master of Arts in Education with an Option in Instructional Systems Technology.
Three specializations are available -Design and Development, Library Media, and Computer-Based chnology
The Department of Teacher
Education offers two Options in the Uacter of Arts in Education -Elementary Education and Secondary ducation. The Ele mentary Educati Cition ofiers three specializations: Childhood Education, and Reading.
The Secondary Education Option has he Secondary Education Option na Instruction, and Reading. To be considered for admission to master's degree program, studen
must submit an application with equired test scores to the Graduate Shool of Education, Office of raduate Studies and Research master's degree program should be nade by December 1 for the spring session or fall semester. Application or enrollment for thesis or mprehensive examination must be made by October 1 for the spring emester or summer session. A graduate handbook and other materials regarding degree programs
are available in the Otfice of Graduate Studies and Research (ED-1, Room 7). Students should consult with faculy in the various departments
concerning particular programs. All master's degree candidates in ducation are required either to complete a thesis or project or to take comprehensive examination according to the requirements of ter
degree, degree option, or degree
option specialization.
Admission to Graduate Program:
Master of Arts in Education, Master Science in Special Education
To be eligible for admission to the espective Graduate School of docation master's degree program
grade-point average (GPA)
requirements:
Clear Admission - To be eligible for lear admission to the Graduate School of Education, applicants must
have a GPA of 2.85 or higher in the ast 60 semester units of course work taken. Lower division and/or
extension courses taken after extension courses taken alter excluded from this calculation. If an applicant has a GPA below 2.85 and e graduate advisor believes specia pplicant may be reviewed by the Graduate Committee
Clear admission is required for
enrollment in 500 - and 600 -leve courses.
Advancement to Candidacy: To be advanced to candidacy for a 1. Pass the Writing Proficiency egulation, all applicants must pass e WPE prior to advancement to candidacy. Test scores must be on Education, Office of Graduate Studies and Research one semester prior to 2. Take the Graduate Record Examination (GRE) - Prior to advancement to candidacy, all pplicants must take the GRE Genera
Test which includes the Verbal. Quantitative, and Analytical. Files of students whose scores fall below the 5th percentile on the Verbal
Quantitative sections must be eviewed by the Graduate Committee o determine necessary action judged appropriate by the Committee betore
advancement to candidacy. Test scores must be on file in the Graduate School of Education, Office of Graduate Studies and Research, one candidacy. Evidence of satisfactory completion of any work required in connection with low test scores must
be on file in the Graduate Office prior to advancement to candidacy. If more than 12 units of course work
(usually four courses) of the official (usually tour courses) of the official
master's program are taken prior to receipt of GRE scores in the Otfice of Graduate Studies and Research,
courses will be given subject credit courses will be given subject credit
and-additional elective courses will have to be taken for unit credit. University requirements for University requirements for
advancement to candidacy as well as he specific requirements or or the degree option and specialization
4. All prerequisites and testing
approved program of studies must have been filied with the Graduate
Shool of
diucation Office School of Education, Office of
Graduate Studies and fesearch, Graduate Studies and Research, and
the student must be currently enrolled 5. Resolution of all incomplete
grades (to either
Requirements for the Master of
Arts in Education:
1. Completion of \(30-34\) units of approved courses with \(18-21\) units of 2. A thesis or project ed sucation; completion omprehensive examination as required by the appropriate option or specialization, 3. Completion of the requirements and courses appropria
Requirements for the various
options under the Master of Arts in Education are given in the departmental sections. Requirements Counseling and in Special Education are given in the Educational
Psychology and Administration Department section.

Educational Psychology and Administration

Department Chair: Robert H. Berda Department Office: ED1 Room Telephone: (310) 985-4517 Facuity: Professors: Roberth.
Berdan, Robert W. Cash, Elaine Haglund, Alice M. Harris, Cynthia Johnson, Thomas J. Kampwitth, Charles J. Kokaska, Vicente N. Sikula, A. Jean Wilson; Assoclate Professors: Norma B Gibbs, Ralph E. Matkin, Alfred I. Terrence G. Wiley;
Assistant Professors: Marquita Grenot-Scheyer, Claudia Wright. Emeritus Faculty: Evelyn L. Blackman, Enid V. Blaylock, Alex L.
Britton, Robert D. Crossan, Alan J. Glasser, Boyd A. Davis, George D. Demos, William E. Fogg, Florence \(H\). Forst, Albert Hamel, Carol A. Hunter Taylor T. Jackman, I. Alleen Poole
Koehler, Phyllis F. Maslow, John A. Nelson, J., Carolyn M. Owen, Jess C. Shaver, Neil V. Sullivan, Robert J. Swan, C
Department Secretary Department Secretary
Gloria Inzunza-Franco
The Department
The Department of Educational Psychology and Administration offer
graduate level course work in the following program areas: Educationa Administration; Special Education School Counseling: School sychology: MFCC Counseling: Philosophical and Social Foundations and Educational Research; as well as raduate service courses in life skills and other areas.
Students desiring information should contact the department office for referral to one of the faculty adisors.
AII GSE graduate level courses (500/600) are assumed to be
traditional grading only unless stated
otherwise.

\section*{Graduate Degrees}

Master of Arts degrees in Education with the following options are offered Educational Administration Option
 the evening.

Educational Administration
Advisory Council
proved programs in educ administration is composed of school oard members, interested citizens, eaders, supervisors and
administrators from all levels in the eographic areas served by the
Universiy. These persons confer w and assist the program faculty in xamining the educational needs of he community and in recommending changes in existing programs that \(w\)
enable the University to meet these needs.
ption in Educational
dministration
Prerequisites:
15 units of upper-division courses in Requirements fo Requirements for the Option (code 5-3103)
A minimum of 30 units with a 15 unit Admcentration in Educational
Adminstration is required. Administration is required. 21 units
must be in the \(500 / 60\) level series taken at this University. . One of the following (3 units): ED 2. One of the following ( 3 units): ED P 575, 576, or 672; 3. One of the following ( 3 units): 4. One of the following ( 0.6 units): written comprehensive examination EDAD 698 ( 6 units): 5. All of the following (12 units):
EDAD 541, 544, 647, and ED P 677 . 6. Electives to total \(30-33\) units chosen in consultation with and approved by the coorarial
Option in Educational
sychology
Master of Arts in Education, Option
in Educational Psychology
A research oriented Master of Arts in Education Option. Designed for doctorate or a school psychology credential

Prerequisites:
Fitteen units of approved
upper-division upper-division units in education,
including all of the following: \(E D P\) P including al of the following: EDP
301 or \(302,305,350,419\), and 420 Requirements for the Option in
Educational Psychology (code 5-3158)
of 34
A total of 34 units, with twenty one
units in the \(500 / 600\) level series taken at this University.
Core Requirements:
1. All of the following ( 6 units)
ED P 519, 520 ;
2. The following ( 3 units):
ED P 555;
3. The following ( 6 units):
EDP 698 .

Option Requirements:
1. All of the following (6 units)
ED P 604 . 605 :

EDP 604, 605;
2. Two diagnosis courses (7 units):
3. Two remediation courses
( 6 units): EDP \(405,554,560,579 \mathrm{~A}\)
NOTE: Students pursuing Schel NOTE: Students pursuing a Schoo
Psychologist redential should not he above.
Option in Social and Philosophical
Foundations of Education
oundations of Education
Students pursuing the option in
Educational Foundations receive both traditional and contemporary
preparation through specialized
preparation through specialized,
iterdisciplinary study. The option designed for individuals seeking careers in multicultural/multilingual education programs, international and lobal education, and/or
convemporary urban education
interested in further academic study.
Prerequisites:
Fifteen units of advisor approved
upper division or graduate level
courses in education, humanitie
social and behavioral sciences, liberal Three units of the 15 must include 400 or a quantitative research course.
Requirements for the Option in ocial and Philosophical
Foundations of Education
(code 5-3162)
A minimum of 30 units of upper division and graduate courses with ninimum of 21 units at the \(500 / 600\) a specialization.
Core Requirements:
1. One of the following ( 3 units): ED
P 500,595 ,o 696 (FDP 595 )

696 required for thesis students);
2. One of the following (3 units): ED 3. One of the following chose consultation with a faculty advisor ( 3 -6 units): ED P 695 F (3) and witten comprehe
or ED P 698 (6). Option Requirements. 1. The following three courses (9
units): ED P \(574,575,576\). units): ED P 574, 575, 576;
2. Choice of one of the following three Specializations within the
Option:
a. Specialization in International
\[
\begin{aligned}
& \text { duccation: } \\
& \text { (1) The following (3 units): ED P } \\
& 583 \text {; }
\end{aligned}
\]
(2) One course chosen from
the following 3 units): ED P
then
b. Specialization in Language,

Literacy and Culture:
Two course
Two courses chosen from the
following 6 units): EDP 577 [or
LING 500 ], ED P 578 [or LING
5. S5], or EDP 672 .
c. Speciailization in Urban

The following (6 units): ED P
615, and EDAD 649 . Electives chosen in consultation of 30 units. The program faculty in this The program faculty in this
academic area believe that counselors serve valuable functions in the field of education, business and
private practice. Its philosophy is to pirvate practice. its philiosoppy is it approaches to counseling, and
encourage development of approaches that fit the personality of each candidate. The program combines theory and practice and
utilizes on and off campus field work assignments. Required courses are offered in the evening, but most field assignments require daytime graduate level to be able to perform the duties expected by the profession of counseling. Students are prepared to assume future leadership po
in their areas of expertise atter
additional work experiences in additional work experiences in the
field. Most of the programs require the field. Most of the programs require th
Master of Science in Master of Science in basic step toward Option as the specialization. This is a 36 unit degree program which also requires 24 units of prerequisisite courses in the wishing to obtain the Those students counseling credential need to take
dditional units. Those who wish to complete the educational cense are required to complete the 8 unit MFCC Option. Admission requirements 1. Copies of transcripts verifying a
GPA of 2.85 or higher on the last 60 semester units (or 90 quarter units) of course work taken
2. Evidence of completing at least a baccalaureate degree prior to
beginning the Master of Science in Counseling program
3. Three letters of recommendation;
4. A written personal statement;
5. Screening interview(s);
above must be on file in the
department by February 15 for the
following fall semester following fall semester. Students are only admitted to begin course
work in the fall semester. Prerequisites for the General Option and the Option in Marriage, Family, and Child ounseling
A bachelor's degree with 24 upper
division units in the following areas of tudy in the behavioral sciences suggested courses in education 1. Developmental: : 3 units (ED P 301 or 302. MFCC Option must
take ED P 301): take ED P 301); 2. Educational Psychc
3 units (ED P 305): 3. Behavior Dynamics: 3 units (ED 3711, MFCC Option must take PS 370)

ED P 350) Differences: 3 units
P 350 )
6 units (ED P al Measurement 6. Counseling and Guida): 3 units (ED P 430 Guidance: 434 B required for SDHE) Other upper division courses may be substituted from Anthropology. Sociology, Psychology, or other appropriate disciplines provided they satisty the area definition. Such
substitutions must be selected in substitutions must be selected in
consultation with the student's assigned advisor.
Requirements for the General
Option (code \(6-3165\) ) Option (code 6-3165) Students must complete a minimum
of 36 units of upper division and graduate courses with a mind 27 units in the \(500 / 600\) level series
taken at this taken at this University including the following:

\section*{Degree Core:}
1. All of the following ( 12 units): ED 2. One of the following chosen in consultation with a faculty advisor 3-9 units): ED P 695C (3) and 698 (6); or ED P 695C (3) and writ
comprehensive examination.

\section*{General Option Requirements by} Speclallization:
3. All of one of the following School Counseling and Guidance (12 units): ED P 517, 531, 643A,

Student Development in Higher Education (15 units):
\(538,549,643 B, 644 \mathrm{~B}\)
Career Specialist ( 18 units): EDP
Career Specialist ( 18 units): EDP
\(529,530,531,637,643 C, 644 C\).
4. Suggested electives to total 36
units (Other electives may be
selected in consultation with an
advisor): ED P 510, 519, 534, 555,
\(604,605,615,639,640\), or 696 .
Requirements for the Option in Marriage, Family and Counseling (M
Students must complete a minimum of 48 units of upper division and graduate courses with a minimum of
36 units in the \(500 / 600\) level series 36 units in the \(500 / 600\) level series
taken at this University including the following:
Degree Core:
1. All of the following ( 12 units): ED
P \(515,520,532,536\) : 515, 520, 532, 536
2. One of the following One of the following chosen in consultation with a faculty advisor
(3-9 units): ED P 695 C (3) and 698 (6); or ED P 695 C (3) and witten MFCC Option Requirements
MFCC Option Requirements:
3. All of the following: ED P 510 ,
\(511,512,513,543,555,560,604\), \(608,634,643 \mathrm{D}\), and 644D.
4. An elective course chosen in
consultation with an advisor to total 48 units.
Speclal Education
The faculty in the special education program area each have their own specialization, which, combined with the numerous part-time faculty used in
the program provide depth and a rich combination of theory and practical application. All courses required for the special education credential are
scheduled in the evening for the benefit of regular teachers pursuing this advanced credential. Studen teaching in special education
classrooms is available during the summer to accommodate regular are limited.
Master of Science in Special Education

\section*{Prerequisites}

A bachelor's degree with 24 upper division units to include the following areas of study (suggested courses in
education noted in parentheses):
(ED P 301 or 302 );
2. Statistics and Measurement:

3 units (ED P 400); :
3. Individual Differences: 3 units
(EDP \(P\) 350).

Requirements for the Master of Science in Spe
(code 6-3155)
Students must complete a minimum 30 units of upper division and raduate courses with a minimum of 21 units at the \(500 / 600\) level taken at his University.
\[
\begin{aligned}
& \text { 1. Degree Core: } \\
& \text { a The following ( } 3 \text { units): ED P } \\
& 550 \text {; } \\
& \text { b. One of the following ( } 3 \text { units): } \\
& \text { ED P } 500,520 \text {, or } 696 \text {; }
\end{aligned}
\]

ED P 500, 520 , or 696 ;
consultation with a faculty adviso (3-6 units): EDP 9955 (3) and
withen written comprehensive
2. Degree Requirements
a. All of the followinints ( 9 units):
ED 535,546 in or , and 566 .
b. Electives to total a 0 units
selected in consultation with a
special education faculty advisor

\section*{Credential Programs}

Pupil Personnel Service
Credential Programs:
The California Commission on
Teacher Credentialing issues fou pupil personnel services credentials: school counseling, school sychology, child welfare and
The Graduate School of Education a he Graduate School of Education programs: school c
school psychology.
Admission Requirements
1. Copies of transcripts veritying a

GPA of 2.85 or higher on the last 60 semester units (or 90 quarter units) of course work taken for students applying for the School Counseling
PPS credential; or a GPA of 3.0 or higher for students applying for the
2. Evidence of completing at least baccalaureate degree prior to
beginning either credential program;
3. Three letters of recommendation;
3. Three letters of recommendation
4. A written personal statement: 5. Screening interview(s) 6. An application and items 1 -4 above must be on file in the department by February 15 for the
following fall semester. Students are only admitted to begin course work in the fall semester.
School Counseling Credential: The school counseling credential is ounseling and guidance fu beyond the advisory duties customarily performed by classroom experience is not required. The credential holder is authorized to work California public schools from kindergarten through grade 12. The
counseling credential requirements include (1) undergraduate course siences and 2) specific graduate courses experience.
Prerequisites:
1. A bachelor's degree and completion of the following course
work or equivalents from other subject areas as approved by a program advisor in each of the following areas: Human Behavior Dynamics and Individua Differences; Measurement and Research; Counseling and Counseling Credential Coordinator for acceptable equivalents), 2. Application for Certificate of Clearance is required for pubic year prior to the expected first field work semester. Persons possessing a valid California
credential are exempt from this requirement.

\section*{equirements}
1. A bachelor's degree and completion of the following quivalents from other subje reas as approved by a progra dvisor: ED P 301 or \(302,305,311\) SH 370 , ED P 350, 419, 420 dily. Check win prograle quivalents;
2. Completion of the following or

\(515,517,531,532,536,555,604\)
615, \(639,640,643 A\), and 6444 :
3, Field
. Field Work Prerequisites: a. 1 st Semester Counseling Field
Work, EDP \(643 A\) ( 225 hours per semester/15 hours per week):
(1) EDP 515,517 and 532 (or
concurrent enrollment in 532 ); (2) Certificate of Clearance (iff
not holding valid credential). Application for Certificate of Cearance is required for publirel
school field work. Apply at least one year prior to the
expected first field work a valid California credential are
exempt from this requirement. b. 2nd Semester Counseling Field (1) ED
643 A ;
(2) Passing the Califionnia Basio
Educational Skills Test (CBETT
4. Certifictation of program
required. The faculty may require students to complete additiona course work, ield work, or
demonstrate specific competence
before approval for the credential.
School Counseling Internship

Admission:
Requirements
Caster's degree in aceptable behavioral sciences. Master's degrees which typically meet this
requirement in the Department of Aducational Psychology and Science in Counseling: Master of Since Apecial Education; option in Educational Psychology approved equivalent master's
2. Completion of a minimum of 60 their equivalents with the approval of the PPS - School sychology
faculty in the following areas of earning: ED P 301 or 302,305 604, 605. Counseling, Consultation 639. Psychological Assessmment,
Remediation: ED P 405, 524, 525, 527,560, 579A. Measurement and

Research: ED P 419, 420, 520.
Practicum and Field Work: ED P \({ }^{642 A}\) (2 semesters at 3 units each) 60 units 3. Certification of program completion by the PPS credential
School Psychology faculty is required. The student may be course work, field work, or defore approval; is required prior to field
workuinternship:
5. Field Work in School Psychology

Counseling or equivalent and
psychology internship application
by the faculty. ED P 405, 524, 525, 579A. Application deadlines are internship
An internship is paid field work,
performed under the supervision and with the permission of the PPS nd the school district which hires the a district as a possible internd udent must have completed the
 sychology credential coordinato chool Psychology Internship pecial Education Specialist This program provides teachers with rearaning in preparing everely handicapped) for their life
1. Admission to the University;
2. An overall GPA of 2.75 in all college and university course work; 3. Hold a valid California teaching

Requiremens:
Core. Specialization:

565,5868. \(563,586 \mathrm{C}\) endidates jointly pursuing a bilingual emphasis or certificate of competenc
may substitute ED P 454 for \(C D 361\).

Special Educatio
ship (Bilingual focus) districts the Graduate School of program leadin an internship education specialist, learning program has limited enrollment, and demonstrated bilingual skills and experience in multicultural settings.
teaching credential; 2. Be employed by the cooperating mployment on an Internship cooperating district; experience in a multicultural setting: ollege and GPA of 2.75 in all or permission from the Special 5. Submit a written application and ter fielernce from current or ducation Internship Co the Special oint district-university council wil
eview applications, intenview applicants, and select candidates

\section*{Requirements:}

Seial and fees to with supporting documents on Teacher Credentialing through the Sudents must hold the Internship special education setting. Accept placement in a learning
handicapped special education sstructional setting. For some arorn tequite changing

Successtully compl
include the following:
ED P 405, 451, 454, 554, 565, 568, Resource Specialist
The Resource Specialist Certificate post-baccalaureate program for eaching credential and a Special Rucation Specialist or the Clinical Language, Speech and Hearing with
the Special Class Authorization. The candidate for this certificate must
have had three or more years leaching experience, including
assignments with both regular and assignments with hoth regular and
handicapped students. Student teaching experience can be counted
toward the three-year requirement.

\section*{Requirements:}

ED P 535, 546B, 570, electives up to 3 units, based on determination of competencies in ED P 546B. (The
evaluation process in ED P 546 B is a evaluation process in ED 546 is a determination by the Special Education Faculty of the candidate's skills.)

\section*{Graduate Certificate for}

\section*{Graduate Certificate
Guidance Specialis}

This post-baccalaureate certificate program is planned for counselors and educators with interests in career
education and career counseling. Admission:
1. Copies of transcripts verifying a GPA of 2.85 or higher on the last 60 semester units (or 90 quarter units) of course work taken 2. Evidence of completing at least beginning the Graduate Certificate or Career Guidance Spe cialist program
letters of recommendation: 4. A written personal statement; 5. Screening interview 6. An application and items \(1-4\)
above must be onfle in the above must be on file in the following spring semester, or May for the following fall semester

\section*{Requirements:}
1. 18 core course units: EDP 434B 529, 530, 531, 637, and 643C Proficiency Examination (WPE) 3. Approved electives in the Departments of Educational Psychology, Human Resources Mociology, or Vocational Education as needed to fulfill 18 units upon waver of any core course un grantid uponad.

\section*{Administrative Services}

Certification of school administrators
is established in a two-level
Administrative Services Credential
The first level-Preliminary
alid for five years from date of
ssuance, or three years from date of itial employment in an administ
whichever date is later, and is not whenewable.
The second level-Professional Administrative Services CredentiabAdministrative Services
Students are oriented toward the following positions: superintendent of schools and all central office secondary school principals, assistan principals, supervisors of instruction, curriculum directors, and othe Admission:
1. Admission to the University: 2. Possession of a valid Califor teaching credential, or pupil personnel, or librarianship, or health services credential, or vocational clinical rehabilitative services credential;
3. A 2.75 minimum overall GPA coordinator of the Administrativ Services Credential Program; 5. Take the Califormia Basic examination;
6. Satisfy the state requirements for mainstreaming and computer education.
equirements: \(544,580,647,648\)
1. EDAD \(541,544,580,647,648\),
EDAD 649 or ED P 574, EDAD 680 ED P 677. One of the two required field experiences ( 580 or 680 ) must be during the school day, either during the regular year with time
or during the summer at a year around school;
2. Three units of elective chosen in
consultation with the coordinator of consultation with the coordinator
3. Three years verifiable experience with a credential listed above; 4. Passing the CBEST prior to entrance in advanced fiel
experience (EDAD 680). Administrative Services Credential-Professional The Professional Administrative Serices Credential meets the Caifornia Commission on eacher professional-level training of new school and district administrators. Administrative Services Credential, the Professional Administrative Services redential is renewable.

Admission:
1. Admission to the University
2. Possession of a valid Prelimina
or Clear Administrative Services California Credential
3. A 3.0 minimum overall GPA in most recent thiryy ( 30 ) semester 4. Personal interview with Coordinator of the Educationa 5. Approval by Educationa Administration Programs

\section*{Administratio
Committee.}

\section*{Requirements:}

This program consists of a minimum of 26 units and satisfies the State's raining of new school and district dministrators, K-1
plan, duly signed and recorded in the Department Office:
2. The program consists of three components: core course
seminars, fieldwork, and electives seminars, ifielwork: 12 to 16 units of the following seminars: EDAD 641 (3 units) or 641 F ( 4 units), EDAD 65 (3) or 657 F (4), EDAD 658 (3) or
658 (4), ED 677 (3) or 677 F (4) The core courses with the \(F\) designation include a one unit field othe seminar course content.
Field work: 8 units of field work, usually satisfied by taking four units of field work in the core courses additional units of EDAD 690 . Students lacking the field component for any of the required core courses must enroll in \(h\).
unit values of EDAD 690 . Electives: 6 approved elective units 3. A minimum of two years successful full-time school
administrative experience in th public schools, or private schools o equivalent status
Satisfactory completion of Ex Examination on Professiona
Credential competencies.
The program of studies, which must include the core courses, is designed for each individual student, specitiving
field work activities and electives. The field work activites and electives.
candidate, faculty advisor, designated administrator from the employing school district, and the cred
program coordinator work program coordinator work
collaboratively on the individualized program
\begin{tabular}{|c|}
\hline Courses in Educational Administration (EDAD) \\
\hline Graduate Division \\
\hline \begin{tabular}{l}
541. Principles and Leadership in School Administration (3) F,S,SS \\
Preerequiste: A valid regular teaching credential
or 15 upper division or graduate unts in \\

\end{tabular} \\
\hline 544. Legal and Financial Aspects of Schools (3) F,S,SS \\
\hline Prerequistite: EDAD 541. Consideration of the law and public education, of school revenues, apportionments, budgetary procedures and cost accounting. \\
\hline 580. Introduction to Field Experience in Administration (3) F,S \\
\hline  \\
\hline 590. Special Problems in Educational Administration 1-3) F,S \\
\hline Prerquisete: Enrollment limited to graduate and have consent of instructor. Advancod study educational adminisistration within an area of andl or seminar basis. The area will be course is by thedilod A student may enroll tor ne:-three units to a maximum of six units for erticate and degree purposes, subject to and non-ceritifcate stucents may enroll for course content subject to suitable change in ourse content. \\
\hline 641. Creating Effective Schools Through Instructional Leadership (3) \(F\) \\
\hline reerequisites: EDAD 541 and consent of program with research-based character- istics of effective chools and instructional leadership practice ssociated with high- achieving schools. valuation of effective school improvement trategies, utilizing instructional leadership skills. \\
\hline 641F. Creating Effective Schools hrough Instructional Leadership 4) F \\
\hline , \\
\hline
\end{tabular}

With research-based character- istics of effective


 \({ }^{5} 54\) hours in rianed hiel work 644. Financlal Ma
Education (3) S

Preerequistes: EDAD 544 and consent of program cocroinator. Fibcal management concopts and
 operations evflectivel. A stucty of important management topics, such as the economics of
 procodures, expenditiure and revenue estimation,
usiness servic
647. Seminar in School Personnel
Administration and dehinistration and Leadership enavisiteo: EDAD
Ferequistes: EDAD 541, 544. Advancod study and function on ofocuateonal malating to the role badertship and the plannina, organazizng, statifing.
directing and expeedting of the personnel \(\mathrm{S}_{\mathrm{S}}^{648 \text {. Educational Management (3) }}\)
 Decilion, making, conflict management,
motivation,
leadership.
team
bulding. communication, planning, and organizational change, cuturue, and renewal. Perspectives and
anaysis of complex oramization and the
theocetical and concoptual acvancos in the feid. 649. Urban Educational Administration (3) F Analyois of avennes of otizen input for school retorm, alternativee for feloming the urban
school, and approaches for educuating the at-isisk student. A comparison and contrasting of
several fecent models of school retorm.

\section*{651. Seminar in Administration}
and Supervision (3) S
Preerequivhes: EDAD 541 , 544 . Advancod study administrataion, and superision of elemanemention, administation, and supenision of elememtary.
secondary and aternative schools, along with an analusis of emerging designs in administration
theory and practice. theory and practice.
657. Labor Relations and Cducation (3) \(F\)
F
Preerequistes: EDAD 544 and consent of program coordinator. Study of the labor movement in
American public education, history of collective Amencican pubtio education, history of collective
baraining, current issues and trends, and
implications tor tivuie impliatitons for fituure negotiations and contract managenent
Collective Bargailins and Education (4) F
Preerequisteos: EDAD 544 and consent of program
coordinator. Stucy of the labor movenent

American public education, history of collective bargaining, current issues and trendis, and
implications for future negotiations and contraci
 fectivemen.
658. Organizational Development and Human Resource Management (3) S
Prerequiaites: EDAD 648 and consent of progran coortinatior. Conccepts and skills required to
improve the human side of group and
organzational Ife in education

 feasible goabs, soching porobiems, dealing with
conficits, and making decilons. 658F. Organizational Development and Human Resource
Management (4) S
Prereacuistes: EDAD 648 and consent of progran
coordinator. Concepts and skills required tion corratinator. Concepts and skils required to
impove the human side of group and organizational life in education. Irteup ancersonal celations, group dynamics, and organizationes
behavior for communicating clearty. seting
teasith teasible goals, solving probiems., oealing with
conflicts, and making docilions. One unit field conficts, and making decisions. One unit fiel
component tequirement tutililed by 45 hours in component require
659. Politics of Education (3) S Preerequistes: EDAD 541,544 and consent of
 COmmission of the State; polticalal activities of the Not viro and local teacher organizations;
not the news media; and poitical activities of both business and industry. 661. Advanced Seminar in (3) S

Prerequisite: Consent of program coordinator.
Advanced stur and research in district cotvanced study and research in dosistric


\section*{78. Curriculum Evaluatio}
78. Curriculum Evaluation
Theory and Practice (3) \(F\)

Prerequisites: ED P 677 and consent of program cordinatior. Intenswo and critical of ptudy of
ifferential livews of the envilution Deverentopment of various theews of evaluation over
the past three decicite the past three decaades.
680 . Advanced Field
680. Advanced Field
Experience in Administration (3) F,S

Prereauistes: EDAD 541, approval by the
Coordinator of Educational Administation,
 and Otober 1 tor the sprching semester. This is the
and
and econd of two onthe-iph experiencos invoving
 and secondary levels. Cleoditito Creodit grading
690. Professional Fieldwork (4-8) F,S,SS ,SS \begin{tabular}{l} 
minary Administratia \\
core courses feat \\
\hline
\end{tabular} Credential and four core courses leading to the Plosesely with practitioners responsibite for maik closesy \(w\) with practitioners responibite for maic
school district toperations. Fielolowwerk experienco cocrorinated by faculyy member through
indridual contacts with district personnel and indididual contacts wint
pericoico seminars with the student grou pepirdio seminars winh the student 1 foup.
Applation should be made by March 1 for summer session and the fall semester and
October 1 for the sping semester. Not repeatable for more than eight units. CreditNo Credit grading only
697. Directed Research
\((1-3)\) F,S,SS

Prerequisites: Consent of instructor, depart- ment
chair and associate dean. Individual pesearch or chair and dasociciat dean. Individual fesearch or intensive study under the guid ance of thee units to a maximum of three units for certificate and degree purposes, subiject to suitable change in
course content. Application for enrolliment must be made by March 1 for the fall semester or by October 1 for the spring semester
698. Thesis ( \(\mathbf{3}, 3\) ) \(\mathbf{F}, \mathrm{S}, \mathrm{SS}\) Preerequisites: Advancoment do canciocacy, EDP
595 or 696 , approval by director, department chair and associate dean. Planning. preparation and completion of a thesis under supenision of a
faculty committee. Must te taken tor six units. Applcation for errollment muet be made to the
Graduate Sudies Gradiuate Sturies olficic by March 1 for the tall
semester or uimmer session or October 1 for the semester or summ
spring semester.

\section*{Psychology (ED P)}

Lower Division
190. Current Topics in Education 1-3) F,S
Orientation to and exploation of topics relevant
0 the college studuent as a leamer-scholay and decision-maker within the changing campus,
community and societal mileu. Lectures, Community and societal milieu. Lectures,
discussion, field stucy. May be repeated under ifferenent topicis for a maximum of six units Topics
ibe announced in the Scheduib of
191. Career and Personal
Explorations (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

A course designed for, but not resticted to, ontering and undeclared students. Includes
taining in life problem-soling and silt-management skills; an intensive explocation itensive career intormation search: and optional ocdures. Instruction by selft-paced matetialas. puts trom various campus departments. 192. Learning Strate
Study Skills (3) S

Determination of individual cognitive (loarning) ayle prefer ences and development of starategies ouse the preferered stype in the educational and
and life skills and habisis which faciliate the Upper Division
301. Child Development and Learning (3) F,S
Physical. mental. emotional and social grownh
and develomentit of the child with emphasis on and development of
the learning proceses.
302. Adolescent Development and Learning (3) F,S
Freequiste: General poychology. Physical, adolecoconcoe: learning procoessees.
305. Educational Psychology (3) F,S,SS Mocifability and educability of the human
eganism at different levels of maturity: rganism at different levels of matiun 311. Mental Hygiene (3) F,S Paychologieal factors importart for the eaching. group work and interpersonal telationghipe in home and ochhol: behavior
discrofers and educational praatico. 350. Education of Exceptional 350. Education of Exceptio
Individuals (3) F,S,SS

Sunvey of the education of exceptional individuals
oftering the opportunity for the study of, and
 sposure to. all excepptional individuals, includuing handicapped. learning hanalicappop, selv 57. Self-Management
(3) Demand, SS

Not open to students with credid in PSY 357.)
reerequibte:
PSY 100 , Introduction to theory research and application of selt-managememe
procedures. Methods for integrating mand
managing the cogntive, emotional, behaviorat. managing the cogritive, emotionol, behaxioral and physiological aspects of an individual will be be
discussed. Topics will include systematic discussed. Topics mill include systematic
selt-bberation
career
decision-making Interpersononal eleations, time managemement, strese and emotiton mana
3731. Nonverbal Communication: interaction of Mind and Body (3) ,S,SS
Prerequistes: ENGL 100 and upper division status. History and theories ot Unp devervopmenent mersonal and interpersosonal relations through eersonal and interpersonal relations through
lecture. diccussion, fimm and movement
anderiences. Anayyis and synthesis of the experiences. Analysis and synthesisis of the holysical. processes in nonvertal commun.
hation. Same course as DANC 373 . 390. Current Topics in Education (1-3) F,S
oientation to and exploration of topics relevant
it the colloge student as a learnerscholar and to the college estudent a a learnerescholar and
decion-maker within the changing campus, comimuntiy and sccietal milieu Lecturese
discussion, feid study. May be repeated under discussion, field study. May be repoeated unde
difteverent topics tor a maximum of six unts. Topica
will be announced in the Schectuve of Classes.
*400. Fundamentals of Educational Statistics, Measurement and Evaluation 3) \(\mathrm{F}, \mathrm{S}\)
(May not be used as a substiute for ED P 419
andor ED \(P\) 420.) Fundamentals of measure. andor ED \(P\). 420 .) Fundamentital of measure.
nent., vevaluation and statastical concopts in
ducation edication: a research consu
405. Behavior Management in the Classroom (3) F,S,SS
Appication of the principles of learaning theory, social learaning, and group dynamics in the
classocom. Includes training in observation in a school seting, coollecetion of obsesvational data,
building and implementation of intevention
419. Educational Statistics
(3) \(\mathbf{F}, \mathrm{S}, \mathrm{SS}\)

Prerequisite: Elementary algebra. Introduction to
statisical methods with application to Pierequiste. Elementary algebra
tatisioal. methods
wht
etuational research problems.
*420. Tests, Measurements and Evaluations (3) F,S
Prerequisite: ED P P49. Determination, meaning and use of fundamental statistical concepts veluation: conotrucution, interperetatiom and use o
standardized and teacher made tests. standardized and teacher made teots. *430. Principles of Counseli
and Guidance (3) F,S,SS Introuction to the fields of school counseling,
school poychology, mariage, family, ohild school ppychology, marriage, tamily, chilid
counselings, and other Community human
 sericices, and an orientation to protes
issues, counseling theories and practices.
434A,B,C. Interpersonal Skills in Human Res
\((2,3,4)\) F,S
Designed to develop interpersonal skills identified as neccessary to have effective helping
relationships and human resources development ncludee a presentation of theory and research applicable to procesases in in itiepersonal experiential leaning approaches. Same cours as HDEV 434 B.C.
*451. Learning Disabilities in (3) F,S Ascossment of learning disabitites in learning
handicapped stucents as related to etiology and diagnosis. Identification of current issues and tuends and the utilization of research findings in instrutional syytems used to design programs tor the learning handicapped. Field work
dinical experience eequired as appropiate. *453. Adults with Learning Disabilities: Counseling Model (3)
An introductory course designed to help students gain knowedge in in identifitation, diagnosis.
remediation and counseling of remediation and
learning disabilities.
\begin{tabular}{|c|c|c|}
\hline & Graduate Division & school, college, career, and agency counseling settings. \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Bilingual Contexts (3) F \\
 atypical development of language skills in school-aged children from non-English language backgrounds. Focus on the skils needmunicative competence, pragmatics and literacy. development and linguistic problems.
\end{tabular}} & & \\
\hline & Prerequisite: ED P 400. Meaning, types and applications of educational research, use of research resources and critiques of research studies. Should be taken early in a master' degree program. Open only to students taking comprehensive examinations. & quisites: ED P 301 or 302,430 or 434B MFCC and SDHE students should take Major approaches, issues and techniques Unseling in marriage, family, child practices, unity agencies, and schools. Major
theories examined and the \\
\hline \multirow[t]{6}{*}{\begin{tabular}{l}
476./576. Education and Diversity: Historical and Contemporary Perspectives (3) F \\
Major themes in the history of education from the perspectives of ethnic, racial, linguistic diversity, and gender in the United States and in California
with an emphasis on the 19th and 20th centuries; with an emphasis on the 19th and 2oth centuries; survey of educational approaches for vivent;
focus on the experiences of various groups; examination of the implications of major educational ideologies, policies and curriculum movements for various groups.
\end{tabular}} & \begin{tabular}{l}
Foundations of Vocat \\
bilitation (3) F
\end{tabular} & \\
\hline & & 516. Counseling the Adult (3) S \\
\hline & d by public and private rehabilitai & \\
\hline & & \\
\hline & & \\
\hline & \begin{tabular}{l}
cultural aspects of disabling conditions \\
vocational activities. Emphasizes on of functional limitations, attitudinal employment, and methods of
\end{tabular} & Prerequisite: ED P 515. Theory, research and techniques of counseling; use and analysis of case studies. Clinical work is required. (Not open to students with credit in ED P 631.) \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
*485. Theoretical Foundations of Language Minority Education (3) F,S \\
Introduction to theoretical foundations of language minority instruction. Background on the historical and political context of the development of educational language policies. Same course as LING 485. Traditional grading only.
\end{tabular}} & hen & \\
\hline & Prerequisite: ED P 502. Techniques and methods of information processing, service arrangement, program monitoring, and overal & rerequisite: ED P 419. Principles of statistical nalysis, with emphasis on sampling procedures, orrelational techniques. \\
\hline & Designed to meet certification for rehabilitation counselors. & 520. Program Evaluation a Research (3) F,S \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
*490. Special Topics in \\
Educational Psychology \\
(1-6) F,S \\
Prerequisite: Consent of instructor. Topics of current interest in educational psychology selected for intensive study. May be repeated undor different topics for a maximum of six units. Classes.
\end{tabular}} & 504. A Family Systems Approa to School Discipline Problems & Prerequisites: ED P 419, 420. Research designs; problems of internal and external validity. needs assessments, goal-setting by various \\
\hline & & nts, summative and formative evaluation ves, and presentation of results. \\
\hline & \begin{tabular}{l}
510. Laws and Ethics for Counselors \\
(3) \(\mathrm{S}, \mathrm{SS}\)
\end{tabular} & Counseling (2) SS \\
\hline \multirow[t]{4}{*}{\begin{tabular}{l}
492. Field Studies in Human Services/Mental Health (3) F,S \\
Prerequisite: Consent of instructor. Students in any major are placed in agencies and organizations to engage in volunteer or paid work in human services/mental health. The required fifteen hour seminar shall focus on personal values, interpersonal communications skills, ortical thinking, and problem solving as they relate to the students' field placement.
Development of knowiedge and skills transferable to future careers will be stressed. A minimum of 120 hours field experience is required for the semester.
\end{tabular}} & Prerequistes: ED P 311, 430, and/or consent of instructor. Examines laws governing the protessional aspects of counseling. Included are the legal and ettical considerations of the & and practical bases for accurately assessing and effectively responding to community, school, personal, law enforcement, medical, and mental health crisis situations. \\
\hline & nical practice. & 524. Individual Intelligence Testing (4) \(F\) \\
\hline & 511. Counseling the Alcohol/ Chemically Dependent Person (2) F,W,SS & Prerequisite: ED P 420. Practice in administration and interpretation of individual intelligence tests. Students will administer practice tests to adults and children, be observed for proficiency, and \\
\hline & Prerequisite: Consent of instructor. Survey of the theories, etiologies, and malor treatment approaches for counseling and preventing alcohol and chemical dependency, and the role & clinic cases. (Not open to students with dit in PSY 574.) (Lecture 3 hours, laboratory 3 \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
*497. Independent Study \\
(1-3) F,S \\
Prerequisites: Consent of instructor and department chair. Independent study undertaken under the supervision of a faculty member. May be repeated for credit to a maximum of six units with no more than three units applicable to credential or major requirement.
\end{tabular}} & of family and community resources, referrals, educational prevention programs. & \begin{tabular}{l}
525. Psychoeducational \\
Diagnosis in Multicultural Settings
\end{tabular} \\
\hline & 512. Child Abuse Assessment and Reporting (1) F,W,SS Child abuse assessment indicators, state child abuse laws, community resources, reporting requirements, and treatment options for the child &  \\
\hline & & \\
\hline & \begin{tabular}{l}
513. Introduction to Clinical Interviewing (3) F,S \\
Theoretical bases and applications in the conduct of diagnostic interviewing in clinical
\end{tabular} & Prerequisites: ED P 525 , and concurrent
enrollment in ED P 642 A . Diagnostic and enrollment in
remedial techniques with individuals, including the learning disabled and those with \\
\hline
\end{tabular}
ow-incidence exxcoptionalities. Disoussion of
problems and solutions in school peychology practice.
529. Assessment in Career

Pereviate EDP 120
instructor. The selection, administrtation, onsent of and interpretation of aseessment instruments in career. counsoling, Assesesment areas induco aptuduces and abilites. Techniquese ford developing and using special
abo be covered.
530. Career Development and Decision Theory (3) F Emphasis on life planning concepts as elelated to
the world of work, theories of carcer development and the career decision proceess. 531. Career Information
Resources (3) F,S,SS Resources (3) F,S,SS Knowledge, use and management of information
resurcoes in the career devevolopment field. 532. Group Counseling (3) S,SS Prerequisite: ED P 516 or 517 or 529 . Theory and application of small group processess in guidance and Counseling, laboratory practice in selection
of participants, leadershbip, interaction methocs. of participantis, leaderssipy intitera
problem sobing and evaluation.
534. Career Development in
Private Practice, Industry and

Private Practice, Industry and
Business (3) S
Business (3) S
Careor development concepts, and skills
non-educational selicable in
 program acountability, and
resources from a career perspective.
535. Counseling and Guidance of
Exceptional Individuals (3) \(F\)

Exceptional Individuals (3) F
Prerequisites: EDP 305, , 350,430 and oonsent of
instructor. Educational and vocational needs of exceptional individuals; methods of counseling: rehabilitation and guidance programs. 536. Consultation in Counseling Services (3) F,S
644. Theory and practice of consultation as it applies to counseling sevicices. Emphasion is on understanding various modeles of consultation,
and the ability to apply these models in school, colloge, agency, business or private practice 538. Student Development in

Suney of student development in public and private collegess and unioperentios. focusuing on
historical. philosochical and theoretical
and historical, philosophical a and theoretical
foundations; rolese and functions; legal, ettical. and organizational isexues.
543. Human Sexuality Counseling 3) \(\mathrm{S}, \mathrm{SS}\) Preerequisite: ED P 515 . Training in human
sexality education, counseling, and therapy. An exuality education, counseling, and therapy. An stuyy of the physibiogical, posychological, and sehavior, sexual identity, and sexual disorders. For MFCC cortification only.

546A,B. Practicum in Special Preerequisites: ED P 350 and consent of Special Education Commitioe. Supenived experience
 asopsesment, Identificiction and remediation of
bearning disabilities. Application should be made learning disabailites. Application h hould be made
by March 1 for the tall semester and October 1
tor the spring semester

\section*{548. Students in U. S. Higher
Education (3) S}

Education (3) S
Prerequisite: ED P 533 . Focus on the concepts
of community and cuiture in the United States oollege with an emphasis on underostanding the diversity of the student population to inclute age, ender, ethnic culture,

\section*{549. Management of Student \\ evelopment in Higher Education}
(3) \(F\)

An analysis of the management and


550. Cultural Perspectives of
Special Education (3) \(F\)

Preerequisite: ED P P 35. Social, philosophical and
historical foundations of
special and compensatory educuation.
554. Principles of Educational
Remediation (3) S

Remediation (3) S
Prerequisite: Admision to the special education
crecential program, learning
handicapoed credential program, learning handicapped
Analysis of theoriese and assumptions undertying
definitions and etiocogies of learning handicapo deffintions and etiologies of learning handicape
and modedis of remedial intevention. Implications and models of remediail intevention. mplications implementation of materials and class
management and instuctional methods. 555. Cross-Cultural Counseling (3) F,S

Examination of discriminatory attrudes and Examination of discriminatory attriudes and
practices includuing historical antecoents.
Probiems of minotities in crose-cultural Problems of minortites in crosesulurual
counseling. Psychiological, sociolocoical. cuitural and eevidational concorns regarding counseling
of muticutural populations. mutiticutural populations. 560. Management of Emotionally
Handicapped Child (3) S Prerequisite: ED P P 301. Etiology, and
characteristics of disturbed emotional behavio in characterisitics of disturbed emotional bethavior
the preschool and
and the p \(p\)
manage
home.
561. Individuals with Severe Handicaps (3) F
Preerequiste: Admission to Special Education
Specialist credential, Severety Handicapoed Specialist credential Severely Handicappeod
Assesmment of developmental and learning Assesement of developmential and learning
disabitites relating to etiolog and diagnois in
individuals with severere handicicapo. Identification Indididuals with severe handicaps. Identification
of theoretical tramework, curant
practices. Uvirization of research hindingan and practices. Uvilization of research findings in
curriculum
pevelopment curriciumementation
563. Methods of Teaching Individuals with Severe Handicaps
(3) \(\mathbf{S}\)
reerequisite: Admission to Special Education Spocialist credential, Severely Handicapped
Methods of teaching individuals with severe handicaps including the use of best praction
instructional technollogy, and non-aversive behavior management strategies. Infusion and use of basic skills such as communication physical management, and postitioning, and activities. Strategies for working with farilies of
individuals with severe handicaps who may be dolididuals with severe handicapo who may be
cituraly and linguisticially diverse will be
presented. 64. Assessment of Individuals with Exceptionalities (3) Preerequisites: ED P 350, 405. Knowledge of
formal and informal assesment instruments and technizues used to assess individuals with
exceptionalities from preschool to adul. Emphasis on use of accurate assessment data in the individualized educational planning process
lor students with exceptionalities. (Not open to for studdents with exceptionalitees.
students with credit in ED P 464).
565. Methods of Teaching

Learning Handicapped Individuals
(3) F,S Learning
(3) F, S
Prerequiste:
Prevequiste: EDP P54. Methods, materials and
strategoes to to teach the learning handicappeed stratagies to teach the leaning handiliapped
studentan all tevels.s. Emphasis on practical ideas
and activites in academic auriulum and activities in academic curriculum areas
noludes techniques to enhance career Planning for the Exceptional Individual (3) Preerequiste: ED P P 350 o conssent of instructor
Revive of the caret, leisuruet eime. adutr family and community needs and problems of the exceptional indmidual. Enphasis wirl be upon the
cooperative rote of the school, public and private community agencies and organizations including parent groups and associations compisised of exceptional
568. Evaluation of Bliingual/

Multicultural Exceptional Children (3) \(F\)

Prerequisite: Admision to the Learning
Handicapped Internship Program. Working with
bilinoual Haldicicappod Internstip Program. Working with
bilingoual//mutitiuntural children who are classifed
as exceptional in the scool system. Indudes as exceptional in the school system. Includes
review of fundamentals of measurement. non-biased assesmentent procecurres., and
instruments and techniques developed to assess instruments and techniques developed to asse
bilingual/multicultural excepptional chidren.

\section*{570. Role of the Resourc}

Specialist (3) \(F\)
Preerequiste: ED P 350 . The concepts of the
resource program as related to the aspects of consultation, program coordination, legal considiaration, staft developpentina and parant
encucation procrama, instruction in developmental processes and skills for planning individua programs for studeents with special needs.

572A-B. Internship With Learning \((8,8) \mathrm{F}, \mathrm{S}\) Individuals
Pretequisites: Admilssion to the Learning
Handiciapedid internship Program, possession of basio teaching credential. and demonostration invoveditin a paide employmenent student will be week for the equivalentent of four sementers
 the student. The student will demporstrat
competencies for the specialist credential in poricr competenciese for the specialist tredential in prion
or concurrest creden itial courses. II addition, the
student will demonstate achanced protenional
 grading only.
573. Intercultural Communication In Education (3) S Anayyis of patterns and functions
communication in the classicom and schod tom he perspectine of intercultural communication structures of participation; communication and ocial structure: communicative events and
 schood and community styles and expectations
regarding communication. Course fufilis
 54. Sociological Foundations of Relaciontion (3) \(F, S\)
Relationships between society and the schools:
ocal/national ideocogies and poltical/economic Ifluences; education as a socitial function: current trends and issues as they atfoct
sudaction (Not open to students with credit in
55. Intellectual Foundations of
575. Intellectual Foundation
Educational Reforms, 19th

Century to Present (3) S
Historical survey of the intellectual and
ideoclogical foundations of educational reform movements in the United States, with emphasis Idividual educationenal philisoopheress and ancus on major
 IIteracy education versus elite education are
compared, with consideration of their impact on compared, with
diverse groups.
576./476. Education and Diversity: Historical and Contemporary erspectives (3) F
Maior themes in the history of education from the and gender in the United Satates and in califrorial with an emphasio on the trith and 2ath canturies: bus on the experiencoes of various groups: damination of the implication of malio ducational ideologies, policiee
577. Educational Linguistics
3) \(F\)

Peermuisistes: Six units in linguistios or
permission of instructor. A graduate introduction
oo the rol of tanguage and linguistics in
contemporay eduaction endyio
ontemporary education: analysis of the context
anguage acquistion: atitudes toward
muttinnuarism; language policies which
guidetines and
 578. Literacy and Uinguistic (3) F
 permission of instructor. This currse
general intiovidides trom a linguistio and sociocultural persspective. Among the maile topicso preverited perse the
relationship beemeen oral and withen treationship between oral and wittuen language
the relationship between literacy and
socioconomico socioceconomic/sociocoultural facterric and the
impact of societal expectations regarding litera impact of of scietal expectations regarding literacy
Pedagacolical implications of these issues are explored. Same course as LNG 575.
579A. Instructional Strategies for
Individuals with Learning Individuals with Lear
Handicaps (3) F,S Prerequiste: ED P525 or 564 . Development and Prerequisise: EDP 525 or 564 . Development and
implementation of effective instrution for
individuals with
learning
handicano individuals with learning handiciope
Demonostation and application of clinical
 O) hours of field work required. 579B. Instructional Strategies for
 Demonstration and appication of clinical
stategies with students with severet handicape
Twenty (20) hours of feeld work tequired. (Course Twent of co ampuas
held
580. Vocational Work Evaluation

Systems (3) F,SS
Prevequisites: ED P P 305, 350, 420, 430 or equivalients, and consent of instructor. Concopts
and processese of vocational work evaluation
systems as they pertain systems as they pertain to the assessmenton of cocupationally dirabled olientileo. The role and and publio ovocational rehabilitation agencies chools, and personneltraining activtites will be
oxamined in regard to their theoretical and situtional applicitions.
5ehabiltation and the Courts 581. Re
(3) s
Prerenime retequistes: VE 499, ED P 502 and 580 Sxtensive evidence and preparation for
loational tostimony is flowowed by opportunitiea
lor mock hearing and tialo lor mock heaerings and trials and obseerration of
actual legal proceedings.

\section*{582. Comparative International}
an overiew of education in selected foreign Countries: a stucy of insthtitional organization, as
well as issues which develion in particular social weonomic, and poolitical contextexs; an enexaminiation of typese of educational problems and solution
which are commonly shared. hich are commonly shared.
83. Global Education (3) S Background on crtical world issues and cultural
nffevences, as well a a methods and resources tor
application in the application in the classrom. Format incluce activies, and cultural simulation exerecisise
584. International Perspective Education in Cultural Continuity Education in Cuitur
and Change (3) F
Explores varying interpetations of the role of
education in ocociety as a transmitter of culture education in socieety as at atranamitter of culture and/or as an agent of political, economic and
social change in economicall doveloping and
developen countriese on an intermatitional scale. \(586 \mathrm{~B}, \mathrm{C}\). Advanced Field Study with Exce
\((7,7)\)
F,S
pevereculy hantes: Admicapspod speciol the learning or and demonstration of speceififed competetencies. Application for this coursee should be be made by
October 1 for the spring semester and by March
 semester. Students will be assigned to field sites
five days a weok for the equivalent of one semesters under the seppervision of a field-site
specialist. Advanced fiel study indurind specialist. Advanced field study inoluding student
teaching in a public or private school or facility sening handicappeed of exceeptional students. Application of specialist training competencies
demonstrated in prior or concomitant specialist credential courses. In additionon, oppopotuntities will be provided for the student to demonstrate
competencies in (i) the analysis and evaluation of competencies in in the analyisis and evaluation
all program elements; (2) the application
appropiate intenin appropriate intervention to extend interaction
among exceptional or handicapped pupls among exceptional or handicapped pupils, the
peeers and aduuts; (3) planning and conducting parent meetings: (4) utilization of ethical practice hancommunication to others about exceptitonal ond
harsicatit of a pupilis and (5) the intitation and
 grading only. Both ' \(B\) ' and 'C' Cociurses may be repeated for a maximum of 14 units. 590. Special Problems in (1-6) F,S
Prerequisiste: Consent of instructor. Advancea
stury of educational ppychohology. A studend problems one-three puits to a maximum of max ennilts for certificate and degree purposes, subijict to
suitable change in suitable change in coorre content. Non-degre
and non-cerificate struents may enroll for and non-cortifiate studdents may enroll
acdititional units subject to suitable change on
course content course content.
595. Qualitative Research
Methods
\((3) ~ F\) lethods (3)
Intruduction to the theory and application of
ettnographic and qualative methods in educational seetings wutirlative mecial empodsis on applications for educational linguisticic
educational anthropology, and research related
 rationale for qualitativelethnographic inquiry and
basic concepts and methods for applications in bastic concectis and methods for applications
teacher-asereearcher apporoaches and for action
research 604. Seminar in H LIN 604. Seminar in Huma
Development (3) F,S Prerequistes: EDP 301 or 302 , and ED \(P 400\)
419. Theocies and isues in develomental

 posychomotor, social and emotional deve
nature-nuture and indididual differencee
ade by October 1 for sping gemester or by
arch 1 tor the summer or fall semester. Three March 1 to the summer or tall semester. Thiese
units of feic work lo reauired per semester.

\section*{42B. Field Work-Counseling}

\section*{(1-3) F,S}

\section*{Prerequisites: ED \(P\). 643,64 and approval of
Program Commititeo. Application for field work
} semester or by March 1 tor the ourmer of tall
semester. Each area of spocialization may bo raken for one, two or three units per semester for
a maximum of four units stala. Credifino Cridit arading only.

\section*{S43A-D,F. Counseling Field Work \\ (3) \(\mathbf{F}, \mathbf{S}, \mathrm{FS}\).}

Prerequithes:
A. School Counseling
ED P 515,517 , Cortificate of Ciearance
B. Student Development in Higher

EDducation
CD. Careers

ED P. 515, a37.
D. Marriage, Family, Child Counselor
D. Marriage, Family, Ch
EDP \(510,511,512.515,600,634\)
F. Special Populations

Practical experiencoes in crounsoling and
guidance actutien under supenision in approved
 made no later than March 1 for the following
summer or fall semester, and October 1 for the uping semester. (Not open to students with creodt in ED P 541.) CreodilNo Credit gradin
ons. only. Field Work (3) F,S,SS Prereauibtes:
A. School Counseling
ED P331, 332,6434 , passed CBEST. EDP 5 S31, 532,643 , passed CBEST.
B. Student Development in Highe \begin{tabular}{c} 
B. Student \\
Education \\
\hline
\end{tabular} EDP 5499643 B
C. Caree C. Careers D. Marriage, Family, Child Counselor ED P 532, \(560,643 \mathrm{D}\). F. Special Populations Continued field work under ficensed/ credentialed supeniocrs (if equired by specialy area or work
setting). Applications tor feeld work must be made

 \({ }^{\text {Pamemester. (Not open to students with }}\) P4 645. Internship in Rehabilitation Counseling (6) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Preerequibites: ED P 63 and Advancoment to
Candidacy. Application must be made no late Candidacy. Application must be made no later
han March 1 for the following summertel
 Fulltime paid employment stituation resutitng in a
minimum of 600 clock hours in an approved
 Corififed Renabilitation Counselor. The studer
will demonstrate competencies for nation certification and ac
72. Language and Educational Policies (3) \(\mathbf{S}\) xamination and anayyis of comtemporary and
 Unitred States which providid the context tor
ourtern language practicese in the shools comparison of U.S. experiencoes with those of
other nations; discussion of the relationship other nations, disecusion of the rilationsh,
botwoen language attividee and education
policy yormation. policy tormation.
677. Seminar in Curriculum

Development (3) S
Poyynological, sociololoical and philosophical loundations of principles of curriculum pattern
and
dovelompment at both T7F Semi.
Development (4) \(S\)
Prevecuibite: Consent of program coordinator for Payuational administration field component unit
 and development at both elementiary and
secondary levels. One unit fieid componeme secondary levals One unit field componen
recuirement tuffiled by 45 hours in relater fielwork.
695C. Seminar in Professional Development in Counseling and
Human Services (3) \(F / S\) Prereaquistes: Advancement to candidacy,
completion of al prerequibtes for ED \(P 644\) and complition of all prerequibites for ED P 8444 and
witten application to Graduate Office
 March itor the summer seession or tal semeatie or by Oatober 1 for the sping gemester and specializations. The studdent will demonstrail
knowiedge of the feld along with selected okills. 695F. Seminar in Foundations of Education (3) S
Prerequisites: Advancoment to candidacy in the Eracuate advisor, and witten application of graduate advisor. and wititen application to
Graduate office. Applications for enrolment must be made by March 1 for the summer
seosion or fal semester, or by October 1 to the session of tail semester, yor by october itior ine
sping semester. Analyis of major lisues in edicational foundations (oscilogogical, historical. and philosophical) and their relationships to
international education, language, Iferacy and international educaation. language, Iteracy and
cuture and drban evuation. This course is taken in preparation for comprehensiwe
examination in Educational Foundations. (Not examination in Educational Foundations.
open to students pursuing the thesis option.) 695S. Seminar in Special Education (3) S
Prerequistes: Alvancement to candidacy, and
witten application to Graduate Office
 March 1 tort hes summer session or tall semention.
or by October 1 lor the sping semester. Studies of by October 1 tor the spring semester. Studies
of problems and issues in special education. Relating research to practice in the severuala aneas. ot exceptional individuals For qualified
candidates preparing tor the comprehensive

\begin{tabular}{|c|}
\hline \multirow[t]{12}{*}{\begin{tabular}{l}
696. Thesis Study: Methodology, Organizational and Research Aspects (3) \\
Prerequisite: ED P 400 , or ED P 419 and 420 [M
in Counseling and \\
Psychology Option require ED P 419 and 420 . \\
Analysis and definition of problems in education
in the context of thesis research. Reference \\
techniques and survey of literature, research \\
inference, and procedure, data analysis and \\
research findings. Designed for studen \\
planning to do a thesis. A thesis committee mus
\end{tabular}} \\
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\end{tabular}
697. Directed Research (1-3) FS Preerquisites: Consent of instructor, department
 o a maximum of three units for certificate an degree purposes, subibect to suitable change in
course content. Applicato for enrolment must be mado to the Opficica of Graduato Studies and Fesearch by March 1 for the fall semester or b
October 1 to the sping semester

\section*{98. Thesis \((3,3) \mathrm{F}, \mathrm{S}\)}

Prerequisites: Advancement to candidacy, ED
19 or 520 or 595 or 698 artment chair and associate deve by pliector reparation and completion of a thesis unde arenenision of a faculty commititee. Must be nust be made to the Graduate Studies Office by March 1 mor the tall semester or Octiober 1 for the
rin

Department Chair:
Department Chair:
Richard J. Johnson
Department Office: LA 1 Room 209 Telephone: (310) 985-4966 Faculty: Professors: Donna George, Richard J. Johnson;
Associate Professors: Ann Lathrop, Joseph A. Lea, Richard C. Joseph A. Lea, Richard C. Emeritus Faculty: Paul L. Brent, James E. Cockrum, Jay J. Gramlich, F. Alan Timmons, Barbara A. Ward Instructional Systems
Technology Adisory Council The Advisory Council is composed whose position indicates an involvement with media as a means of and industry. The purpose of this group is to examine and recommend changes in the existing program and assist the
planning.

\section*{The Department}

The Department of Instructional Systems Technology offers courses meeting the requirements ior th Instructional Systems Technology, a Library Media Teacher Servicos Credential for the State of California, and a certrificate program.
Objectives of the programs are to (1) provide opportunities for advanced study experience and
research in practical and the aspects of instructional design and the preparation, selection, crirculation
and implementation of instructional and implementation of instriactiong computer applications; (2) qualify those students desiring advance protessional preparation communication phases of schoo health, business, industry, and
governmental institutions; ( 3 ) prepa students for an advanced degree in which a significant prerequisite for employment is profession communications; (4) provide theory and experience in the organizatio leadership and administration of library media programs; and (5)

\section*{Instructional Systems Technology}
provide opportunities for teachers,
administrators and training directors
to become acquainted with new
eommunicative tech
Students desiring information
should contact the department office
for veferral to one of tha faculty
advisors. All GSE graduate level
advisors. All GSE graduate level
courses ( \(500 / 600\) ) are assumed to be
raditional grading only unless stated otherwise.
Master of Arts in Education with On Option in Instructional Systems Technology
(code 5-3150)
Admission and Advancement to
Candidacy:
Please consult the "Graduate
chool of Education section of the
criteria and advancement to
andidacy.
Prerequisites:
1. Design and Development, all of
the tollowing ( 6 units): EDST 300, 301
2. Library Media, all of the following
2. units): EDST 300 ;
3. Computer-Based Technology,
of the
301.
Requirements:
A minimum of 30 units with a 20 unit concentration in education is required. 18 units must be in the 500/600 leve
Core:
1. One of the following (3 units):
EDEL EDSE 530, ED P 574 , or 576 Library Media specialization require EDEL/EDSE 530
2. One of the following (3-6 units)
ED P 400 or 419 and 420
3. One of the following (3 units): ED 500 , or 696;
4. The following (3 units): EDST 501 5. One of the following: Witten 698 ( 6 units).
Specialization Requirements.
1. Design and Development:
a. A minimum of 7 courses chosen from (1) and (2).
(1) Production: 3 or 4 of the
following ( \(9-12\) units): EDST 410 ,

412, 451, 510, 511, 512, 515, 551,
52) Applied and Theoretical: 3 or 4
(o)
of the following (h-1 of the following (9-12 units): EDST
\(450,452,500,501,550,553,630\);
b. Electives to total 30 units.
2. Library Media: the following (9 a. Select three of the following (9
units): \(L 1510,513,520,540,550\) b. One of the following ( 3 units): EDST 410, \(412,451,510,511,551\) c. One of the tollowing ( 3 units):
EDST \(452,552, ~ 1570\) :
d. Electives to total 30 uni selected from the following in consultation with an advisor: EDEL
540, 551, 553; ED P \(575,582,677\); EDST 500, 512, 515, 630; L 590 . 3. Computer-Based Technology: a. All of the following (9 units)
EDST 450,550 553: DST 450, 550, 553; b. Two of the following ( 6 units):
EDST \(451,452,551,552\).
c. Electives to total 30 units.

Library Media Teacher Services
Credential Credential
The program in Library Media prepares students for service as a
library media teacher, grades \(\mathrm{K}-12\), in library media teacher
Prerequisites:
1. Admission to the University 2. Completion of a bachelors
degree, preterably with an academic subject major;
3. Admission to the Library Media Teacher Services credential program; 4. Overall 3.0 GPA in the last sixty
units of undergraduate work and in all units of undergra
graduate work;
5. Passage of CBEST prior to
admission to program;
6. Possession of a valid California eaching creden
Requirements:
1. Foundations ( 12 units): EDST
300, 1513,520 EDE E/EDS 530 . Procedures and Policies ( 9 units): LI 510, 540, 550;
3. Design and Development ( 3
units), choose one of the following;
EDST \(410,412,451,510,511,551 ;\)
4. Theoretical (3 units), choose one
of the following: EDST 452, 501, LI
5. Field work ( 4 units): LI 581 (Candidates must pass field work with recommended for the credential): 6. Electives as needed from the
following: EDEL \(540,551,553\); \(P\) PD
\(575,582.677\) : EDST \(500,512,515\), 630; ப590.
With careful planning and
advisement, students advisement, students may complete
course requirements for the Master of Ants in Education with Instructional Systems Technology Option, with the
Libray Media Teacher Services credential program. The Library Media specialization of the Master's program is correlatated with the
credential program. credential program
Certificate in
Technology
The Certificate Program in Instructional Technology is interdisciplinary and is open to
students in any field where communication and/or library media skills are important. The program is open to undergraduate or graduate
students, but may be earned only students, but may be earned only baccalaureate degree
Admission to the program is through application to the Department
of Instructional Systems Technology Requirements for the Certificate in instructional Technology: 1. A bachelor's degree with an
approved maior: approved major;
2. 21 to 24 units
2. 21 to 24 units selected from the completion of one of the four programs listed, chosen in consultation with an advisor and
determined by class level and st bjectives. a. Industrial Employee Development Personnel and Public b. Instructional Materials Resource Center Personnel: Audio Visual or Library:
c. General Media Specialist; Approved courses:
EDST \(300,301,410,412,450,451\) \(452,400,491,497,500,501,510\),
\(511,512,515,550,551,552,553\), 590, 630, 697; \(51510,513,52,520,543\), \(590,570,581,590, \mathrm{SPCH} 332,333\)
\(352,358,448,449 / 549,451 / 551\).

\section*{Courses in Instructional}
ower Division
250. Computer Literacy (3) F,S Developing personal propuctivity and
understanding experience with integrated computer applications (Werd processing, graphics, sproadoheots,
databases, telecommunications and networking). overhead and video priesentations. Elementary computer programming. (Lecture 2 hours,
labocatory 2 hours.) Not open to stucents with credtit in IM 340 or 341
\({ }_{(3)}^{251 .} \mathrm{S}\) Computer Programming (3) S Preerequiste: EDST 250 or consent of instructor.
Appling advanced Apopling advarnedd programming techniques,
including struatured programming, fiel handing
and custom inouttoutout and custom input/outout. (Lecture 2 hours.
laboratory 2 hours.) Not open to students with credt in EDST (IM) 342
Upper Division
300. Instructional Media (3) F,S

Resource materials and technological
advancements elataded to instructional theory and practice. Laboratory experience incoludes Preparation of instructional media and equipment
operation. (Lecture 2 hours, labcratory 2 hours.) 301. Instructional Design (3) S Preerequishe: EDST 300 or consent of instructor.
Instructional
sydtems
design applied to educational and training programs. *410. Preparation of Graphic
Media
(3) F Media (3) F
Probiems in visualization including the
preaparation of transparency materials for
preparation of transparency materials for
utilization with the overnead ppoiector in the
corporateelclassicom setting corporate/classroom seting, introduction to
computer graphics, newsieter desion and computer graphics, newsettert design and
production. (Lecture 2 hours, laboratory 2 hours.)
Tradtional gracing only. Traditional grading only
*412. Instructional Support
Production (3) F Production (3) F
Design and development of instructional media
support and interactive learning materials support and interactive learning materials for
instuction. Basic skilis necossary to pictur overhead, slidetape, audio, and video materials including computer generated images. (Leoture *450. Computer Educatio (3) F,S,SS

Preerequisite: EDST 250 . Integrating tecchnology
into teaching and learning. Teaching others use ceaching and learning, Teaching others to
critical thinking as toins tor problem solving critical thinking and creativyt: the computer as
tutor (drill and practice, tutorias, and simulation and games). tool (word procossing, graphics
spoeacohhees. , databases, spreadsheets. databases, toleccommunications
and notworking), and tutee (programming and and networking), and tutee (prorgramming and
authoring languagas). Uisg teache outiry
programs: evavauating and managing programs; evaluating and managing resources.
(Leecture 2 hours, laboratory 2 hours.) Traditional grading only.
451. Desktop Publishing (3) F Prevequivite: EDST 255 or consent of instructor Developing instructional materials for
indiviualized learaing with an emphasis on
sell-publishing techniques using computer

*452. On-line Information
\(* 452\). On-line Info
Retrieval (3) F
Prerequishe: EDST
tierequisite: EDST 250 or consent of instructor.
Retrieving intormation through on-line computer searicrening information through on-line computer databasee. Using telecocommuninations sencicices,
equipment and sotware.
 490 . Speci
490. Special Topics in

Herequiste: Consent of instructa \(\mathrm{F}, \mathrm{S}\) Prerequiste: Consent of instuctor. Topics of
curent interest in instructional media selected tor
itensive stucy May intensive study. May be repeateded undere dififerent
topicos for a maximum of \(s x \times\) unts. Toplcs will be 10picis tor a maximum of six units. Topicic
announcod in the Schedula of C Cassses.
*491. Internshlp (3) F,S
Prerequisites: Consent of dopartment chair and
senior standing. At least 120 hours with
 and eviluated by supenisors of the participating organizations. Three classrcom meetings per he area of ingtuctional communications. \({ }^{\text {*4 }}\) 497. Independent Study (1-3) F,S
terequisites: Consent of instructor and Undert the euperidision of a tacoututy member. May er epeated for credit to a maximum of sis unats, credential or major toquirement.
Graduate Division
500. Instructional Systems (3) S Perequisite: EDST 300 (may be taker concourrenty) or consent of instructor. Anaysis
and desity of instructional systems telataded to the
conceppual tramework of a sytem. 501. Theoretical Models Applied Media (3) F
Pedelo of communication, EDST 300, Theoretical and perception apacplied, information, learning
ant itization of instuction osign and utilization of of instructional media.
510. Preparation of Photographic
Media (3) F Media (3)
Pereqequiste: EDST 300 or consent of instructor.
Design and production of photographic story poorn formatas, slidese and of filmotortipaps. (Lecture 2
hours, laboratory 2 hours).

\section*{(3) S}
erequiste: EDS
Planning a and procuccing consent of instructor.
the sound track for Lecture 2 hours, laboratory 2 hours.)
(3) \(F\)
Preerequis

Prereqquisite: Consent of instructor. Plamning,
producing pitoucming and directing the instructional dures wilt be emphasized. (3) S

Preeraquisteo: EDST \(300,410,510,511,512\), and consent of instructor. Advanced nstury and laboratory experiences in desighing, procucuing
and
presenting
educational
mutitimecia) mesages. (Lecture 2 hours), laboratory 3 hours.)
550. Teaching Computer Concepts and Applications (3) F Prerequisite: EDST 450 or consent of instructor. Teaching others about computing: devevipo
and using performance oblectives, electing and usting ingterctional technicuess and materials,
and interreting and appling research. (Lecture, and interp)
3 houra.)
551. Interactive Learning (3) S Prerequiste: EDST 451 or consent of instructor Developing instructional materials for interactive Learning, with an emphasis on computer- -asous,
interactive video technology. (Lecture 2 hours, laboratory 2 hours.) Not open to students with
552. Computer Databases (3) s,ss
Preerequisite: Computer Ifterate. Using, planning.
 (Lecture e hours, laboratory 2 hours.) Not open
tostudents with credit in 1 M 42 .
553. Managing Com
Resources (3) \(S\)

Presequisite: EDST 450 or consent of instructor.
Organizing educational technology systems for use by others. Setting up and operating and moditing sotwware packages. Optimiving computer usage by means of command
language capabilities. Maintaing and repaing
equipment. (Leeture 2 hours, laboratory 2 hours.) equipment. (Lecture 2 hours, laboratory 2 hours.) 590. Special Problems in
Instructional Media (1-3) F, Instructional Media (1-3) F, S
Preaquiste: Consent of instructor. Abvancod
study of Prevequisite: Consent of instructor. Advanced
stury if special topicict and problems in
instructional media. A student may enroll for instructional media A Astudent may enroll for
one-three units to a maximum of six unhts for one-thies units to a maximum of six units tor
certificate and degree purposes, subicet to
suitable change in course content. Non-degree suitable change in course content. Non-degree
and non-cortificate students may entoll for and non-certificate students may enroll for
additional units subject to suitabie change in course content.
630. Seminar in Educational

Technology (2) \(F\)
Preerequisite: EDST 501 . Anaysis of experimental motivation and aucience.

\section*{697. Directed Research \\ \section*{(1-3) F,S}}

Prerequistes: Consent of instructor, department Intensive astuccy under the the guididance of a facuity member. A stududent may encol for one-three units to 2 maximum of three unitif for or cetificate and
to
degree purpoces Abiect courree poritosenes, subpicicat to suitable change in be made by March 1 tot the fall semester or by
October 1 for the sporing semester. 98. Thesis or Project \((3,3)\)
\({ }^{698}\) F,S,SS

\section*{Herequisites: Advancement to candidacy, ED P} by director, department chair and associate dean. Planning, prepearation and completetion of a
 Committee. Must be taken for six units. Application tor enroliment must be made to the
Graduate Studies Officio by March 1 for the fall
Semester and summer or October 1 tor the spring emesesterand summer or October 1 for the sping

Courses in Library Education

Lower Division
100. Introduction to Library Use (1) Introduction to the use of libraries, Ilbrary tools,
materiais and senicea. Particuilar emphasis on materials and servican
the college Ilibray.
Upper Division

\section*{*497. Independent Study}
(1-3) F,S
Preerauisites: Consent of instructor and department chair Independent study undertaken
under the superision of a faculty member. May be repeated tor credit to a maximum of six units ith no more than three units applicable to Graduate Division
10. Selection of Materials a

\section*{ation Sources (3)}

Citieria, toolk, procedures and policies for
evaluating and selecting book and non-book materials appropriate to use in various types of
513. Library Materials for K-12 (3)

Foction and non-fiction books and reatated eefecting the cultural diversity of our state; cititeria and tools for print and electronic media selection nd use; selection to support the statat curricilum rameworks; and current isuue
tudents with credit in t 4 413.).
520. Basic Reference (3) F

Philosophy of referencee service; criteria for valuation, study, and use of selected basio
 diversity of our studentsi; and oveniew of
computer and other technology as it applies to computer and other technology as it applies so
piference work. (Not open to students with
incod L420.)
540. Organization and Cataloging of Materials
(3) S , Odd Years
Prerequisites: EDST 300, L 513,520 . Rationale and ues of card, book, and computer catalago rataloging applied to school librariess: procecssing 550. School Library Media Center Management
(3) reiequisistes: EDST 300, LI 513,5220 . Philosophy, upervising and managing a a school librayy media center program.

\section*{570. Library
(3) \(\mathrm{S}, 1993\)} otrequasite: EDChost 450. Computer, vidioo, and Anayysis of avaliable equipment and software Productivity skili
Ibray setings.
581. Field Work in the Schood
Library Media Center (4) Prerequisist: Completion of the courses required or the library media credential program permision of the program advisor. Applications
for spring semester must te in the office of the Library Education Aovivor by by Otober 1 and tor
fall semester and summer by March 1 Sutdents Libray Eucation Aovisor by October and for
tal semester and summer by March 1 Students
will recelve practice in administering a libray will receive practice in administeting a libiary
program and services under the superivision of a redentialed libraiaian.
590. Special Topics in Library Media (1-6) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Study of special problems and topics in the field six untits moa a maximum of mix units oflo for one to and degree purposeses, subjicact to sutatable change in course coonteont, subuect to suitable change
Non-degrea land
noncerticate students may enroil for additional units subbect to suitable change in course content.
Topics will be announced in the Scheodie of
Classes.

\section*{Single Subject Teacher Education Program}

University Coordinator Office: ED 1, Room 55 Telephone: ( 310 ) \(985-5325\)
Secretary: Patricia Colucci Secretar
General
A teacher with a Single Subject Cpecificic subiects named to the the credential in departmentalized schools. This is commonly done in California high schools and in most chools. The Single Subject Credential Program prepares university students to be
credentialed in California credentialed in California for single
subject instruction. At CSULB the program includes courses in the students' teaching subject area, in
Secondary Education (EDSE) and Secondary Education (EDSE), and Admission Requirements: 1. Complete the prerequisite course, EDSS 300, in the
2. Satisty the GPA of 2.75 or mee e minimy CSU System for the degree major, equirements were as follows: 3.00 - Health Science; 2.88 - Foreign Language; 2.83 - Fine A
- English; 2.75 -Home - English; 2.15 - Home

Technology Education, Physical Education, Mathematics, Science
and Social Science. Consult with your acvisor if your degree is no your advisor it
3. Achieve satisfactory perfirmance as a teacher's aide inimum of 30 hours):
4. Complete personal interview 5. Submit to f faculty recommendation;
6. Submit an application for
Certificate of Clearance to the California Commission on Teache redentialing (CTC)
7. Pass CBEST and satisfy the Students who do not pass CBES
may satisfy the fundamental skills by attaining a minimum of 37 in the otal required for passing) or by the ollowing: Written English - Pass
he CSULB Writing Proficiency he CSULB Writing Proficiency
xamination; Reading - Complete the literature or philosophy general education requirement with a minimum grade of C; Mathematics general education requirement with minimum grade of C; Note: CBEST must be passed in order to teaching:
8. Submit a written statement of professional goals or philosophy; 9. Submit a completed program
application to EDSS 300 instructor; 10. Complete all single subject ea requil ior admission. or details
Requirements for a 5 -Year
1. Hold a bachelor's degree; 2. Satisfy the U.S. Constitution exam): exam.
Single Subete the requirements for Subject Credential Major, 4. Attain a GPA of 3.0 or above
for all professional education course work, with a minimum grade of 'C' i' 5. Comple the following 5. Complete the following
courses: EDSS 450, EDSE 435 ,
436,457 , and HSC 411B. 436, 457, and H SC 411B
6. Pass CBEST;
7. Be admitted to and complete the student teaching requirement of Bilingual Emphasis Credential This Spanish/English program is Mathematics, Spanish, and Socia Science Credential programs. The program requires the following 1. Single subject education course sequenc
2. Bilingual section of EDSE 457 .
3. 150 hours as a teacher's aic a secondary school bilingual setting units): Intercultural Component ( 12 with the chairperson of the Mexican American Studies Department for
approval of courses
Candidates for the Bilingual Emphasis Credential are expected achieve and to demonstrate th ability to perform the duties of a ooth Spanish and English. The program administers an assessment or all candidates in both languages ae result of that assessment. SPAN 322 is required. The Bilingual Proficiency Assessment is
administered on the last Saturday of February.
6. Culture/-listory Component: Candidates must successfully complete a written asses competency in the targe
cutture/history. Courses MEXA 300 , MEXA 340 , MEXA 350 and one of MEXA 310, MEXA 400 MEXA 405. The Culture/History
assessment is administered assessment is administered on the Student Teaching
Admission to Student Teaching is based upon a second thorough assessment of the candidate's qualifications. The process involves
an evaluation of the applicant's file and an interview with faculty in the Single Subject Program. The criteria for admission are as follows: success in teaching, as indicated by successful leadership, teaching experience, or work experience. Updated information regarding the candidate's most recent experien
including the work in EDSS 450 , forms the basis of this assessme Candidates are urged to submit letters of recommendation which
reflect activities undertaken since their admission to the credential program
2. Continuing motivation for and nthusiasm toward teaching gether with those personality traits believed essential or successful eaching. New evidence includes a nstructor of the EDSS 450 class and further recommendations from aculty who have worked with or he time of admission to the credential program:
3. Academic competence, overall and in the teaching major. he level of scholary achievement of
andidates is expected to be above candidates is expected toed to consult with their credential adviso egarding the GPA required Admission Require
1. Admission to the Single
Subject Teacher Education Progran
2. A GPA of 2.75 or the minimum equirement of the CSU System for he degree major, whichever igher;
3. A minimum grade of "C" in each course in the professional of the four education courses with a GPA of at least 3.0
4. TB clearance (clearance mus student teaching);
5. By October 1 or March 1 of the semester prior to Student Teaching. file a student teaching application
6. Pass the California Basic

Educational Skills Test (CBEST) prior
to the student teaching application deadline;
7. Satisty subject matter mastery evaluation.
Student Teaching Application Proces:
1. Transfer graduate students the credential program may take three or more semesters. The majo department may require a minimu of sior to student teaching
2. The application for Student Teaching is reviewed by the student's Single Subject major area(s). The Credential Processin transcripts. The department then makes a recommendation to the
ducation Committee which takes inal action. When approved by this Ommittee, the student registers for sed if sufficient funding is not seed if sufticient funding is not applicants to enroll in student eaching:
3. A Certificate of Clearance uust be on file in the Single Subject Student Teaching.
Student teaching is full day, full semester, following the school strict calendar. The students teach hree classes which represent
different aspects or levels of the single subject major. The other two eriods are for preparation and observation. For at least two weeks, eaching responsibility for the total lass all day. Student teachers Ittend student teaching seminar he University determines the specific student teaching assignment.

\section*{rofessional Clear Credentia}
equirements: 1. Requirements for the 2. A minimum of thirty ( 30 ) postbaccalaureate semester units. Note that these units must be taken awarded. The only exception is for second semester seniors who successfully petition in advance of btaining the baccalaureate to coun the senior year toward a postbaccalaureate credential (see dex under 'graduate-credit').
3. ED P 350 (mainstreaming)

Petitioning Process:
Students may appeal a decision 0 student teaching, a negative ecommendation for the credential, or any other program decision, by lling a written appeal to the University Single Subiect eitition Committee reviews the written statements and supporting evidence and interviews the candidates, it Committee renders its final decision Students follow University policy to uppeal a course final grade.

\section*{Single Su}

Candidates for the Single Subject Credential must complete one of the credential major programs which have been approne consult the following list for the programs available at CSULB. Students should contact a Single
Subject Advisor for complete details on each of these programs.
Art

Complete the requirements for the in At option in A Education.

\section*{English}

\section*{American Studies Emphasis} Students are required to complete the tollowing core of thirty-oni (31
units and fifteen (15) units to provide breadth and perspective. Core Courses ( 31 units): ENGL 184, 310, 363, 482; Select one
course from ENGL 320 or 325 , Select three courses from ENG \(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\). Breath and Perspective ( 15
units). AMST 300, 490, 498, HIST units): A
\(477 \mathrm{~A}, \mathrm{~B}\).

\section*{Compar}

\section*{Compharatis:}

Students are required to complete the following core of thirty-one (31) units and twenty-one (21) units to provide breadth and perspective. Core Courses ( 31 units): ENGL
\(184,310,363,482\); Select one course from ENGL 320 or 325 ; Select three courses from ENGL 50A, 250B, 370A, 370B Breadth and Perspective (21 units): C/LT 234, 330A, 3308 431, 432, 438; Select one course om C/LT 403, 404, 430, 440, 449, 451; Select one course from
CЛT 342, 402, 445, 452, 453; Select at least three units of electives from the courses listed or this option.
Creative Writing Emphasis:
Students are required to complete he following core of thirty (30) provide breadth and perspective.

Core Courses ( 30 units): ENGL
184, 310, 375,482 ; One course from ENGL 320 or 325; Select three courses from ENGL 250A, 250B, 370A, 370B.
Breadth and Perspective (18
units): Select nine units from units): Select nine units from
ENGL 405, 406, 407 (may repeat any of these three courses for a maximum of 6 units); Select three
courses from ENGL 385, 386, courses from ENGL 385, 386,
\(459,467 \mathrm{AB}, 474,475,476\), 477AB.
Dance Emphasis:
Students are required to complete the following core of thirty-one (31) units and twenty-five (25) units to
provide breadth and perspective. Core Courses ( 31 units): ENGL \(184,310,363,482\); Select one
course from ENGL
20e Select three courses from ENGL 250A, 250B, 370A, 370 B .
Breadth and Perspective (25
units): DANC 114B, 212B, 220 \(331,380,442 B, 470,485,488\). Journalism Emphasis:
Students are required to complete the following core of thirty-one (31) units and twenty-four (24) units to provide breadth and perspective. Core Courses ( 31 units): ENGL
184, 310, 363,482 ; Select one course from ENGL 320 or 325 Select three courses from ENG. 250A, 250B, 370A, 370B
Breadth and Perspective ( 24 units must be upper division): JOUR 110, 120, 320, 331, 430; Select one course from JOUR 322A 322B; Select 6 units minimum
from JOUR 115, 280, 312,370 422 A or B, 431, 490, 499.

\section*{Language and Compositio}

\section*{Emphasis:}

Students are required to complete the following core of thirty-one (3 units and eighteen (18) units to Core Courses ( 31 units): ENG 184, 310, 325, 363, 482; Selec three courses from ENGL 250A 250B, 370A, 370B.
Breadth and Perspective (18
units): ENGL 420, 421, 428, 429 units): ENGL 6 units from ENGL 423 426, 427, 499. Twelve units o equivalent of a foreign language.

\section*{Literature Emphasis:}

Students are required to complete
the following core of thirty ( 30 the following core of thirty (30)
units and sixteen (16) units to units and sixteen (16) units to Core Courses ( 30 units): ENG 184, 310, 375, 482; Select one course from ENGL 320 or 325 Select three courses fron
\(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\). Breadth and Perspective ( 16
units): ENGL \(363,384: C T T\) units): ENGL 363, 384; C LT 230 Select one course from ENGL 451, \(452,453,455,456,458,459\)
Select one course from ENGSelect one course from ENG
\(474,475,476,477 \mathrm{AB}, 478,479\). Radio-Television Emphasis:
Students are required to complete
the following core of thirty-one (31) units and eighteen (18) units to provide breadin and perspective. 184, 310, 363, 482; Select on course from ENGL 320 or 325
Select three courses from ENGL Select three courses from ENG Breadth and Perspective (1 Breadth and Perspective
units):
RTVF \(150,204,220,230\) 240, 316.
Speech Communication Emphasis:
Students are required to complete the following core of thirty-one ( 31 units and twenty-one (21) units to Core Courses ( 31 units): ENG 184, 310, 363,482 ; Select one course from ENGL 320 or 325 Select three courses from ENGL
\(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\) Breadth and Perspective units): Select one course from Units): Select one course from
SPCH 210, \(271 ;\) Select three courses from SPCH 331, 332
333,335 : SPCH \(440,448,450\).

\section*{Foreign Language}

French
Complete requirements for \(B \cdot A\) and include FREN 414:

\section*{German:}

Complete requirements for B.A.
and include GERM 303 and 410 .
and include GERM 303 and 410; Spanish:
Complete requirements for B.A
and include SPAN 440 and 445 B.S. in Health Science
option in School Health.

Home Economics
Complete the requirements for the B.A. in Home Economics with an option in education.

\section*{Industrial and Technology
Education \\ Complete the requirements for the B.A. in Technology Education}

\section*{Life Science}

Students are required to complete the following core of thirty-fou
(34) units and sixteen (16) units of related course work.
Core Courses ( 34 units):
Lower Division: BIOL 210A, 210
Lower Division: BIOL 210A, 210B; Upper Division (Must include two
Plant and two Animal courses): Morphology and Development: Select at least one course from
BIOL \(332,333,334,370,438\) BIOL 332, 333, 334, 370, 438,
439, AP 335, 336; Physiology:
Physiology:
Select at least one course from AD \(447 / 447 \mathrm{~L}, 342 / 342 \mathrm{~L}, 440\) Ecology:
Select at least one course from BIOL 350, 450, 453, 456; Organismic Biology: Select a least one course from BIOL 313 ,
\(314,315,316,324,328,419,421\), \(314,315,316,324,328,419,421\)
\(423,424,425,427 ;\) Marine Biology:
One approved Marine Biology One approved Marine Biology
course (not required to be upper division). Examples of acceptable courses include: BIOL 201, 353,
\(419,425,458\) Breadth and Breadth and Perspective (16
units): CHEM 111A. PHYS 100A MICR210, CHEM 327.

Mathematics

Students are required to complete the following program wenty-one (21) program, division units, twenty-four (24) upper division units,
elective units.
elective units.
224, 233, 247: SiTH 122, 123, 224, 23, 247; Select one course

Upper Division: MATH 310, 341 361A, 380; Select one course from MATH 350, 355*; Select 9 elective MATH units chosen in consultation with Crede
Advisor. * Preferred course Advisor. * Preferred course
Elective: Select 3 addditional in consultation with the Credentia Acvisor, from mathematics, computer science, or approved
closely related courses. closely related courses. Students will satisfy the requirements for this program by
completing the B.S. in Mathematics with an option in Mathematics Education.

\section*{Music}

Complete the requirements for the B.M. With an option in either
instrumental Music or Choral Vocal Music.

\section*{Physical Education}

Physical Education Emphasis: Complete the requirements for the B.A. in Physical Education with an
option in Adapted Physica Education, Elementary School, o Secondary School.
Dance Emphasis
Students are required to complete the following core of forty ( 40 units and eighteen (18) units in
courses designed to provide breadth and perspective. Core Courses ( 40 units): \(P\) ED 125, 145, 260, 263, 300, 312, 335
\(360,380,483\) : DANC 112A, 360 360, 380, 483: DANC 112A, 360 470; AP 202, 207; Select one unit
from P ED 250, 253, 255, 257 Select one unit from P ED 264 266, 26

Breadth and Perspective ( 18 units): DANC 114B,

Physical Sclence

\section*{hemistry Emphasis}

Students are required to complete the following core of twenty-five to
thiry (25-30) lower division
 division courses, and nineteen to wenty (19-20) units in courses esigned to provide breadth perspective
Core Courses ( \(51-56\) units): Lower
Division: CHEM 111A-B, 251. PHYS 100A-B or all three of 151, 152, 153; GEOL 102, 104; Upper
CHEM 321A-B, 451: Division: CHEM 321A-B, 451;
CHEM 371A-B or 377A-B; Select six (6) units approved by an advisor from CHEM 373, 421, 422, 431, 441A,B, 496;
Breadth and Perspective (19-20
units): MATH 122, 123; CECS 242; Select at least six additional units from GEOL 460, 461, 461L. 463, 465; Select at least three additional units from P30,
Earth Sclence Emphasis:
Students are required to complete Students are required focymplete units and twenty-wo to twenty-three (22-23) units of courses designed to provide readth and perspective. Core Courses (55 units): Lower 140; PHYS 151, 152; CHEM 111A-B; Upper Division: GEOL
\(324,330,341,342,419,431,441\), 72. Select one course from GEOL 463, GEOG 444; Select one cours from GEOL 464, 465; Breadth and Perspective (22-23
units). MATH 122, 123: CECS units): MATH 122, 123; CECS
242: ASTR 100; BIOL 200; Select at least three units in Chemistry from CHEM 251, 327, 327L, 448; Select at least three units from
PHS \(102,103,331\), PHYS 330 , PHSC
380.

\section*{hysics Emphasis:}

Students are required to complete Students are required to complete
the following core of fifty-five to the following core of ifty-five to
fifty-six \((55-56)\) units and seventeen to twenty-one ( \(177-21\) )
units of course work designed to units of course work designed to

Core Courses ( \(55-56\) units): Lowe Division: PHYS 151, 152, 153
MATH: \(122,123,224 ;\) CHEM 111A-B; GEOL 102, 104; Upper
Division: PHYS 310, 320, \(340 \mathrm{~A}-\mathrm{B}\), Division: PHYS \(310,320,340 \mathrm{~A}-\mathrm{B}\),
450 , Select one course from 450; Select on
PHYS 330,380 ;
Breadth and Perspective (17-2 units): ASTR 100 or 200A-B CECS 242; Select six units from
GEOL 460, 461, 461L, 463, 465; Seolect six units from CHEM 261 Select six units from CHEM 24 .
\(327,327 L, 371 A, B, 441 A, B, 448\).

Social Science
Students are required to complete Students are required to complete a 38 unit piogram which includes mphases in two disciplines (but not both psychology and sociology), and a 3 -unit capstone
course as the final student assessment prior to student teaching. The two 6 -unit emphases are to be chosen from disciplines of Ane Anthropology, conomics, Geography, History, Poltical Science, and no more an one emphasis from Core Courses ( 33 units): 300, GEOG 100, 306, HIST 132, \(172,173,473\), POSC 210 . Select one course from each of the
fllowing - HIST 111 or 131 HIST following - HIST 111 or 131, HIST
112 or 492, and POSC 100 or 391. 492, and POSC 100 or Breadth and Perspective (12 units):
Anthropology Emphasis:
Select one course from ANTH
313 314: Select one course from 313, 314; Select one course from
ANTH 307IC, 331, 332, 335, 336.

\section*{Economics Emphasis:}

Select one course from ECON rom any upper division course in CON except ECON 300, 305IC, and 3091C.
Geography Emphasis:
GEOG 140 and one course from History Emphasis:
Select one course from HIST 373,
Select one course from HIST 373,
\(375,376,378,379,380\); Select one course from HIST 317,337 , 339, 364, 382B, 3838, 385, 386, 431, 491

Political Science Emphasis:
Select one course from POSC
326, 327: Select one course from 326, 327; Select one course from
POSC 420, 423, 424 .
Psychology Emphasis:
PSY 100 and 351.
OR
Sociology Emphasis
SOC 100 and 335 .
Capstone (3 units): SBS 495, completed with a grade of " B " or

Single Subject Teache
Internship Credential
In cooperation with approved school districts, the Graduate School of Education offers a Single Subject eacher Internship Credentia outstanding candidates who have exceptional skills for classroom eaching

\section*{Admission Criteria:}

Students submit completed
applications for the Internship
Program for review and action by the University Single Subject Teacher Education Committee and the
Internship Admissions Committee Upon acceptance of the applicants into the Internship Credential Program, students must submit the
State application for an Internship Credential with supporting documents and fees to the CT through the CSULB CPC. Students must hold an Internship Cred
prior to Internship teaching. Requirements for the Internship Credential:
degree complete the baccalaureate degree, complete or be very nearly major (or equivalent);
2. Pass the California Basic
3. Apply for the Internship Credential Program in the CSULB Single Subject Credential Office;
4. Have and maintain an overall
GPA of 3.0 and a GPA of 3.0 in all upper division and graduate courses in the single subject major and in
professional education courses;
5. Provide verified evidence of minimum of 40 hours experience
with pupils in a school situation, with pupils in a school situation, (this may be accomplished in EDSS
6. Have clearance on the CSULB speech assessment;
7. Have health clearance prior to
field experience;
8. Have an offer of employment on an Internship Credential Program
rom a participating school district. Academic Program: The Internship Credential
rogram is available in either of two formats, depending on the arrangements made with the Plan A: - Standard Teacher Plan A: - Standard Teacher
Education Program with Internship eaching of One Y Year Substituted
for Student Teaching or Student Teaching
Prerequisite to Internship
-eaching: EDSS 300,450 ; EDSE 435, 436, and 457; To be taken during Internship Teaching: EDSS 572 F-G ( 8 units each per semester): To be taken before,
during or atter Internship Teaching HSC 411B, ED P 350, Computer Education
Plan B: - Two-year Internship Taken Concurrently and During Summer Sessions Suggested sequence
Summer Session - EDSS 300; Fall semester - EDSS \(572 \mathrm{~A}(4\)
units). EDSE 436 . Spring units), EDSE 436; Spring semester
- EDSS \(572 B\) ( 4 units), EDSS 450 Summer session - EDSE 457, EDST 250; Fall semester - EDSS
572 C ( 4 units) EDSE 435; Spring 527 ( 4 units), EDSE 435; Spring
semester - EDSS 5720 ( 4 units), semester - EDSS 5220 ( 4 units), 400;
Additional courses to be taken before, during or atter Internship teaching-EDST 300, H SC 411B,
ED P 350, and Computer Education Professional Responsibilities of the Single Subject Intern: Most Single Subject Interns will be assigned to teach full-time in employment are governed by Master Agreement, school district board policies and regulations. For the purpose of employment, interns
are employed under the temporary provisions of the California Education Code (EC44920).
ourses in the Single Subject redential Programs (EDSS) Field Experiences
Prerequisist: Advanced sophomore or junior thanding. Directed field experience a a a teacher aide. Evaluation of students for admission to
he Single Subject Teacher Education Program hequired as the first course in the professione credential and recommended to be taken in the
unior year (lecture 11 hour, aboratoy field Unior year (lecture 1 hour, laboratoroy field ours). CreditiNo Credit grading only, with
A. Preliminary Directed Fie Experience (Art) (2) \(F\)
Experience (Life and Physical Sciences) (2) F,S
Preliminary Directed Field
Experience (Health Science) (2) S
F. Preliminary Directed Field Experience (Foreign Languages: G. Preliminary Directed Field Experience (English: Literature, Language
and
Creative
Wrtiting, Composition,
Comparative Literature, Journalism, Speech, American Studies, and Dance) (2) F.S
H. Preliminary Directed Field S 1993
M. Preliminary Directed Field

Experience (Mathematics) (2) F,S N. Preliminary Directed Field xperience (Music) (2) S Experience (Physical Education Experience (2) FS
Dance) (2) F,S
Dequisites: Current standard first aid/CPR ertification, P ED 370 and completion of a
inimum of five (5) skill proficiencies.
 Squire for credit.
Experience (Social Sciences, including An Anthropology, Economics, Geography, History,
Political Science Political Science,
Sociology) (2) F,S
. Preliminary Directed Field
Experience (Technology Education) (2) F,S

\section*{450A. Curriculum and} Art Education (3) s Preequisit:: Admission to the Single subiect naterials and procedures in art edicuation. noludes a survey of histarical and current
practices in art teaching with emphasis on the
lationship of art to the total school progran Must be eompleted prich
Traditional grading only.
450 C . Curriculum and Methods
Teaching Natural Sclence
(3) F,S

Prerequisite: Admission to the Single Subbiect Credential Program. Obiectives, curriculum, sciencie. Must be completed betofore student. raditional grading only.
450D. Curriculum and Methods Teacit: Admission to the Single subied Trerequisite: Admission to the Single Subject
Cedential Program. Objectives, curriculum, methods and materials used in teaching health the semester prior to student teaching. Seminara) Traditional grading only. *450F. Methods of Teaching oreign Languages (3) Treequivite: Admission to the Single Subiect French, German, Latin or Spanish; incluces ativities. Should be taken the eme leter priage to actutiess. Should be taken the semester pry
tudent teaching. Tradtional grading only.
*450G. Teaching English (3) F,S
rerequisite: Admission to the Single Subiect Tredential. Program. Methods of teaching language, itierature and compostion in junior
high school, senior high school and community
hollege I college. Includes instuuction in techniquase of leaching. Must be completed be
*450H. Methods and Curriculum
In Home Economics Education
(3) Demand
rerequiste: Admission to the Single Subject ethods and materiass used in teaching home conomics in seconday schools. Traditional grading only.

450M. Curriculum and Methods Teaching Mathematics (3) F,S Credential Program. Objectives, curriculum methods and materials veed in teaching dirhematics. Must be taken pritit to the fina
directed field experience. Traditional grading only.
*450N. Curriculum and Methods Teaching Music (3) Demand Prerequistes: Admision to the Single Subiec Philosophy, objeotives, curriculum, materiai procesures and current practices in teaching
music in seconday schools. Classroom music Husic in secondary schools. Classroom music presented. Should be taken the eemeoter prif *450P. Curriculum and Methods In Teaching Physical Education 3) \(\mathrm{F}, \mathrm{S}\)
reerequistes: Current standard first aid/CPR Critifation, admission to the Single subiec Perormance proficiencies with an overal average score of 3.5 . Limited to students Illowing semester. Traditional grading only. *450S. Curriculum and Metho (3) F,S

Prerequiste: Ad
erequisiti: Admisasion to the Single Subject naterials for teaching Obocitives, methoded and and senior high school Must te taken prior 450T. Curriculum and Methods In Industrial Education (3) S Prereauiate: Admission to the Single Subiec Maedential and programedoures in in teaching industrial education with emphasisis on currinent prastices and the relationship of industrial edcucation to
the toad eschool program. Must be taken the the total school program. Must be taken the
sememester prior to student teaching. Tradtional
grading only.

472A-C. Student Teaching
(5,5,5) F,S,SS
Prereauisite: Approval by the Single Subject
Program Faculty.
Student teachers assigned a minimum of fuve periods caily. The teach three classes representing at least two
different apo ainerent aspects or levels of the Single Subiect
major.
Two additional periods observation, preparation, and consusutation with
the
 teachers follow the school district caluend
Seminars are held by each single subieid Seminars are held by each single subiejci
progam area. CoeditNo Crodin grading onbl with ' \(A\) ' or \(B\) ' required for credit.
*490. Curriculum Topics in

\section*{1-3) F,S,SS}
rericuluiste: Consent of instructor. A study of The acadicmico subiect to becondary school announced in the schedcule of classes. May be repeated under different topics but only six toward advanced degrees. May be repeated for a maximum of six units
497. Independent Study (1-3)

F,S,Ss
Trerequisites: Consent of instructor and single
Independent
stubiect coordinator. undertaken undortort the superisisenon of a facuit there units.
Graduate Division
572A-D;F-G. Single Subjec
Prerequiste: Admission to the Single Subject Prerequiste: Admisision to the Single Subien
Internship program. Superised teachin
experience in xperience in grades seven through twelve. schoo district while enrolled in four unititpe \(p\). semester for two years or eight units pee
semester for one year. Teaching will be evaluated by bye yearar. Teapaching sholl ilitsici and universt
grading only.

\section*{Teacher Education \\ Graduate School of Education}

Department Chair: Robert A. Roth Telephone: (310) 985-4506 Multiple Subjects Admission Coordinator: (310) 985-4507 Office of Field Programs: (310) 5-4508
acuity: Professors: V. Yvonne Jones, Albert H. Kgochian, Rita Marina C. Krause, Mary Jo Lass, Helen P. Newcastle, Consuelo Nieto, Leonard Olguin, Robert A. Roth, Norma B. Tarrow; Assoclate Professors: Kaye W.
Anderson, Jean M. Casey, Carole A. Cox, Richard F. Marrs, Frank S. Morris; Assistant Professors: Catherine C. DuCharme, Mary Ellen ogt, James J. Zarrillo.
Anderson, Louis L. Beck, R. Burdet
Burk, William E. Fisher, Juliana T. Gensley, Frank F. Gorow, Harold V A. Kinsman, Charles L. Myers,

Walter A. Nagle, Leland M. Perry Donald F. Popham, Clara G. oodney, Howard C. Rolfe, Arlene A
oster, Roy A. Sugimoto, Doris D. abor.
Office Manager:
The Department of Teache education course work that lead the (a) Multiple Subjects Credential (elementary), and the (b) Single ubject Credential (secondary; eacher Education' section of the catalogue for information on admission criteria and program
requirements), as well as a Master or equirements), as well as a Master
Arts in Education with options in either elementary or secondary ducation. Additionally, programs e available for advanced
a) Early Childhood Education, and
b) Reading/Language Arts for
grades K-12. All GSE graduate leve courses ( \(500 / 600\) ) are assumed to
be traditional grading only unless stated otherwise.

Early Childhood Education (ECE)

\section*{rogram}

The faculty in the ECE program Irea work cooperatively with the Center as well as the Department of Home Economics and the Program in Human Development, and have rerequisite for the Specialist redential and the Master of Arts in ducation specialization available inder the Elementary option
Courses are offered during the can be met during the year and during summer session
Reading/Language Arts Programs Faculty in the Reading Program believe that a variety of approaches mastered by future reading specialists. Course offerings are at
night to accommodate practitioners, night to accommodate practitioners equire daytime availability at a require daytime avalabity at a
school site during the school year. Master of Arts in Education
Please consult the 'Graduate
School of Education' section of the School of Education' section of the catalogue for information on to candidacy.
Option in Elementary Education (code 5-3110)
Prerequisites
Curriculum and Instruction and Reading Specializations: A valid multiple subject or elementary teaching credentia
Early Childhood Specialization
EDEL 420,481 (or documented preschool teaching)
Requirements
A minimum of 30 units is required with at least 21 in the 500/600 level series at this Universty.
requirements are as follows:
1. One of the following ( 3 units
\(E D P 400\) or \(E D P 419\) and 420 ; 2. One of the following (3 units):
ED 500 or 696 ;
3. The following (3 units)

EDEL/EDSE 530;
4. One of the following chosen in consultation with a faculty advisor
(3-6 units): EDEL 695 (3 units) or 698 (6 units).
Specialization Requirements for
Curriculum and
Surriculum and Instruction: 1. One of the following ( 3 units)
EDEL 500 A or 501 : EDEL 500A or 50 2. All of the following ( 9 units):
EDEL 540,560 , and 570
3. Electives to total 30 units Specialization Requirements for Speclailization Requirements
Early Childhood Education:
1. All of the following (18 units):
EDEL \(421,422,522,523,621\), and EDEL 526 or ED P 604.
Specialization Requirements for Reading:
1. All of the following ( 12 units)
EDEL 551, 555, 651, and 655 ;
2. Electives chosen in consultation with the reading coordinator to total 30 units. Master of Arts in Education (code 5-3140)
Students must possess a Bachelor's degree, and a valid California teaching credential or its equivalent in order to pursue this
Requirement
A minimum of 30 units is required with at least 18 units in the \(500 / 600\) level series taken at this University. The core requirements are as
follows: follows
1. The following ( 6 units): ED P
400 , and ED P 500 or 696 ; 2. The following EDSE/EDEL 530;
3. One of the following chosen in consultation with a faculty advisor (3-6 units): EDSE/EDEL 695
units) or EDSE 698 ( 6 units). Specialization Requirements for Curriculum and Instruction: 1. One of the following ( 3 units)
2. The following (3 units): EDSE

\section*{3. One of the following} alternatives:
a. Two of the following ( 6 units): EDSE 435, 436, or 457 (These units must be taken as either a post-baccalaureate student or by advance petition in the year): year)
b. Elective chosen in total 30 units.
Alternative II:
a. Nine units of advanced
course work in the Single
Subject area of concentration. The area oictified as appropriate by the Commission on Teacher Credentialing;
eading:
1. All of the following (12 units):
nd EDEL 655 ;
2. Electives chosen from the follow.
590.
Credential Programs
Multiple Subjects Credential
A teacher with a Multiple Subjects Credential is authorized to teach
grades pre-K through 12 in
self-contained classrooms. Th
Muttiple Subjects Credential
Mutiple Subjects Credential
Program (MSCP) at CSULB
prepares students to be
redentialed in the state of California The program emphasizes daytime ield experience in elementary classrooms, and includes nethodology courses and student program can be completed in one summer and two semesters, or thre semesters (based on fullt-time urrent copy of the Schedule of Classes for full time unit load equirements). Part-time attendance is allowed, but program
seven years from the date one start the program.
Admission:
Before beginning the MSCP
students must be admiked to in
you are (a) a graduating senior at CSstit, (b) transferring from another university after an absence of one university after an absence of one or begin taking the prerequisite courses needed for admission to the MSCP as a junior with a minimum of sixty units. Admission to the constitute admission or acceptance to the MSCP. A separate MSCP Admissions Coordinator in der to be considered for ceptance into the MSCP
The MSCP is separated into three uccessive phases. Students may before completing the previous one. During Phase One, students omplete program prerequisites hase Two, students complete ethodology courses, and in Phase Culminating Field Experience student teaching).

\section*{Phase One - Ac}

1 Attend a MSCP G
dvisement meeting either before or Ackise enrolled in EDEL 380. The MSCP application and othe necessary materials will be
distributed only at these meeting distributed only at these meetings. he MSCP Handbook with them to he meeting. The handbook is available for purchase at Krishna's Verde Ave, in Long Beach. The cos t the handbook is \(\$ 2.00\). Krishna's phone number is ( 310 ) \(431-9\)
or those seeking a Multiple Subjects Bilingual Cross-cultura mphasis (Spanish/English) redential, attendance at a Bilingual mphasis Group Advisement Group Advisement meeting) is equired.
2. Successfully complete EDEL 380 or its approved equivalent wit MSCP Handbook for approved equivalents).
3. Successfully complete EDEL
360 or MATH 110 or an aproved 3. Successtully complete EDE
6o MATH 110 or an approve equivalent. (Check the MSCP
Handbook for approved equivalents)
4. Submit a tuberculosis skin tes or chest \(X\)-ray taken within the last hree years.
5. Submit two photocopies of all
university and/or college transcripts. 6. Submit three letters of
recommendation
7. Submit a typed statement
describing why you want to teach
B. Atend y you want to teach 8. Attend an oral inteview
department faculty advisor.
9. Submit the MSCP application along with documents verifying that the above prerequisites have been completed the semester before taking methods
following dates:
Summer/Fall: February 1 - April 1
Winter/Fall: Sept. 1 - November 1 THE ABOVE DEADLINES ARE NOTE: Only students enrolled in EDEL 380 in Summer Session, and who receive a " \(B\) " grade or higher,
will be allowed to submit MSCP application packets July 1 - August 1 for admission to the MSCP in the fall semester
Questions about any of these requirements can be answered by
consulting the MSCP Handbook, as well as by attending the Group Advisement meeting

\section*{Phase Two - Methods and
Subject Matter Competenc}
1. Methods Courses

Methods courses (EDEL 440, 450,460 , and 470 ) are designed to prepare students with the objectives principles, materials, and teaching areas. Although all of the methods courses require daytime field work, at least one course must be taken off campus. These courses must be
completed with a minimum grade of completed with a minimum grade or
" \(C\) ' and a cumulative GPA of 3.0 or above.
Option One - Open Track:
Core (12 units): EDEL 440, 450,
460 and 470 , 460 , and 470 ,
STtudent Teaching (16 units): DEL 481.
Option Two-
Bilingual/Cross-Cultural Emphasis (Spanish/English):
Students in his program must be admitted to the Bilingua/CrossCultural Spanish/English Emphasis Pogram. Ability to converse fiuenty
ispanish and English is required. Undergraduates should complete
the liberal Studies baccalaureate

The Core courses should be taken as follows: Fall semester: EDEL 440, 470, Final Semester: bilingual sections of these courses)
Language Component:
Candidates for the Bilingual
Candidates for the Bilingual
Emphasis Credential are expected mphasis Credential are expec ability to perform the duties of a credentialed teacher equally well in oth Spanish and English. (The program will provide students with
options for this requirement.) All
candidates are required to complete 3 units in classroom vocabulary for
he bilingual teacher (SPAN 322).
Culture/history Component:
Culture/History Component. complete a written assessment for competency in the target culture. The Culture/History assessment is administered twice each year.
non-Liberal Studies maiors are equired to take four culture/history courses to prepare for this
sessment.
2. Subject Matter Competency All students admitted to the ompetency before beginnin hase 3. At CSULB, Subject Matter one of two ways: (a) pass the General Knowledge Section of the Core Battery of the National Teacher's Exam (NTE), or (b) approved core of courses in the Liberal Studies Waiver Program with no individual grade lowert than a a \(C\) ' in those courses. If Subject Matter institution other than CSULB, an ssessment will be made to determine course equivalency. For more information about the Subjec
Matter Competency requirement.
please contact the Credential
rocessing Office at (310) 985-5710
Phase Three - Culminating Field
xperience (CFE)
The CFE (EDEL 481 - Student
eaching) is the final phase of the MSCP. A separate application for his phase is required, and must be submitted in person to the Multiple ubjects Field Programs Oftice, prior to beginning the CFE. It is
possible that not all qualified
pplicants will be able to student each in the semester of their choice Applications are distributed at the Student Teaching Application
meetings. Dates for these mee meetings. Dates Aor hese meetings ft the methods courses. Deadlines for submitting applications to student teach are:
Fall or Summer Term: March 1 Student Teatorer

\section*{Requirements}
1. Admission to the MSCP.
2. Passage of the California Basic Educational Skill Test CBEST). Passage of the National eacher's Exam (NTE) is also najors
3. A valid tuberculosis skin test or hest \(x\)-ray
4. Have completed Phases 1 enrolled in the Bilingual Spanish/English Program are exempt from the off-campus methods class requirement, but must stil pass all four methods
classes with no grade lower than a Classes with no grade
' and an overall GPA of 3.0 or higher;
5. Have received a grade of ' \(C\) ' r higher in EDEL 420 if student teaching at the kindergarten level;
6. Have applied for a Grad Check for the Liberal Studies Certificate (non-Liberal Studies Liberal Studies Department prior to his application;
7. Have submitted a certificate d clearance or proof of filing with acramento
8. Have submitted a student pplication, or supervised teaching a a bilingual (Spanish/English) lassioom.
1. Student Teaching shall be a ssignment in a primary classro grades K-3), and one assignment in an intermediate classroom (grades 6), with at least one grade lev student teaching assignment must be in a public school. It is possible complete student teaching
during two consecutive summers, or
ne summer and part of one regular emester.
2. In cooperation with approved each, and Pach as ABC, Long ternship Program is ant, an selected individuals to teach full time with full pay. This program is limited outstanding candidates who have successfully completed Phases 1 offered employment in a participating district. An additional aplication and interview is required or the Internship Program. In admission requirements, an Intern applicant must meet the following equirements: (a) possess a accalaureate degree from a earning, (b) submit verification of an extensive and successful experienc with pupils in a school situation. 3. Requirements for students
he Bilingual (Spanish/English) program in addition to those needed or admittance to student teaching clude: (a) completion of the Studies major, (b) completion of appropriate language and culture/history courses (for non-LIberal Studies majors), (c)
completion of all four methods courses in the designated bilingual sections, (d) passage of the Bilingual Proficiency Assessment
and the Culture/History Assessment, and (e) a minimum of 150 hours as volunteer or paid paraprofessional in a bilingual elementary about the Bilingual Spanish/English equirements, please contact the ilingual Program Coordinator, Dr onsuelo Nieto, at (310) \(985-453\) Additionally, the Departme
eacher Education highly ecommends that all students complete the following courses with grade of 'C' or higher prior to PSY 361 or ED P 301 or equivalent; b) EDEL 475 or NSCI 301 or equivalent; and (c) P ED 476 o equivalent
reliminary Multiple Subjects
Studen
Students completing either
Option One or Option Two of the MSCP will be recommended for the Preliminary Multiple Subjects
Credential, which is issued for five-year period. To renew this
edential, the holder must meet requirements for

\section*{Multiple Sub \\ Credential}

In cooperation with aprov school districts, including AB
Beach, and Paramount, the Graduate School of Education a SULB offers a Multiple Subjects ffers the opportunity for selected individuals to teach full time with full pay in a participating district as an itern. The program is limited to outstanding candidates who have
been admitted to the Department program and have been offered mployment by a participating

\section*{Admission:}

Each of the following admission equirements must be met to be igible for the internship program. 1. Clear admission to the
subjects credential program;
2. Baccalaureate degree from a accredited
education
3. Completed the liberal studies program and satisfied the subject matter competence of a ' \(B\) ' average on selected courses, or passed the General Knowledge part of the
common Exams of the National eachers Examination (NTE);
4. Certificate of Clearance verified
by Credential Processing Office;
5. Earned an overall GPA at or bove the standard set by the CSU admission to teacher education;
6. Description and verification of experiences with students in a chool setting, such as serving as a eacher's aide:
7. Minimum grade of "B' in each subject methods courses (EDEL.
\(440,450,460,470\) ):
8. Satisfy the U.S. Constitution
requirement (POSC 100 or 391 or xam
9. Have health clearance prior to internship;
10. Submit three references for confid.
Form.

\section*{Requirements:}
1. Complete EDEL \(572 A-B(8,8)\) : 2. Complete NSCI 301 or EDEL 3 Complete ED P 301 evelopment requirement.
Professional Responsibilities of e Multiple Subjects Intern: Interns normally cary a full member of the instructional team at each school site. Conditions of employment are governed by the master agreement of each district. and school district policies and y the cooperating district under the mporary provisions allowed in the ducation Code

\section*{Professional Clear
Subject Credential}

Candidates must meet an approved fitth-year program, and be ecommended by an institution位 ost-baccalaureate units must be aken. The only exception to the ost-baccalaureate requirement is or second semester undergraduate advance of obtaining the
baccalaureate degree to have a aximum of six units taken
post-baccalaureate studies. For post-baccalaureate studies. For petitioning process, see index unde
dauale - ine

The following three courses must e taken in order to receive a Professional Clear Multiple Subjects redential: (a) HSC 411A, (b) ED 350, and (c) EDST
337 or MATH 278 .
These courses must be taken within five years after receiving the Preliminary Multiple Subjects Credential, however, they can be
aken as an undergraduate student they are taken at the undergraduate level, they will no ount toward the thirty uni ost-baccalaureate requirement for he Protessional Cliar Multiple information about the Professiona Clear Muttiple Subjects Credentia Processing Center at (310) Processing
\(985-5710\).

Early Child
Credentia
This advanced credential
program is integrated with various field experiences. Course
degree, elementary education option with a specialization in early childhood education closely program. All courses in this program are applicable toward hildren's Center permits.

\section*{Admission Requirements}
1. Admission to the University: 2. A minimum GPA of 2.85 on
the last 60 units of course work: he last 60 units of course work: 3. Pass a Writing Proficiency
Examination (WPE) or CBEST:
4. Possess a valid basic teaching credential or be in the process of completing the Multip
Credential Program;
5. Provide three letters
endation
6. Verification of successful
experiences with young children; 7. Submit a personal statement of teaching philosophy: 8. Attend a personal interview with the ECE Coordinator
9. Complete a self-assessment o competency in early childhood
10. Fil a program plan developed with an

\section*{Prerequisite:}

\section*{ED P 301.}

Requirements:
1. All of the following course work
(37 units): EDEL 420, 421, 422,
450, 460 EDELEDS 500 A or 501,
450, 460, EDEL/EDSE 500A or 501,
EDEL 522,523, EDEL/VDSE 530, EDEL 621, 682 ( 4 units), and 526 or
2. Verification of two years of
uccessful teaching experiences each of the following areas is equired of all candidates prior to ompleting the specialist credential rogram - a. preschool; b. multicuitural settings.
Reading Specialist Credential
This advanced credential (K-12 program provides clinical and field research in teaching reading. Many

*475. Teaching Science in the
Elementary School (3) S
Prerequuistes: Six units of science. Objective pinciples, materials and methotsd for teaching w to develop their own strategies and
 ciences. Inquiry and hands-on approaches tresed. . Leocture 2 hous
Tradtional grading only.
481. Student Teaching in the
( official admission by the Elementary Teache Education Commitite. All day for one esemester
or five mornings per week tor two eemesters in or five mornings por week tor two semesterer it asignments in two grade levels and a weekh sminar with a coliege adcisor. Application ementer and Otoboer 1 for the porin
emester. CreditNo Credit grading only, ivit mester. Creditivo Credit grading only, with
or B . required for credit: Course io apeatable in same semester.
490. Special Topics in

\section*{(1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{S} \mathrm{S}\)}
oples of current interest in eiementary
 nits may be applied toward advance
segrees. Topics will
97. Independent Study
ereauisites: Consent of instructor and ndertaken under the supenision of a tacuity ember. May be ropeated for credit to nits applicable to crecential or maj
raduate Division
00A. Reflective Processes Fo eginning Teachers (3) F, revequisite: Currenty teaching and hold ffectiveness and succoss in beginning year teaching andios and tour years). Emphasiction refecting procesoses. Acquire skilis to idontity and resoh personal and drofoessional problems: devve int group processes: create, identity and evaluate rempative solutions and apply these to own probem E00A.
500B. Reflective Processes For Beginning Teachers (3
Preerequistes: Currenty teaching and hold belils to id dentity and resonve problems hatructional menanagement and probiemsional diationships. ERhance effectiveness and

including effective communication in
intercultural setingas. Emphasis on accuisition
 development of solutions to probiems and
501. Enhancing Teache

\section*{501. Enhancing Teacher
Effectiveness Through} Instructional and Personal Strategles (3) \(F\)
Prerequiaite: A minimum of threes (3) years
teaching experience. To enable experienced teaching experiercce. To enabie experiencou
teachers to accuite skilis and undertanding
to to improve their own instructionanal and profeesional effectiveneess or beccome mentor
teachers. Enhance ability to analyze and teachers. Eniance ability to anayyze and
improve instructon or guide other teachera Increase interpersonal and personal anays)
skilis and strategios and asositit other teachert husing their skilis. Same course as EDSE 501 . 522. Parent Education and Involvement in Educa
Environments (3) S
Analysis of ternds, isoues, programe and ivovivement in educaational seettings. Emphasie on early childhood education in multiculurual settings. Discussion of eflective two-wa/
communication between school and home communication between ichoor and home, Cordinating community suppoot semices to chicren and tamilies. Anayyis of federal an state programs which mandate paren
involvement, parent education programs, an working with culturally diverse
(1) hours of field work required.
523. Supervision of Early
Childhood Programs (3) F

Prerequiste: Consient of instructor. Shipel पsion and coordination of earty childhoon
education (E.C.E) programs: statifing and
 program: preparing budgets and program
poposasis: working wih paerents and
communty tesources. Ten (10) hours of

26. Advanced Study of Infant and Toddier Programs (3) S orequubtes: ED P 301 . EDEL 422 or consen an todoler programs. Analyis and podier developmentint to group learning setting n (10) hours of fielowark required. 530. Intercultural Education: US 3) \(F\), \(S\)

Study to enhance teacher intercultura Study to enhance teacher intercutiural
competence thiughe a critical anaysio of
issues of cultural diversity and globoal heses of cultural diveratiy and plobe intercependionce. Students will investgate the apply findings to the resolution of interaction
and equality problems in education and to the and equality problems in elucation and to the concopts, skill and atitudes into the
anriculum. Same course as EDSE 530
540. Advanced Studies in
Teaching Language Arts (3) F Prereaquistes: EDEL 440, teach ing experience
or consent of the instructor. Advanced study and research in the teaching of language arta Emphasis on integration and theory ars application of the teaching of language arts in
the elementary and lunior high classoom with tocus on content, methcds and materials.
the licides individual fesearch. Includes individual teeearch.
551. Dlagnosis of Reading
\[
\begin{aligned}
& \text { Disabilities (3) } \\
& \text { Prerequistes: EDEL } 450
\end{aligned}
\]
\[
\begin{aligned}
& \text { Pererevisisies: EDEL } 450 \text { or EDSE } 457 \text { and } \\
& \text { credentiaed } \\
& \text { teaching }
\end{aligned}
\]
 with recommendation
course as EDSE 551 .
553. Reading Instruction Through
Literature and Language (3) S Prerequistes: EDEL 450 or EDSE 45 . Prifcipipes and practices of reading instruction
through liferature and language. Focuses on
 selected chidren's and adoloscents's books
which refect our nation's muticuitural heritige.
555. Measurement and

Evaluation in Reading (3) \(S\)
Prerequistes: EDEL 450 or EDSE 457 and ED
P 400 . Anaysis and interpetation of

 levels. Intensive study of social, cultural
bilingual perspectives and their infuence on reading persormancoee. Empharsis on tesearch
related to measurement and evaluation od reading pertormasire.
with creodit in EDEL 451 .)
556. Foundations of Literacy Development (3) S
Prereauisiot: EDEL 450 or EDSE 457. Analyal of historical, social, cultural, philssophical
economic and politial perspeo tives and thei influmence on ourriculum mend inpoctivestional issues
in in reading and language arts. Survey
research related to Iteracay, cogntion, teaching. research helated to ilieracy, cogntion,
and models and theoties of reading. 560. Problems of Teaching
Elementary Mathematics (3) Prerequibites: EDEL 460 , teaching experience. Advanced study and research in elementar school mathematics. Emphasis on contien
methods and materials. Inoludes individual 570. Advanced Studies in
Teaching Social Studies (3) S Prerequistes: EDEL 470; ED P 400, 500 , or 696 .
Intensive stucy of selected topics in the Intensive study of selected topicics in the
teaching of scoial studies in the lementan leaching of social studies in the eelementan
school trom the perspective of the ereearch and methodolocgies of the scocial sciences.

572A-B. Multiple Subjects
Prerequisist: Admission to the Multiple Subjects Internship program by the Teacher
Education Admissions and Standards
 approved school diaticit whilie enrolleded in eight
units of EDEL 572 and other required course units of EDEL 572 and other requirid course
work. CreditNo Credit grading only.
(Suendion)
(Supenision)
581 A-B. Seminar in Student Teaching ( 6,6 ) Prerequisiste: Admission to the multiple
subiects credential student teaching program.
All day Al day studential toaching tor teaching weeks in a
Aublic elementary public elementary school classicom, with a
weekly seminar with the University supenisor. Weeky seminar with the University supenisor.
Students enorl in 58 for for the fros student
teaching experience or 5818 for the second teaching experienoe or 581 i for the second
assignment the following semester or summer. One assignment is to be completerd at the
primary level and the other at the upoesergade pimany level and the other at the upper-grade
leverit
muticuitural aestigignenent must be in a muticiulurual setting. Application must be made
by M Marh 1 to summer student teaching.
CreditNo Credit grading only by March 1 for summer studule
Creditivo Creodit grading only.
590. Special Problems in
Elementary Education (1-3) rerequisite: Consent of instructor. Advanced study of spocial topics and problems in
tementary education. A student may enroll for ene:thee units to a maximum of six units for cetitifate and degree purposes, subjiect to
suitable change in course content. Non-degree suitable change in course content. Non--degree addititonal unitits subject to suutable change in
course content.
course content
621. Research Seminar in Early
Childhood Education (3) S

Prerequisites: ED P 400 and teaching

 eesearch design. Ten (10) hours of feid work
625. Advanced Analysis of Instruction Through Reflective Strategies (3) S
Prerequistes: Teaching experience in grades
\(K\)-12, EDELIEDSE \(500 A\) or
EDELIEDSE \(501, ~ E D ~\)
 Instructional process thrugh the stuy of
theory and research on teaching. Appled to heory and research on teaching. Applied to evaluation of the instructional process in
gracese \(K\)-1. The focus is practical appliciton
of gracese \(\mathrm{K}-12\). The focus is practical appliaation
of theor and rosearch to impoue insturtional
effectiveness through analysis and reflective effectiveness through analysis and refecti
strategios. Same course as EDSE 625 . 51. Seminar and Clinical Experiences in Reading
Disabilities, \(K-12\) (3) F
(Not open to students with credit in EDEL 653.3
Preerequiste: EDEL 551 . Seminar and clinical expecience in diagnosis and remediation of
feading disabilites. Same course as EDSE

Prerequisite: EDEL/EDSE 551. Advancod study and research concerning incurriculum
deveveloment and superision of fintruction with
emphasis on emphasis on program and staff develolopment 660. Advanced Field Work in
Reading (3) F,S Reading (3) F,S Preeracuiste: Completion of all other required
courses in the Reading Specialist Credential Program. Applications should be made by March 1 to the fall semester and OCtober 1 tor
the sping semester. \(1 n\) then-field participation,
dividual
 loward the solution of problems evolving from
reading programs, instruction and superision. 681. Advanced Field Experiences in Early Childhood
(4,S,SS 4) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

Prerequibite: Approval by Early Childhood
EEvuation (ECC) area oommitee Supprisised
feid experiences required of candidate for the Eaucation (ECE) area committee. Superised
fiect expereinces required of candidates for the
ECE speciaisitc credertial who do ECE speciaist creciential who do not have kindergatren or primary grades; and (3) a
kita muticitutural setting. Applications should be
made by Octorer it of the sping semeter made by October 1 for the spring semester,
and by March 1 tor the fal semester and
summer session. May be repeated for a
 oward a master's degree program.
682. Exit Assessment of Competencies in Early (4) F S,SS Prereauiste: Completion of all requitements to
the Early: Chidhoodd Specialis Credential
 he candidate receives a final assessment of
competencies demonstrated at the preschool. kindergarten or pimary levels. Applications
should be made by October 1 for the sping hould be made by Octaber 1 for the sping
semester, and by March 1 for the fall semester
nd summer sesion and summer session. CreoititMo Creodit grading only.
695. 695. Seminar in Elementary
Education (3) S,SS

Preerauishes: Advancement to candidacy. Application to Graduate Officio. AApplication for summer session or fall semester, or by Oot oboe Cor the spring semester. Consideration of curriculum, rote of the school, and topics
retated ot offectiveness and excellence in
education
For quifed ducation. For qualifed candidatates preparing
o witte the comprehensive examination.

\section*{697. Directed Research}

Prerequisses: Consent of instructor, ndididual research or intensive stuady under the
 ints for cortificate and degree purposeen
subiect to suitable change in course content Application for enicllment must te made by

March 1 tor the fall semester and summer
session or by Ootober 1 for the sping
Ther. Thesis ( 3,3 ) F,S,SS
 and asociotat deanan. Plecanining, pepertmenention chand complition of a thesis under superision of a
faculty committoe. Must be taken for six units.
Application for enroliment must be mado to Applicaton fito enroliment must te made to the
Araduate Studies office by march 1 tot the tall Graduate Studies Office by March 1 for the tall
semester and summer session or October 1 tor
the sping semeter semester and summmer
the sping semester.

\section*{Education (EDSE)}

Lower Division
157. Critical Thinking and
Analytical Reading (3) F,S Perequiste: ENGL 100 or equivalent (may be advanced rearidys compreabensinh. Ing andudes
aboratory experiences and acceess it resource materials.
Upper Divisio
401. Principles of Ad
ducation (3)
scope and functions of adult education
characterisitics of the adut characteristics of the aduit leanner
philsocochica and historical pesspectives, tuture
trends. Meets Philosophical and historical perspectives, future
trens. Meets the requirent for the
Designated Subjects Ceremitial in Aduit Designated
ducation.
402. Methods and Materials of Adult Education (3)
Objectives. curriculum, methods and materials sed in teaching aduit oducatiton. Meets the redential in Adult Education 435. United States Secondary Schools/Int
(3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Trerequiste: Admission to the Sincle Subied Treegusite: Admission to the Single Subiec)
Critical refection on roblems, issues, and questions of multicuitura education in a plurailistic society: philosophy,
hibtory, and sociogy of edication; the
curriculy and Suriciulum and student poputation in the Unite States secondary school; and curternt
controversies in education. Traditional grading 436. Learning and Instruction in a Multicultural Setting (3) F,S,SS rrerequiste: Admission to the single Subliec
 curriculum design and development
ascesment
and evaluation of studen
arceses discipipine, and probom manem of the adent adesent rading onty
457. Reading in the Secondary

Prerequisite: Admission to the Single Subject Credential Program. Enphasis on assosesment and instruction of individuals and groups in a
nutiticutural seting: textbook selection and nviticurtural soting: textbook salestion and comprehension strategies; and the special
reading needs of less propared, of second

 nd issues of diversity and equity. At least ten
hurs of ffeld experience are required. raditional grading ony.
(3) SS
eo the daily newpoper
Use of the daily yemspapeer as an instructional
 current contint and bases for improvement of
reading skill, interests, critioal thinking and
problem.
*490. Special Topics in
Secondary Education (1-3) SS
Prevequisite: Consent of instructor. Topics of
curent interest in secondary education current interest in secondary education
selected fifi intensive study May ber repaated
Under ifferent topices for a maximum of six inder dififerent topics for a maximum of six
units. Topics will be announced in the Scheduie of Classes.

\section*{*497. Independent Study
\((1-3)\) F,S,SS \\ (1-3) F,S,S \\ Prerequisites: Consent of instructor and
department
chair.
Independent
stucy department chair. Independent stucy nember. May be repeated for credit to a} maximum of six units, with no more than three
unitis apppicable to credential or malior nequirement.
Graduate Division

\section*{500A. Reflective Processes For \\ Beginning Teachers (3) F,S}

Preerequisite: Currently teaching and hold sffectiveness and success in begining years of teaching (less than tour years). Emphaxis on acquisition and application of refeective personal and porefesioional probilems: deve into the current ifteraturue and research; engage in
group procosesec; craete. identity and evaluate
alterative solutions and apply these to own group procososes: create, Identity and evaluate
athernative solutions and apply these to own
problems and situations. Same course as \begin{tabular}{l} 
problems and \\
EDEL 500 A. \\
\hline
\end{tabular}
500B. Reflective Processes For Beginning Teachers (3)
Prerequilites: Currenty teaching and hold
Credentid, and EDELEDSE 500 A redential. and EDELEEDE 500A. Acquire
 elationships. Enhhance effectiteneess and of teaching.
Focus on ins intercuitural Understandings, refationshipos, and insitights., notuding efrective communication in
hitercuturual setings. Emphasis on acquistion

625. Advanced Analysis of Instruction Throu
Strategies (3) F
Prereauistes: Teaching experience in grades
K-12, EDELEDSE 500 A or EDEL 1 EDSE \(501, E D\)
 instructional procoss through the staucy o
theocy and research on teaching. Applied to theory and research on teaching. Applied to
the obsevation, diagnosis, analysis, and
enal evaruation of the insturutional process in
grades \(K-12\). The focus is practical application of theory and research to improve instructional effectiveness through analysios and reffect 51 Seminar and Clinical Experiences in Reading Disabilities, K-12 (3) F
(Not open to students with credit in EDEL 653
or EDSE 657 ,
Prerequistes:
EDSE 551 Seminar and clinical experience in in iagnosis and remediation of
course as \(E\) EDEL 651 .
660. Advanced Field Work in Reading (3) F,S
Preverauistit: Compietion of all other required Marcam. Appliations should be made by
 the spoling semester. in-the-field participation
indwidual conferences and seminars directeo
ind toward the solution of problems evoving tho
reading programs, instruction and supenision 695. Seminar in Secondar Education (3) S,SS
hereauisites: Advancoment to candidaay application to Graduate oftice. Application tor enrollment must be made by March 1 for the 1 for the spining sememester. Advancoced studies in econdary education including Ibbary yesearch eesearch papers and oral examination
 epamination.
97. Directed Research

1-3) F,S,S
rereequisites: consent of instructor ndividual research or intinensise stadrut yndoet th
suidance of a faculty member. A student may enrill too one-three units to a maximum of three units for cerificate and degree purposes
subiect to suitable change in course conten: subject to suitable change in course conten.
Application for enrollment must be made b March 1 for the tall semester and summen
session or by October 1 for the spring eemester.
Prerequisites: Advancoment to candidacy, ED
 completion of a thesis under superisision of a acuiticeom mittee. Must be taken for aid units
A Application for enolliment must te made o to the pplication for enrollment must be made to the
Traduate Studies Office by March 1 tor the tal



Certificate Programs
Certificate in Waste Engineering
and Management
and Managem
Certificate in Energy Conversion and Power Systems Engineering (offered by M.E. and E.E. epartments) rocessing and Dustrial Plastics M.E., Ch.E., and Technology ducation Departments) ertificate in Facilities Operation Certificate in Safety Operation (offered by E.I.T. Department)

\section*{Minority Engineering Program} A comprehensive recruitment and
retention program, conducted by the College of Engineering, assists Coliegity of Engineering, assists engineering, computer science, and
engineering technology disciplines. engineering technology disciplines (MEP) arose out of recognition that Native Americans, Blacks, and
Hispanics are underrepresented in Hispanics are underrepresented in the
engineering fields. Pre-college programs are administered by MESA (Mathematics, Engineering, Science
Achievement) with the goal of Achievement) with the goal of student enrollment. The College of Engineering has a Minority
Engineering Advisory and Development Council consisting of senior representatives from local industry with interests in supporting
the minority engineering students. Academic Standards

\section*{Academic Standard}

\section*{Preparation for Admiss
College of Engineering}

The high school student planning to enter engineering, engineering technology, or computer science is
advised to pursue a program with courses in biology, physics, chemistry, advanced algebra, and trigonometry. In addition, the general University must be satisfied. Deficiencies in some of the above areas may result in an extension of the
time required to complete a program in engineering, technology, or computer science.
The curricula are also designed to
accommodate students transferring from other colleges such as the community colleges and liberal an colleges. Transter students should
note and follow, where possible, the appropriate curriculum as outlined in ater sections.

General Academic Requirements
A grade of 'C' or better must be
achieved in all prerequisites for all courses required of engineering courses required of engineeering
majors. English 100 or equivalent is a prerequisite to all upper division
laboratory courses laboratory courses
Admission to any one of the College of Engineering requires a minimum GPA of 2.7 in the last 60 units taken
A student must pass the Writing
Proficiency Examination (WPE) before Parificiency Examination
qualifying for any degree.
Letter Grade Policy
Letter grades ("C' or better) are
required for all prerequisites for all required Coquired courses of Engineering, Technology majors.
All required English, Speech, and
Upper Division Interdisciplinar, courses must be taken for a Letter Grade, not CR/NC.
Concurrent and/or Summer Enrollment in Another College Students who wish to take
coursework in a community college coursework in a community college requirements while enrolled as an
undergraduate in the College of Engineering must petition the appropriate department for prior approval to enroll in specific courses enroliment or summer encollment. University policy must also be complied with. (See 'Concurrent
Enrolment' and Transter of Undergraduate Credit' in this Bulletin.) Courses not receiving prior approval
will not be accepted for credit by the department
Dual Degree Program
Students wishing to combine a
Professional engineering education
with one in business, education, fine arts, humanities or the education, fine enter the Dual Degree Program. The Colege of Engineering at CSULB has agreements with other Colleges with the University and with other this. After three years at the first institution, students transfer to CSULB as juniors to complete the two final years of the first year at CSUU.B. students who have complited all of the requirements for their first degree
are awarded those degrees by the appropriate College or institution. At appropriate theil fithe y year stududents
the end of the have completed all engineering
who
equirements receive their engineering degrees.
umanities and Social Sciences Majors
Engineering majors will hav omewhat modified general dic catalog yearams and enrolliment tatus. Students, especially returni and transferring students and those in
he ABET accredited programs, must see an advisor in the department to work out a plan which meets both the campus General Education and ABET humanities and social sciences ngineering has specified thematic usters within which the upper division, interdisciplinary General
Education courses are to be taken. To ensure that engineering graduates are fully aware of their social responsibilities and the effect laken in the humanities, social ciences, and related nontechnical reas must be an integral part of
ngineering programs. The ABET enolicy with regagrams. to general education in the area of humanities Studies in the hes is as tollows: sciences serve not only to meet the objectives of a broad education, bu so to meet the objectives of the studies in the humanities and social sciences must be planned to reflect a
rationale or fulfill an ppropriate to the engineerin appropriate to the engineering educational objectives. In the interests of making engineers fully
awae of their social responsibilities
and better able to consider related actors in the decision-making process, institutions must require
coursework in the humanities and ocial sciences as an integral part of the engineering program
philosophy cannot be hilosophy cannot be
overemphasized. To satisfy this equirement. the courses selected must provide both breadth and dept inelated introductory courses, Suc ccepted definitions that humanities e the branches of knowledge hhile social sciences are the studies individual relationships in and to ubjects in these areas are philosophy, religion, history, literatur ne arts, sociology, psychology
economics, and foreign languages language(s). Non-traditional subjects are exemplified by courses such as technology and human affairs, history and social responsibility. Courses that instill cultural values are acceptable, while routine exercises of courses that involve performance must be accompanied by theory or history of the subject.
Subjects such as accounting,
industrial management, finance personnel administration, engineering economy, and miltary training may be required or elective courses in engineering curricula to satisfy desire program objectives of the institution. However, such courses do not fulfill the objectives of the humanities and
social sciences' General Education requirements.
General Education Themes in
Humanities and Social Sclence
Humanities and Social Sciences Because engineers, engineering
technologists, and computer technologists, and computer social change, they must be sensitive to the human setting in which hat Social Sciences courses are emphasized within the Engineering
curricula to increase the student's awareness of the human and social implications of engineering practice. The Humanities include subject area
such as literature, philosophy, foreig such as iterature, philosophy, foreign
languages and the fine arts. The Social Sciences include areas such a anthropology, political science
history, sociology psychology history, sociology, psychology and
economics. The following themes have been designed to cluster a group of upper-division courses with the area of humanities and social sciences. All engineering students must take at least two upper division
Interdisciplinary General Education courses in at least one of the themes listed below

\section*{THEME 1: Human Understanding} and Development
"Human Understanding and
Development" is an integrated approach to antiquity - its history,
achievements and legacy - and the achievements and legacy - and the on-going development of modern
civilization. Its purpose is to develop an understanding of our civilization, its achievements, problems, and
ategory C: ART 3751, CNT 320
C/LT 4111, Mus 3631, C, C/ 4201,
RST 383, AMS 350, ChT 349
HIST 303I, HUM 3631, R/ST 3901
Category D: ANTH 412 I, GERN 400
SY 3001, SOC 335I, SOC 410 I.
OC 4411 , SOC 485 I .
Category E: DANC 3731, HDEV 307 I,
HDEV 357 I, HSC 4201, HSC 425 !
HDEV 3571. HSC 4201, HSC 425 I,
SOC 461 I.
SOC 46
HEME 2: Human Diversity: The lobal Perspective
Human Diversity: the Global erspective of the development of odern civilization. Its purpose is to develop and increase understanding om a global perspective of the vilization. Emphasis is on developing and understanding cultural diversity and its prospects for ategory B: ENGR 370 atecorny C: CLSC 310I, R/ST 315
 ategor D: AST 3001, AST
011 AST 4851 , GEOG 3101 , GEOG 301, AST 485I, GEOG 3101, GEOG
320 I, HIST 307, SBS 3191 , WIST
. 401, ANTH 311, GEOG 312, HIST
4141 , MEXA 3901 , SOC 3701, SOC 10I, SOC 485I, U/ST 4
HEME 3: Social and Economic THEME 3: Social and Econg Social and Economic Dimensions provides an understanding of the
human and economic aspects of engineering practice. The impacts of ew technologies and engineering on modern society are addressed, as ell as social/political aspects of cluded are:
ategory B: ENGR 370
ategory C: C/LT 411I, AMST 3501
IST 3031. . AST 301। ANTH 307 Category D: AST 3011 , ANTH 3071 , POSC 494i, SBS 3171, SBS 318 I,
ANTH 311, ECON 3051 , ECON 309, ANTH 311 I, ECON 305 I, ECON 309I
HIST 306 I, HIST 308 I, HIST 474 I, HIST 3061, HIST 308 I, HST 474 I, ASY 3501 , RED 332 I, SOC 335 I,
SOC 370 I, SOC 410 I, U/ST 401 I. Category E: HDEV 307 I, HDEV 357 THEME 4: The Engineer In Society 'The Engineer in Society' is intended provide an understanding of the ngineer with modern society and the
lobal environment. The objective is enhance understanding of the role and to ensure that the engineer is well of the coming decades. Courses
ncluded are:
Category B: ENGR 3701
Category C: CNT 4111, HIST 303 I.
Category D: AMST 350, ANTH 307।,
ANTH 4121, HST 307।, POSC 461।, ANTH 412, HSS 307, POSC 4611,
OSC 494, SBS 3171, SBS 3181, ANT 311), ECON 305, ECON 309,
HIST 306I, HIST 474), HIST 475), HIST 306 1. HIST 474 I, HIST 4751,
HEC 3121 , HDEV 307।, POSC 495।, EC 3001, SOC 3351, SOC 370।, J/ST 401 I, A 388 I.
Category E: DANC 373।, HSC 420,
THEME 5: Health and Well-Being This theme provides a basis for emotional, cultural, and philosophical aspects of self as they relate to concerns of enduring importance to he human experience of all individuals as members of national
and world communities. Emphasis is on providing a background of learning hat will encourage selt-actualization to the
are:

Category C: C/T 411
Category: W/ST 401I, DANC 373 GERN 4001, HEC 3121, HDEV 3071 I, Category E DANC 3731, HDEV 3071, HIST 3091, PED 3381, REC 3401 ,
OC 461
HEME 6: The Creative
Experience In Human Developmen The Creative Experience in Human Development' explores various aspects of the creativity of human peings. Students examine thought through a study of the culture, history, and physical nature of the world in
which they live. Several courses are oriented toward the enhancement of reativity as it relates to human and societal development. Courses ncluded are
Category B: ENGR 3701
Category C: ART 360 I. ART 3751,
C/T 3201, C/T 4111, MUS 3631,

HUM 409 I, R/ST 3911 , R/TV 318 I,
Category D: PSY 3001 , SOC 3701.
Category E: HDEV 307 I, HDEV 357 ।

THEME 7: The Individual in a Complex Society
"The Individual in a Complex Society addresses the relationships
of the individual to an increasingly complex and technologically advanced modern world. The impacts of societal change on the
individual, and the ability of the individual to cope with these changes is addressed. The objective is to provide a background of understanding that will assist the
student to prosper in a rapidly student to prosper in a rapidly Category B: ENGR 370 \(\frac{\text { Category C: }}{\text { CLT 411. }}\) HIST 303I, HUM 4091, Category D: ANTH 307 I, ANTH 4121, ANTH 311 I, ECON 305 I, ECON 309
I, GERN 400 I, HIS 306 I HIST 308 । I, GERN 400 I, HIST 306 I, HIST 308 , PSY 300, PED 3221, SOC 3351, SOC
3701, SOC 441। Category E: SOC 4611, HDEV 307 I, THEME 8: Human Values, Society and Technology
"Human Values, Society and Technology' addresses the impacts of technology on human values and the
profound effects these changes are having on modern society. Students gain an enhanced understanding of mores and culture. The continuing changes in our modern world brought about by rapid technological advance are addressed as they relate to
human behavior and societal change. Courses included are:
Category B: ENGR 370
Categon C: C/T 411 I, C/T 451,
ENGL 3181, HIST 303I, HUM 350 I,
Catecory D. AST 3011 ANTH 307 ANTH 4121, GEOG 307 I, POSC 4611, POSC 494 I, SBS 317 I, SBS 3181 ,
SBS 3191, ANTH 311I, ECON 305 , ECON 3091 I, GEOL 3051 , GERN 400 HIST 3001, HIST 308 I, HST 4091,
HIST 474 I HIST 475 , HPEV HIST 474 I, HIST 475 I, HDEV 3071 I,
POSC 4951 I, PSY 300 i. PSY 3501 SOC 335 I , 401 .
Category: HDEV 307 I, HDEV 357 I

\section*{THEME 9: Gender and Huma}

Experience
This theme provides an integrated disciplined inquiry into the status and
implications exploring the gender differences, exploring the meaning and
significance of these basic factors in
human experience and societal development. Courses introduce
students to the biological basis of gender differences, gender in relation to cultural and societal institutions, the meaning of sex in gender and their cultural expressions, the evolving ro society, gender changes in th professions, and prospects fo
rational evaluation of rational evaluation of gender
organization. Courses included are Category C: HIST 3031, W/ST 365 I. Category D: HEC 3121, W/ST 401 ।. CategoryE: HSC 4291, HSC 4251,
THEME 10:
Pluralism
This theme provides perspective on the diverse ethnic aspects of our global society and provides a greater
understanding of the important role that ethnic and cultural diversity plays in human and societal development. Courses included are:
Category C: AMST 3501, AST 300 C/L 3261 I, R/ST 3151, R/ST 3311
R/ST 341 I, THEA 3261, R/ST 341 I, THEA 3261. Category D: AST 300 I. AST 312 I, GEOG 320 I, MEXA 390 I, SOC Category E: HSC 4201 THEME 11: Human Maturity and Growth: Prospects and Problem issues that confront individuals as they mature and provides an integrated academic approach to the examination of the biological bases, the social and psychological implications of maturity and aging, approaches to ensuring ful enjoyment
of life and continuing self actualization through the later years, and the literary and philosophical concepts of aging Courses included are. Category C: C/LT З20।, C/T 4111, HIST 3031 I.
Category D: GERN 4001 I, HEC 312 HDEV 307, POSC 4951,PED 3321,
PSY 3501 , SOC 3701 , SOC 410 I PSY 3501,
SOC 441 I.
Category E : DANC 373।, HIST 3091 ,
HDEV 3071 , HDEV 3571 , REC 3401 ,

\section*{THEME 12: Our Interdependent} World/International Studies International Studies" addresses theme of internationalization of the
o provide a better global perspective
human and societal problems to
better enable the student to assist in etter enable the student to assist coming years. Courses included are Category B: ENGR 3701
Category C: R/ST 383 I, AMST 350। Category D: A/S 3 3001 I, AST 3011
AST 485l, ANTH 3071 , ANTH 412, CON 3051 I, GEOG 3071, GEOG 310 GEOG 3121, GEOG 3201, POSC
3181, SBS 3191, SOC 3171 I, HBS
MEXA 3901 I, PSY 300 I. Category E: HSC 4201
THEME 13: Human Emotions and Reasoning
'Human Emotions and Reasoning' aimed at improving self tudint's understanding of the emotions and rational thought. The student gains a better understanding of reasoning process and how synthesis of emotion and logic. ynthesis of emotion and
Courses included are:
Category C: C/T 3201, C/LT 4521,
HIST 3031, HUM 3631
,
Category D: ANTH 3111, HEC
3121, HIST 3101 , PSY 300 I, PSY 350 I,
PED 332I, SOC
3351 I, SOC 410I, SOC 441I, SOC
Category E: DANC 3731, HDEV 3071
Category E: DANC 37
THEME 14: Classical and Modern ivilization
"Classical and Modern Civilization provides a greater understanding of
the development of human civilization om medieval times up to the
resent. Courses included are
ategory B: ENGR 370
Category C: C/LT 3201 I, C/T 4111
CLT 422I, HIST 3231, HIST 4141,
HUM 409 i.
CategorD: AST 301 I, ANTH 307 I,

GEOL 307I, GEOL 305 I, HIST 409
Category E: SOC 461
HEME 15: Arts and Human
This theme focuses on the arts as a This theme focuses on the arts as
vehicle for enrichment of human experience. Students are exposed to
classical and modern arts thereby classical and modern arts, thereby gaining a better appreciation
mportant role of the arts and
humanities for human anichmet ourses included are
Category C: ART 3601, ART 3751 , MUST 3641 I, C/T 3241 I, CNT 349
 HIST 4041, HIST 4141, THEA 3241, THEA 3261 , THEA 4211 , H Category D: HIST 414 I.
THEME 16: Language, Though
and Cultural Development
'Language, Thought and Cultura Development' encompasses the perspectives of language and thinking processes and the developmen provide an enhanced understanding of modern cultural developments and addresses future prospects. Course included are.

Category D: HIST 482 I, PSY 3001 ,
THEME 17: Contemporary Culture and Soclety

Comtemporary
This theme is concerned with modern society and the social/political
forces that created it. The social and technological forces that are changing modern society are addressed, as are the challenges
included are:
Category B: ENGR 3701

HUM 409
Category D: HIST 307 I, POSC 461 I,
HIST 4741, PSY 3501, PED 3321,
SOC 335 , SOC 37 ,
SoC 461
Category E: HSC 4201, HIST 3091
THEME 18: Scien
and Public Policy
'Science, Environment, and Public Policy' explores the scientific considerations that have an impact on
the natural environment. It reviews the moral obligation of humanity toward the environment and the societal the arts. The student also explores the historical development of current attitudes toward the environment, and the way in which the political process
is brought to bear on environmental is bought to beurses included are Category B: ENGR 3701 CategonC: C/T 4111, HUM 350 I,

Catecory D: ANTH 307 I, ECON 3051, GEOL 3071, HIST 3071, P OSC 4611,
POSC 494, SBS
GEO 3051 I HIST GEOL 305 I, HIST 405 I, SOC 370I, SOC 410 I.
Category: HSC 420 I, SOC 46

\section*{'The Modern Age' con} modern technological world in its broadest context. The potentials and the problems of technological
advance for society are studied so that students are able to make better judgments regarding policy and thei own responsibililties in an age that
faces the possibility of human extinction through nuclear conflict or global environmental disaster.
ourses included are:
Categoory C: CNT 320I, C/T 411।, Category C. HUM 409 I.
Category D: ANTH 307 I, ANTH 412 I, W/ST 401,',GEOL 3051, HISS 4051, PSY 3001, SOC 3701, SOC 4101, SOC 441 I,
Category E: HSC 4201, SOC 4611 HEME 20: Perspectives on
"Perspectives on Evolution" is intended to provide a foundation for nderstanding human and societal oluding the origins of the universe, he earth, life forms, and past and continuing evolutionary changes in of evolution from antiquity to the resent and its impact on the culture the twentieth century are explored . CategoryC: CLSC 3101, CLSC 349 HIST 414!. CIST 310I, HIST 4051, Category D: HIST 310I, HIST 405I, Ctecory E: HDEV 307 I, HDEV 357 I. HEME 21: World Urban HEME 21: World Urban ssues
World Urban Environment: Ecology and Urban Issues' contributes to a understanding of urbanization, its on the city as a particular type of human habitat, with emphasis on the elation of urban issues to eocology and human expe
Category B: ENGR 370
Category C: CRT 4111, HUM 350

Category D: ANTH 307।, GEOL 307 I,
HIST 3071, HIST 474 I, POSC 494 I,
PSY 3001 I, SOC 370 I, SOC 441 , WIST 4011 .
Category E: REC 3401 , SOC 461। THEME 22: Development and The third World
The Third World is characterized by severe social tension and staggering re a continuing source of conflict and are a continuing source of confilict and bcome more acute. These course ddress the physical limits and
osssibilities of Third World evelopment, an appreciation o human and economic aspects affecting social and economic change in the Third World, appropriate
technologies for Third World development, and the dynamic interplay among the arts, religion, and
cultural values of the Third World. cultural values of the Th
Courses included are: Category C: AST \(300 \mathrm{I}, \mathrm{CLSC} 310\) I, Category D: AST 3011, AST 485 I, GEOG 3101, POSC 461, SBS 317, GEOG 320 I, HIST 4741 I.
Category E: HSC 4201.

\section*{HEME 23: Techno}

\section*{This theme concerns societal} This theme concerns societal
mpacts of technological advances and prospects for resolving major problems facing humanity, including disease. These courses help students in technological fields to address prospects and limitations for using new technologies to solve
societal problems. Courses included are:
ategory B: ENGR 370
Category C: C/LT 4111, HUM 409 I. Category: ANTH 3071 I, ECON 3051 , GEO 3191 , HIST 474 1, PSY 300 I, SOC
SBS
3701 SOC 3701 I, SOC 410 I.

HSC 420I, SOC 4611
THEME 24: Humanity, the Earth

\section*{and the Environment}
"Humanity, the Earth, and the and social perspective of environmental protection. The student gains an appreciation for the
complex interrelationships of social systems, the use of land and materials, and the environmental mpacts derived therefrom. The
objective is to provide the student a proper perspective on environmental
and professional action to reverse current trends in environmental
degradation. Courses included are Category B: ENGR 370
Category C: C/T 4111, AMST 3501 Category D: HIST 405I, ANTH 307 I, W/ST 401 I , GEOL 305 i ,
SOC 370 I, SOC 410 .
Requirements for the ABE
Accredited Degree Programs
Students working for an ABE accredited degree are required to see an academic advisor in their
department as early as possib department as early as possible to
make themselves fully aware of the ABET requirements, not only in
General Education as outlined above but also in other areas, such as math/science requirements. In particular, majors in the ABET
accredited programs must take accredited programs must take a
minimum of 32 units of basic science and mathematics not including units earned in courses prerequisite to
calculus \(\mid\); students should see the departmental advisor early to determine whether they must take a biological science to complete their
Master of Science in Engineering Graduate Program Director: Dr
Mihir K. Das, Associate Dean for Instruction
The College of Engineering offers graduate study prograns ior degree. Typical tasks and students in the curriculum would not fall within one of the traditional specialties in engineering e.g.
chemical, civil, electrical and chemical, civil, electrical and science and engineering. The studen may pursue an interdisciplinary program, approved by a Graduate
Advisor, by selecting courses from th various departments of engineering.
Additional information concerning the programs, special facilities,
may be obtained from the College of
Engineering.
(1) A bachelor's degree in an engineering with a minimum GPA of 2.70;
(2) A bachelor's degree in engineering, mathematics or a natural with the requirement that essential indergraduate prerequisites
(3) Graduate students must onsult with a graduate advisor, with
whom they will be working, for information concerning procedure and requirements for appropriate pior to enrolling in their graduate programs.
(4) The Writing Proficiency xamination (WPE) must be passed ourses taken after the first semester without having passed the WPE will ot be counted toward the graduate egree
dvancement to Candidacy: (1) Removal of all undergraduate deficiencies as det
Graduate Advisor;
(2) Students may, at the discretion take examinations in their chosen areas;
Requirements for the Master of Science in Engineering
code 6-4301):
(1) Completion of a minimum of 30 pper division and approved
(a) a courses, incluaing:
(a) a minimum of 18 units of 500
nd/or 600 level courses in engineering;
(b) Six units of electives selected om approved upper division of areas;
(c) Completion of an acceptable hesis or project and/or Note: Students are strongly dvised to read and be familiar with nder 'Graduate Programs' elsewhere in this Bulletin.
Ph.D. in Engin
code 8-4303) Director: Minir K. Advisor: Nick Panagiotacopulos, Ph in offered jointly by the College of Engineering at California State University, Long Beach and The
Claremont Graduate School, allow students to pursue doctoral programs n most areas of engineering and applied mathematics
The College of Engineering at
California State University, Long Caifornia State University, Long responsibility for the engineering portion of the program, and the
Department of Mathematics at The

Claremont Graduate School (CGS) has the primary responsibility for the program of study for each Ph.D. candidate is carefully integrated to
ensure the interdisciplinary nature o ensure the interdisciplina Application Deadlines: Admission will be granted only to a imited number of qualified students, made as early as possible. Applications are encouraged oth men and women, and particulary yrom members of minority
and handicapped groups. Completed applications are due to either institution preferably by February 20 for the Fall semester and
October 31 for the Spring semester, although later applications may be allowed at the discretion of the Program Committee. Students will be Admission Requirements:
To be admitted to the Joint Ph.D. Program, an applicant must have eceived a bachelor's or a master's
degree in science, engineering or degree in science, engineering, or institution. Applicant must, moreover have attained a good scholastic recommendations indicating that he or she is qualified to pursue, with research. In some cases an examinations may be required. Admission is contingent upon the support reerch in the applicant's area of interest.
The Graduate Record Examination (GRE) is strongly recommended in th applicants. Applicants. whose first or native language is not English, are required to submit the results of the Test of English as a Foreign
Language (TOEFL) as part of their application procedure. A minimum aspore of 550 is required. Admission to graduate standing
does not automatically admit the student to candidacy for a degree The student is responsible for seeing that advancement to candidacy is see an advisor.
Program Planning and Supervision:
Within a semester of beginning
study in the Ph.D. study in the Ph.D. Program, the
student contacts the Program sommittee forts an advisor in in
Comather Mathematics at CGS and an advisor
student's program of study wil be in collaboration with the advisors. However, the student's overall performance will be monitored by the

\section*{Plan of Study:}

Plan of Study
After consultation with the advisors, the Program Committee before the end of the first semester a Plan o
Study for completing the course Study for completing the course
requirements for the degree. The Plan of Study must indicate the areas
of study that the student will be taking of study that the student will be takin in preparation for the preiminany
examination, and study to be examination, and study to be
undertaken to meet the language requirement. In exceptiona
circumstances, a Plan of Study may be altered at a subsequent time by
petition to the Program Committee. petition to the Program Committee, A minimum of 72 units of course
work independent study and research (including transfer credits) must be completed. Transfer credits of up to 24 units of related courses a the master's level is permissible on
approval of the Program Committee; this course work must have been completed with at least a grade of 'B institution and must be directly related to the joint program and to the student's Ph.D. goals. Of the 72 units, a minimum of noty units must graduate engineering program at the graduate mathematics program at the graduate mathematics program
CGS. Both sets of 24 units must conform to the area requirements the relevant institution and must be
approved by the Program Committe Preliminary Examinations:
After the completion of the require 24 units of course work (including transfer credits at CGS and at
CSUB) the student is required to pass witten preliminary examinations These examinations shall consist of our examination areas: two in engineering and two in mathematics.
In each area there will be a three-hou examination. The two engineering examinations must be taken during e same month, and the two laken during the same month. Thes examinations will be given twice a year (January and May). Shaumination sue retake of that set may be allowe hrough a pettion to the Program hrough a pe
octoral Committee
During entry to the program and of course work at CGS and CSULB, tudent's progress will be monitored by the Program Committee. O preliminary examinations, the studen nay petition the Program Committee constitute the Doctoral Committe sudent with advice from the faculty and with approval of the Program and must include at leas o faculty members, one each rde th breadth and depth in mathematics and engineering. The student's progress through research preparation and dissertation wititng and administers the qualifying and oral examinations for the degree. The
hair of the Doctoral Committee is the dissertation supervisor.
Research Preparation
On completion of at least 48 units of and the completion of the preliminary xaminations and research tool test, a student embarks on the resea
phase of the Ph.D. Program. In preparation for the research phase, he student is expected to spend at east a semester in advanced graduate courses, seminars, or exposure to research material is mphasized. From these and other ources the student gains he abing
ounderstand the motivation for esearch in engineering and applied mathematics, and learns to app

\section*{esearch techniques.}

A student in the Joint Ph.D. Program must demonstrate adequate reading proficiency in a foreign language or Russian) and in computer programming. The tests for language and computer proficiency must be passed before the stun Examination:
With these advanced courses as background, and with the guidance of
the Doctoral Committee, the student shall define an area of proposed research and prepare a written Dissertation Proposal containing an utdertaken and references to relevant source materials. The Dissertation

Poposal is presented to the Doctora ommittee at least two weeks prio qualifying examinatiotion. The resentation to the Doctoral Committee by the student descrining expected to present evidence both s to the mathematical content and to he engineering applications of the roposed research. The Doctoral quality of the Dissertation Proposal om this presentation and from the witten proposal, and subsequently he Program Committee; only upon a positive recommendation may the student embark on a dissertation. exament of aliure, the qualifying
examination may be retaken once, examination may be retaken Committee.
Dissertation a
Examination:
Examination: student will prepare the dissertation in accordance with CGS regulations. A
final draft of the dissertation will be final draft of the dissertation will be
presented to each member of the prestontad tommittee at least three veeks prior to the final oral
examination. The oral defense will be examination. The campus of the
dissertation supenvisor. held on the campus of the
dissertation supervisor.
Residency Requirements: To meet the requirement of the
Ph.D. degree, a minimum of 72 units Ph.D. degree, a minimum of 72 units
of course work, independent study, and research, including transfer credit must be completed. No more than 1 units per semester or per summer
session may be counted toward the requirement of 72 units.
All degree requirements must be completed within seven years from study. Work for which transfer credit is granted will be counted as part of the seven years; e.g, if transfer credit
of 24 units (one year) is granted, the of 24 units (one year) is granted, the
time limit will be six years. The seven-year maximum time period for the Ph.D. degree is reduced by six months for 12 units or less of transfer
credit and 12 months for 13 to 24 units of transfer credit. The Program Committee will extensions.
The residency requirement for the two degree may be met either by 24-month period or by the completion of 48 units of course work within a of 88 units of course work within a
4 -month period, including work in the Summer Session, on either or both campuses

Students who receive transfer credit for 12 units or less may meet the
residence requirement either by completing two full-time semesters of course work within a 24 -month period or by completing 36 units within a
48 -month period. Those receiving transfer credit for 13 to 24 units may meet the residence requirement by completing 24 units within a 36 -month
If a stu
If a student withdraws from the program atter completing a
substantial portion of the course work a master's degree at either or both institutions is still possible by
satisfaction of the appropriate requirements. Both CGS a and CSULB
require 30 semester equire 30 semester units of course Teaching Practicum:
Students who have completed coursework equivalent to a master's degree and who intend to pursue a enroll in a Teaching Practicum for three units of credit. The student will eceive instruction in teaching techniques and, under the supervision
of a senior faculty member, will teach an undergraduate class in
angineering or mathematics. In for qualified Ph.D. candiddates to teach undergraduate courses as part-time

College-Based Courses (ENGR) Lower Division
090. Special Topics in
Engineering (1) Fs

Engineering (1) F,S
Selected topics from recent advances of interest
ob beginning engineering students.
Cours content will vary from year to year and may be eppeated to a mai)
problems 1 hour).
282. Critical Thinking and

Analysis (3) F,S
Prerequisite: MATH 122, PHYS 151 . The
interelations of language, abstract symbolism Iterrelations or anguage, abstract symbolis
 points are conildoerd. Proogamming as a cortincol
thinking tool, evaluation of various programing languages, as aluating of various programming logic, statatitical generatizations, truth tabilios, structured (Leoture problems 3 hoursa).

Upper Division
300. Computers and Their Appllcations (3) F,S Proeraquivite: ENGL 100 and Upper-division standing. Introduction to computerss and
conputer applications. Microcomputuer porating
.nder

 with a graphical interface. Presentatation graphices. Preparation of original art and graphios.
Computer drawing and drating. Introcuction to Computer drawing and drating. Introduction to
desktop publishing. Introcuction to computer destop pubilishing. Intuduction to computer
programming in BASIC. (Leoture problems 3 hours).
301.
301. Solar Energy (3) S Prerequisite: ENGL 100 and Upper division
standing. Prior coursework in ajebebia standing. Prior coursework in algebra and
trigonometry. This course is designed to provide the student the knowiedge and kkills sencosoary
to dosign, analyze, and instal solar energ 10
syytems for producing space heating, hot watere,
cooling and cooling, and electricial power. The etuduent also
gaing an anppereciation of the practical appects of usinin renewablibeneroy systems as asposed to
traditional energy eocrices. (lecture problems 3 traditional
hours).
350. Computers, Ethics and Soclety (3) F,S
Preerequistes: One computer programming
course plus 3 units from \(G E\) Categonn
 (Phinsophy) or GE Category \(D\) (SScial and
Behatioral Science). An examination of the Behavioral Scienco). An examination of the
social impact of information technologies. Topices include 2 survey of the technologyes. (sotupare,
harcware and key applications) hardware and key applications), ethical
obbigations of specialistst the computer in the
onk
 issues related to computing. Clectu
hours.) Traditional grading only.
(3) F,S

Prerequisite: Previous coursework in algebbra and
trigonomety. ENGL 100 and trigonometry. ENGL 1 1ro, and uper divind
standing. Teehnologes and sociel aspects of standing. Technologies and social aspectso of
space treve and the colonization of space and spaces ruvel and the colonizatiton of space and
the planets. Topics include fundamentals of
rocketry and orbtal mechenice rockety and orbital mechanics, economics of
space travel, bife support syitems, current
progams to
 development, space stations, tecchnologies and
prospects for extraterrestrial colonization, unique
 prospects for interstellar space fight. (Leecture
problems 3 hours). 375. Total Qual Improvement (3) F,S Preerequisites: ENGL 100 and Upper Division Standing. Total Quality approach to gool setting
and disciplined appoch and diciciplined approach to planning. torrcos towaurs meeting the set goosis. Strategies
for creating an environment which nutures tor retrating an environment which nutures
continuous improvement. Total Quality tools and
methodologies. Variability Reduction approach
and cocncepto. Measurement oystems for
tracking progress from the working level to the tracking progress from the working level to the
overal gooal
corporate oultural chanan compentitiveness and corporate cultural Change to meet the global
challenge.
(evtur)-problems
3 Thailitional grading ontry.
480. The Self-Integrated

Professional (3) F,S
Prerequibite: ENSL 100, PHIL 160 or General
Education A. 3 Critioal Thinking and
 in society and hiahher profesosion. The
significance of the values of the individual and significancee of the values of the indididual and
individual behhevior in the moral and ethical docicisions inivolved in professional activity. The
ethicos, discidinine and ethics, disoiplinine and conduct of professions
such as engineering, science and technolog,
nursing
 492B. Internship In Engineering (3) F,S
 experience. Studentstuructorulily can bep placod
in a major -or career related, preprofessional experience as an employee in privati indusutry y
in public agencies. Tradtional grading only. in publico agencies. Traditional grading only.
May ber repoated.
(lecture (Lecture probilems 3 hours).
790. Advanced Special Topics in
Engineering (4) \(\mathrm{F}, \mathrm{S}\) Engineering (4) F,S
Pierequisite: MS or equivalent and formally
adimed to the Ph.D. Program. Each offering is
 abvances have been made. Specific topics will
be recorded on student's transccipts. Repeatable to a maximum of 8 untits with dififerent topolices.
Course Survey Form must the completed. Course Sunvey Form
Tradtional grading only.
795. Advanced Directed Studies
(4) S (4) F,S

Preerequibite: MS or Equivient and formally
admited to the Ph.D. Provam. Explorations of admitted to the Ph.D. Program. Explorations of
theoretical and experimental (if applicable) Enginhealing problemerimential (rifat applicable)
emphasis on mathematical modeling with emphasis on mathematical modeling and
anayasos. Students must pesent the findings in a
formal report and a formal. report ands mase prosent the indings in a
maximum of 8 units. Course Surveneatable to a maximum of of 8 unts. Course sunven Form to must
be completed. Traditional grading only 798. Doctoral Dissertation
(4-12) F,S
Proereauistes: Enrollment is limited to students
formaly admitted to the Ph.D. Program who have Tormaly admitted to the Ph.D. Program who have
passed the preiliminary examinations and passed the preiminary examinations and
research tool tosts on completion of at east 48
units of course work. A witten diseatration units of course work. A wirtiten disiserataion
proposal containing an outine of the research to be undertaken and and refererncines of the revesearch to materiel must be sumberitercoses on on relevevant source
recommendation a student may membark itive recommendation a student may embark on a
disesatation. Minimum 4 units per semester. May
bee be repeated till the work is completed. Tradtional
grading only.

\section*{Aerospace Engineering}

Department Chair: Tuncer Cebed Department Office: ECS-603 Telephone: (310) 985-1503 Faculty: Professors: Tuncer
Cebeci, Ralph Cooper, J. Richard Williams; Associate Professors: Hsun-Hu Chen, Hsin-Piao Chen, Hamid Hefazi
Graduate Advisor: Tuncer Cebeci Secretary: Laju Tejwani Advisory and Development Councl
The Department of Aerospace Engineering is supported by an Advisory and Development Council
consisting of outstanding engineers and executives trom industry and government agencies in Southern California. Its function is to form a
liaison between the University and liaison between ye ep the
industry and to keep
administration and faculty informed of administration and faculty informed modern engineering practices. (code 6-4301)
For requirements, see the
description in the College of
Engineering part of this catalog Courses (AE)
436. Aerodynamics (3) F,S Prerequistes: CE 335 , Math 377 A or consent of
instructor. Consevation equations of fluid fiow, airfoli and wing aerocyynamics, thin airfoil theory, multielement airfoils, frinte wings, vortex and pannel methods. Two dimensional supersonic
fiows around thin airifols, wings and airplane configurations. Turubulemt and laminar bounday
layers. LLecture-problems 3 hours.) 471. Introduction To Aircrat Structures (3) F,S
Preerequistes: ME 373 or consent of instructor.
Mechanical behavior of aerospace materias; Meechanical behavior of aterospace meotereials;
bending. extension and tossion of adraced bending, extension and torsiven of advaneod
beams; stress anayyis of flight vehicice structures. (Leeture problems 3 hours.)
480. Fundamentals of Aerospace Engineering I (3) F,S
Prerequisite: AE 436 or consent of instructor. Introcuctory understanding of sciencoe and
engineering of fight venices, basic aercocynamics, structurese, perterimancose, stabilicy and contol, elements of rochet propulion and
traiectories,
and
orbital Lecture-problems 3 houm) Teditional grading only.
502. Applied Numerical Methods for Aerospace Engineers (3) F,S Prerevulistes: MATH \(370 \mathrm{~A}, 323\) or equivalent.
Numemical solution of ordinary differential
 partial differentital equations. and problems in
viscous and iniscid fiows vibration of structures, statio wave propagation
and buckling.
and bucking.
537. Fundamentals of Fluid Flow

Preerequistes: CE 335 , MATH 370 A , or consent of
 Elements of two-dimensional potential and real
fifows: boundar-layer theory, turbulence, flows: bounday-1
compresaibe flow.
539. Gas Dynamics (3) \(F\) Preerquistes: CE B35, or consent of instructor. Review of one dimensional gas oynamics:
isentropic, Fanno and Rayjeigh flowe: nomal
 expansion. Small perturbation theory: subsonic
and supersonic flows. Transonic and mixed fowe. (3 hours, Leeture-problems.)
540. Aero Laboratories (3) S Preerequisites: AE 537 or consont of instructor.
 measurumento of pressure, temperature, velocity
and forcees. Pitot tubes, ho-wire and lasert
 and analysis. (2 hours, Lecture-problems
hours Laboratory).
551. Aircraft P

Design (3) F,S
Preerequiste: \(A E 537\) or consent of instructor.
Aircat fight cehavior requirements and retion Aircratt filight behevior requirements and dosign
citereia. CFD and empirical design method criteria. CFD and empirical design method
appliations tor subbonic, transonice and
and supperosic conditions. Segmented and
continuous performancee analysis methods for continuous periomance analot. iston-ropelerer turbopopop and turbotar aircratt. (Lecture-problems 3 hours)
552. Flight Mechanics (3) \(F\)

Prerequivites: ME ME 371 a consent of instructor
Geometry of wing and fuvelage, wing foceces and Geometry of wing and fuselage, wing forcess and
moments, kinetics of fight vehicles in 30 .
simulation of fiopt puath.
 during manevering.
(Lecture-problems 3 hours).
554. Avionics Systems (3) F,S Preerequites: EE 330 , equivient or consent of instructor. Anvonics systems, requirements
defintion process. designing the sydem, core defintion process, designing the system, core circuits and device tecchnology, lesting
cerification. LLecture. problems 3 h hurs.)
555. Computer Alded Design an 555. Computer Alded Design an
Computer Aided Manufacturing
reerequibite: ME 305 or equivalent, or consent of instructor. 3 -wire frame modeling and solid
mocoling of aircratt. Computeraided drating and manutacturing. Computational geometry for aircrat design and manutacture, pre- and Element Method. Display techniques and graphics programming, animation of filiht veticicle
Aptructures.
 high-resolution graphical inter
(Lectura-problems 3 hours.)
571. Aircraft Structures I (3) F,S Prerequisites: ME 373 or consent of instructor Energy methods of structural analysis, principle of streseds skin construction, bending, shear and
torsion of open and closed thin-wall stiffened fubese, shear lag. diagonnal tension, structur 575. Structural Analysis of 575. Structural Analysis of
Composite Laminates ( 3 ) S Prerequisites: ME 373 or consent of instructor Basii theory of anisotropic elasticity, properties of
laminated compooites, classical lamination heory, bending, buckling, and vibration of laminated Plates, strength of composite acent research topics, delamination growh analysis, interlaminar
(Lecture-problems 3 hours)
577. Stability of Aircrat
tructures (3)
Prerequiste: ME 373 or consent of instructor
Theory of stabiliy, frexural and torsional instabiity of columns, Itateral instability of beome beams-Columns, stability and tailure of flat plates components. optimum configuration
grid-stifened p plates. (lecture-problems 3 hour) grid.stififened plates. (Lec
631. Viscous Flow Theory (3) F Prerequivit: \(A E 537\) or consent of instructor and energy. Bounday-layer apporoximations
 sheear flow. Predition of external. internal and
thee-shear flows. (Lecture problems 3 hours). 632. Inviscid-Flow Theory (3) S Prerequistes: AE 537, AE 539 of consent
 threedimensions. Singularity tecerniqueses and
contomal mapping metheds. Suboonic.

 nonisentropic
techniques.
652. Aircraft Stability and Control

Prerequisites: EE 370 or consent of instructor. Longitudinal, lateral and directional stablity, aircat. Neutral points, control effectiveness, tifin aircatt. Neatrau points, oontion effectiveness, trim
in
might.
maneuvering determinantst. Transient modes. Methocs, type
and application.
654. Guidan

Control of Aerospace Vehicles (3) F,S
Prerequis
Preerequisites: AE 652 or consent of instructor.
Control theory and applications to air vehicles. Control theory and applications to arit veliciles
Control law development and filgt contro
synthesis with respect synthesis with respeoct to handling qualities and
stability augmentation. Includes architecture of stability augmentation. Includes architecture
guidanco systems. (Lecture-problems 3 hours.)
661. Propulsive Systems (3) S

Pretequisites: \(A E 537,539\) or consent of
instructor. Desociption, doesign criteria, analysis instructor. Desoripion, dosign critiria, analyois and pertormanee ofp piston engines, turbopropes turbojetst, turbofans, ramiets and solid, liquic,
and hybrid-tuel rockets. Analysis of components:
 houra).
672. Aircraft Structures II (3) S

Prerequisite: \(A E 5711\) or consent of instructo. force, and finite elementt method to basic aircra structural components; theory of plates an
shells: application of finite element computer
programs. (Lecture-Problems 3 hours.)

\section*{\({ }_{\text {(3) }}^{680 .} \mathrm{Spe}\)}
(3) F,S

Preerequisites: Consent of instructor. Topics in
aeronautics not covered in formal couree selected according tored in thermal courses and
the studentia, as well as courent intereses. \(\mathbf{n}\). 3 hours of the students, as
Lecture-problems)
690. Aerospace Engineerin
Seminar (1) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: Consent of Instuctor Prerequisites: Consent of instructor. Oral
prosentations by students and seminars given by guest lecturers of matetial Ileleated to thesis and
research problems. (Leeture-probems 1 Hour.) 695. Directed Research (1-3) FS Prerequiste: Graduate Standing. Reseearch in computational and experimental aerocynnamics
structures or design problems structures of design problems.
696. Computatio
Dynamics (3)

Preerequisites: AE E31, AE 632, or consent of
instructor. Panel methods, introcuuction to numericial methods fortho solsutuon of boboun to to
layer equations. Twodimensional internal and layer equations. Two-dimensional intermal an
external flow probbems. Calculation of stablitity
and tanastion 698. Thesis (1-6) FS Pretequisistes: Consent of instructor, advanco
ment to candidacy. Research on a chosen top ment to co

Department Chair
Department Office: E4-12
Telephone: (310) 985-4909 Faculty: Professors: Lloyd R. Hile Larry K. Jang, Hamid Kavianian,
Ashok Naimpally, Shirley C. Tsai; Emeritus Professor: John M. Lenoir
Undergraduate Advisor: Larry K. Jang
Graduate Advisor: Shirley C. Tsai General Education Advisor: Ashok Naimpally
Students desiring detailed information should contact the department oftice for reerral to one
the faculty advisors. Chemical engineering is concern with the conversion of chemical
materials into products of increased materials into products of increas economic utility and benefit to
consumers. The chemical engineering curriculum gives the
student a thorough background student a thorough background in
chemistry, mathematics, physics, engineering science, and engineering engineering science, and engineering
design and analysis for application to current technical problems as well as potential technical problems th
might arise in the future. The objectives are to serve as preparatio for immediate employment as a chemical engineer in industry, to
provide a basis for later graduate provide a basis ion rhater graduate
study
and research or to background for possible advanced marketing or law.
Students wishing to pursue
advanced study may be intere advanced study may be interested if the Engineering College's Master
Science in Engineering degree. Graduate study leading to the MS can be tailored to the goals of student with a background in
chemical engineering by taking chemical engineering by taking
advanced course work in the advanced course work in the
interfacing areas of chemistry, civil
enginering engineering (environmental area),
electrical engineering (semiconductor processing, control and computer areas), mechanical engineering
(thermal, fluids and materials areas)

\section*{Chemical Engineering}
and mathematics in addition to chemical engineering. Thesis wo
engineering faculty. Requirements for the MSE are specified in the College Engineering section of this catalog All chemical engineering students
must have received a minimum must have received a minimuin grade any chemical engineering course. Chemical Engineering
Professional Advisory Council: The Department of Chemica Engiseorng and Development Council
Advis consisting of outstanding engineers and executives from industry and
government in Southern California. Its function is to form a liaison between the University and industry and to informed of modern engineering practices. This ensures that the curricula are kept up-to-date. It also
advises on placement opportunities advises on placement oation.
ABET Accreditatio
The Bachelor of Science in
Chemical Engineering is acceredited
Engineering and Technology (ABET)
Engineents enrolling in this program are
strongly advised to get in touch with
an undergraduate advisor as early a
possible to know the details of the
ABET requirements in math/sciences
muires and social sciences ares Requirements for the Bachelor of (code 3-4320)
ower Division CHE 200, 210 ; CHEM 111A, 111 B
251: CE 205; E E 211 or 212; MATH 22, 123, 224; PHYS 151, 152.
Upper Division
\(\mathrm{CHE} 310,320,330,410,420,430\)
\(40,450,460,470 \mathrm{CHEM} 3214\) 371 A ; three units from CHEM 322
 426; three units from CH E 300 , 385 ,
425, 465, \(475,480,490\); three units of \(425,465,475,480,490 ;\) three units
approved science electives; three units of approved engineering ectives; a course in economics.

Courses (CH E)
ower Division
200. Chemical Engineering

Preequisites: CHEM 111A, MATH 123, PHYS 151 mensional analysis of units, steady an ransient balancoes of mass, ,momentum and ngineering problems. (Lecture-problems ,
10. Computer Methods in Preerequisites: CHEM 1111A, MATH 122, PHYS 151 . Beogining Fortran programming and tecthiqioue
of numerical analysis apolied to typical problem hemical engineering. (Leeture-problems? chemiae engineering.
Upper Divisio
300. The Chemical Industry 3) F, Odd Years
 processing techniques of ind thestial acthemitice of engineers in this area, illustrated by field tripe
peeakers, professional society meetings, filma leadings, etctossional secture-proty meetems 2, hour
(libratory 3 hours.) aboratory 3 hours.)
\(\begin{array}{lll}\text { 310. Chemical Engineering } \\ \text { Thermodynamics I } & \text { (3) F,S }\end{array}\)
Prerequisites: CH E 200, CHEM 371 A Prerequisteses: CH E 200, CHEM 371 A
Thermosynamics of real gases and liquides
thermodynamic hermodynamic functions, relations between heal
and work, application to chemical engineering and work, appication to chemimale ens
320. Fluids (3) F,S
reerequisites: CHE E20, CE 205. Study of the aases, with applications to chemical engineering Lecture-problems 3 hours.). 330. Sep
(4) F,S

Freerquistes: CH E 200, 210, CHEM 371 A Computation methods for prediciting the oxtraction and matherer methods. Llecture-probilems 3 hours, laboratory 3 hours.)
(3) S
rerequisites: CHEM TIA: PHYS 154 or consen ptinctiples of diffusion, reaction, heal transter, etc. - processeses used in semiconductor derice Im growth. Examinian of crystal structur,
 microtelectionic de det
Problem: 3 hours)
405.505. Safety in the Chemical
Process Industries \((3) \mathrm{F}, \mathrm{S}\)

Process industries (3) F,S
Prerequisite: \(\mathrm{CH} \mathrm{E} 200,310,320\). Industrial
safery, hyoliene and toxicology, Source model
 and dispersion models. Fires and explosions.
Relief valves. Hazards identififation and risk asesesment. Accident investigations and case
histories.
Extra requirement for fron statdents: term
problems 3 hours.
410. Chemical Engineering
Thermodynamics in (3) F,S

Thermodynamics in (3) \(F, S\) Prerequisites: CH E 210, 310 . Multiphase
propertios including advancod equations of state. Thermodynamics of reactive syytems and fifow
415/515. Occupations 3 hours 415./515. Occupational and and Management (3) F,S Preerequisite: CHEM 327 or consent of instructor Satety engineering and management, legislation personal protective equipment; firio hezards: noise control:; leoertialal safefty, system satefy analysis; container and spill management; use of
computer systems and statistical methocds. Extra


\section*{420. Heat and Mass Transport}
\(\stackrel{F}{\text { F,S }}\)
Prerequisites: CH E 210, 320. Heat exchange by corduction, corvection and ratiaition. Diftusion in
fuidst and solids. Simultaneous heat and mass
25. Polymer Synthesis and

Characterization (3) S
Prerequisite: CHEM 321 ar consent of instructor.
Physical and chemical concepts in the Physical and chemical conceopts in the
procuution of polymers. Relation of the chemical produution of polymerts. Relation of the chemical
structure to buik properties of plastics. Latoratory
synthesesis of polymers and theit mechanical. synthesis of polymers and their mechanical.
thermal and molecular charaaterization. (Lecturethermal and moleculuar characterization.
problems 2 hours, labocratory 3 hours.)
430. Chemical Reactor Kinetics (3) F,S

Prerequisites: CHE 210 , CHEM 371 A . Homo-
geneous and heterogeneous reactions and aeneous and heterogeneous reactions, and
application to reactor deoign, catalyytt. (Lectureproblems 2 hours, laboratory 3 hours)
440. Chemical Engineering Prerequistes: CH E 310, 320, 330, pass Writing Profciciency: Exam. Laborataroy study of ffuld mechanics, separation processes and thermocynamics. Experimertal design and analysis and
preparation of engineering reports. (Laborotatory 6
hours) houra.)
450. Chemical Engineering
aboratory II (2)
Perequiustes: CH E \(\mathrm{E} 420,430,440,460\),
laborator study of heat and mass transport,
 engineering reports. (Labocoratory: 6 hours.)
455./555. Environmental
compliance (3) F,S
Prereaquisite: CHEM 327 or consent of instructor.
Physical and chemical properties of hazardous materidis and wastes. Envirommental hazards. regulations and standards deaing with storage: gruiations and standards dealing with storage,
transportation, treatment and dispoal of
hzardous wastes. Emergency plapning and hazardous wastes. Emergency planning and students: term papers or projects. (Lectureroblems 3 hours.
(3) \(\mathrm{F}, \mathrm{S}\)

E 20 M MTH 370 A Contel theory and practice, instrumentation, syytem nd stability as apolied to chemical enoineoring and stability as applied to chemimal eng
655/565. Blochemical
Engineering (3) F, S
ierequiste: CH E \(200, \mathrm{CHE}\) E330, CHE 430 , and Mir science course(s) with instructor's approval.
 of substrate utilization, procuuct formation and biomases production. Desigig and analysis o Product recovery operations
Bilopracocess
 biohydrometallurgy. Extra requirements for projects on biomase production, microbial enhanced ol recovery \({ }^{\text {o }}\)
(Lecture-problems 3 hours.)

\section*{4) \(\mathrm{F}, \mathrm{S}\)} erequisites: \(\mathrm{CH} \mathrm{E} 310,330,420,430\), CHEM
 Lemctra-perobilims
eession 3 hours.)
(3) F

Prerequistes: CHEM 111A-B. Recoommended Cheremistry 321 A , 371 AA A Application of chemistry to the prob
hours.)
480. Theoretical Methods in Chemical Engineering (3) F, Even Years

Prerequibites: CHE \(210,310,420,430\), Simula. promeseses by mathematical formulation and 485./585. Air Pollution (3) F,S Prerequisites: CHE E 200, 310, and CH E 475 o
CE 364 or consent of instructor. Air polution chemistry; control strategies; origin of pollutants heteorologoyy vapor dispersion modelels: contrial
peinciples for particulates, sulur dioxide, and
 tudents: term papers or projects. (Lecture
90. Special Problems (1-3) F, Prerequisit:: Consent of instructor. Assigne opics in techrical liter
and reports on same.
Graduate Courses:
05./405. Safety in the Chemical Process Industries (3) F,S Prerequisite: CHE 200,310 , 320 . Industrial satefy, hygiene and toxiocoloy., Source models
iof flow of fuids ftom equipment. Toxic release lon fow of tuics trom equipment. Toxic release
and dispersion modele. Fries and explosins
Relief values. Hazards identifoation and risk Relief valves. Hazards identification and risk assesement. Accident investigations and case stutudent: term pa
problems 3 hours.)
510. Multiphase Flow and Interfacial Phenomena (3) F,S Prereauisites: CH E 320 or consent of instructor
Equation of motion in multiphase systems such Equation of motion in mutitiphase systems such drops, and particies. Effects of interfacial tension particle-surface and interp
515./415. Occupational and Environmental Safety Engineering and Management (3) F,S Prerequisite: CHEM 327 or corsent of instructor.
Safery engineering and management. legisataion. Safery engineening and management, logislation personal protective equipment; fire hazards
noise control; eleactical safety; system saiet noibe control: electrical saiefl; system satety computer systems and statistical methods. Extra requirements for graduate students: :erm
or projects. (Lecture-problems 3 hours.) 520. Advanced Transport Phenomena (3) F,S
Prerequisites: CH E 320, 420, 430. Application a differertial and integral mass, momentum and
energy balances to chemical engineering processes. Analysis of fluid flow, heat transfer diftusion and chemical reaction in vario
operations. (Lecture-Problems: 3 hours) 530. Advanced Reactor Kinetic (3) \(\mathrm{F}, \mathrm{S}\)

Prerequistes: CH E E 430. Modeding of chemical
reactors; effects of mutiple phases, mixin
 adoroption, ditusion and catalysts on 540. Energy Conservation (3) \(\mathrm{F}, \mathrm{S}\)

Pefercuaistes: CH E410, 420, 430. Improving the
efficiency of efficiency of industrial processeses involving heat exchange, distillation, chemival reaction and
other unit operations through appliotion other unit operations through application of
thermochynamic analysis. Pinch technology. cogeneration, exergy and other topics asich
examined. (Lecture:Problems: F,S
Preerequivites: Consent of instructor. Examination
of procesess to economically prodive mind
of proceseses to economicalty croduce examergyo or
fuel trom various raw materials (coal, il shale, te sands, biomass, solat, wind, elci.) (Leeture
Problems 3 : hours)
55./455. Environmenta

Compliance (3) F,S Prereauisite: CHEM 327 or consent of instructor. Materials and wastes. Environmential hazardcas An examination of environmental laws. egulations and standards dealing with storage,
transportation, treatment and disposal hezardous wastea. Emergency planning and stupdents:
stern papers or projects. (Leoture problems 3 hours.)
565./465. Biochemical

Prerequisiste: CHE 200, CH E 330, CH E 430 , and life science Course(s) with instructor's approval Mirorbial physiology and genetics. Chemicals of
ifife. Metabolic stoichiometry and energeticu
 of substrate tutivation, product formation and
biomass procuuction. Design and analysis of


 graduate students: term paperss and laborotary
proects on biomass proution, microbial projects on biomass production, microbial
enhanceed oil recovery or metal recovery. enhanced oil recovery,
(Lecture-problems 3 hours.)

585/485, Alr Pollution (3) F,S Prerequisistes: \(\mathrm{CH} E 200,310\), and \(\mathrm{CH} E 475\) on
CE 364 or consent of instructor. At pollution
 meteorolagy: vapor
pincipies for particulateses, sultur dioxide, and nitrogen oxides. Extra requirement for gradual students: term pap
697. Directed Research (1-3) F,S,SS
Prerequuistes: Graduate standing. Individual
research ot intensive study under the guidance of research or intendive study under the guidance of
a faculty member on theoretical or experimental problems in chemical engineering. (independent Study
698. Thesis (2-6) F,S,SS

Prerequisite: Advancoment to Candidacy.
Planning, preparation and completion of a thesis chemical engineering.

\section*{College of Engineering}

Department Chair: Peter A. Cowan Department Office: VEC 101
Telephone: (310) \(985-518 / 8010\) Telephone: \((310)\) 985-5118/8010
Faculty: Professors: C. V. Chelapati, H. L. Chu, Peter A. Cowan, Ali Eshett, Richard P. Nguyen, Joseph M. Plecnik,
Sridhar J. K. Rao, Chan-Feng Tsai, Bing C. Yen, William H. Ying, Elena Zagustin
Emeritus Faculty: Robert L. John H. Dudley, M. Gamal Mostafa, Willard H. Reed
Undergraduate Advisor: W. H. Ying Graduate Advisor Department Secretary Leanne Hayes.
The Department
Students desiring detailed
information should contact department office for referral to one of the faculty advisors.
The Department of Civil Engineering offers an option designed to give the students a
broad educational background essential to modern civil engineering practice and research. The program is built around a basic core engineering sciences comm accredited professional engineering programs. It is plian selection of basic engineering-science and design
education to enable the graduate to begin a career in any of the various fields of practice in civil engineering
or to prepare for graduate study in related engineering majors. It makes possible a systematic and integrated foundation in the principles of
structural analysis and design, transportation systems, transportation systems,
environmental systems, geotechnical engineering, water
resources engineering, material resources engineering, materials
construction engineering management, and information technology. Opportunity to explore a
particular area of interest is offered particular area of interest is offer engineering design electives engineering design electives to
courses related to the area of their choice.
The four engineering buildings mechanics and hydraulics, materia of construction, geotechnical engineering, earthquake engineering and structures, engineering
mechanics, surveying, urban an environmental engineering. The Department of Civil Engineering
offers graduate study programs offers graduate study programs science in civil engineering
(M.S.C.E.) and the advance (M.S.C.E.) and the advanced degree of civil engineer (C.E.).
These programs provide opportunities for graduate student to develop as civil engineers capable of competent research
design, and application throu integrated curricula of engineering and science while permitting a concentration in the student's area of interest. Areas of specialization
include: environmental engineering water resources engineering, geotechnical engineering, structur engineering, and transportation engineerin
nal information concerning the programs, special facilities, laboratories and research Engineering Department brochures The department actively participates in MSE programs of interdisciplinary nature with course offerings and
theses/directed studies in theses/directed studies in
management engineering
engineering systems, and structura mechanics
Some graduate laboratory, teaching and research assistantships are available to
qualified graduate students. Applications should be sent to the department chair. Advisory and Development
Council Council

The Department of Civil Engineering is supported by an
Advisory and Development Council consisting of outstanding engineers and executives from industry and
government in Southern California Its function is to form a liaison
between the University and industry and to keep the administration and
faculty informed of modern engineering practices. This that the curricula are kept up-to-date. It also advises on
placement opportunities before an after graduation.

\section*{ABET Accreditation}

The Bachelor of Science in Civil Engineering is accredited by the Accreditation Board for Engineering and Technology (ABET). Students advised to get in touch with an undergraduate advisor as early as possible to know the details of the
ABET requirements in math/sciences, humanit social sciences areas and engineering sciences and design. Bachelor of Science in Civil
Engineering (code 3-4325) A grade of "C" or better must be achieved in all prerequisites for

\section*{Lower Division:}

BIOL 200 or MICR 100; CHEM 111A: C E 205, 206, 225; E E 211 MATH 122, 123, 224; M E 172; Upper Division:
GEOL 370 ; C E \(300,335,345\),
\(346,359,364,406,426,437,459\), 348, \(359,364,406,426,437,459\),
471, 490,\(497 ;\) ECN \(300 ;\) MATH
3704 . 370A: CE E 306 or 407 ; M E 330 ,
371; 373 ; nine units of technica, design electives from: \(C E 427,438\), \(445,455,456,457,466,492,495 ;\)
two laboratories from: C E 336, 356, 464, 491, M E 331, 374; three units of technical electives
\(435,446,458,460\).
Master of Science in Civil Engineering
Prerequisites: (1) A bachelor's degree in an
accredited curriculum in civil engineering; or
(2) A bachelor's degree in engineering, a natural science or
other appropriate discipline with the requirement that essential
undergraduate prerequisites in civi engineering be satisfied;
(3) Graduate students must information concerning procedures and requirements for appropriate
approval of their courses of study approval of their courses of stuay
prior to enrolling in their graduate programs.

\section*{Advancement to Candidacy:}
(1) Removal of all undergraduate deficiencies as determined by the Departmen
(2) Completed at least 12
graduate units at CSULB; minimum
GPA of 3.0 ; currently enrolled;
(3) Passing the Writing Proficiency xamination.

\section*{Requirements for the Master of Science in Clvil
(code 6-4325)}

Completion of a minimum of 30 units beyond the bachelor's degree nd graduate coursework as follow (a) A minimum of 24 units ngineering, probabiity and with 18 units of 500 -/600-level courses in Civil Engineering. Within ese 18 units a student may includ six units of CE 698 or three units of
602: Students are required to omplete successfully either CE 697 r CE 698 .
(b) Six units of electives selected om approved upper-division or graduate
subjects;
(c) Fuffil one of the following
alternatives:
1- Write and present orally a
thesis to be approved by the
thesis committee;
II - Pass a written
comprehensive examination on coursework in the student's program.

\section*{Civil Engineer Degree}

The program leading to the Civil The program leading to the Civir student professionally oriented courses with greater concentration in civil engineering than is required by engineering. This program encourages appropriate advanced studies in other disciplines of the University.

Prerequisites
(1) A master of science degree in institution with a minimum GPA of 3.5; or
(2) A bachelor of science degree in civil engineering from an accredited institution with a minimum
GPA of 30 ; or
(3) A bachelor of science degree in engineering, mathematics, physical sciences or other appropriate disciplines from an GPA of 3.0 with the requirement that essential undergraduate prerequisites in civil engineering will student's civil engineering degree program;
(4) The graduate student must consult with the graduate advisor and Civil Engineering Department concerning departmental procedures and requirements and or appropriate approvals of the
course of study prior to enrolling in courses in the student's graduate program
Exceptional cases not meeting m GPA may be considered by the Department
Graduate Studies Committee.
dvancement to Candidacy for the Clivil Engineer Degree: (1) A Department Graduate Study Committee, consisting of the east two other faculty members, will e responsible for the formulation nd supervision of each individua raduate student's program
(2) The committee shall and requirements as to removal or indergraduate and/or graduate erequisite deficiencies;
(3) Prior to determining
advancement requirements the dvancement requirements the equire the student to take an xamination in the chosen area. Requirements for the Civi ngineer Degree (C.E.)
code 7-4324)
(1) Completion of a minimum of 00 units beyond the bachelor's degree and graduate courses approved by the student's Domartment Graduate
(a) A minimum of 36 units of
engineering courses including a thesis of nine units to
(b) Twenty-four units of 400 -

500 - and 600 -level approved electives.
(2) No more than 30 units
completed before advancement to candidacy may be used in completing the requirements for the CE degree
Certificate in Waste Engineering
and Management (code 1-4050)
Director: Dr. Peter A. Cowan
Professor of Civil Engineering
The 24 -unit Certificate Program in Waste Management is designed to provide the interested student or latest in education and training in the field management of waste as as related resource and energy recovery.
The program is conducted in consulting firms and government agencies and could accomodate an internship of three units th
directed study (CE 697).
The 24 -unit certificate program may be taken (1) by a graduate as a matriculated student, (2) admitted to a CSULB graduate degree program or admitted as an
graduate student.
Regardless of how the program is taken, a grade of "C' or better must be obtained in all courses applied to the certificate, with an overall G.P.A.
of 3.0 . Courses taken on Credit/No Credit or Audit basis will not apply to the certificate. Graduate students taking courses in this program are
reminded that grades received will be included in calculations of the M.S. requirement.

Requirements for the Certificate 1. Completion of an accredited baccalaureate degree in engineering or a related scientific discipline, with 2. Satisfactory completion of 24 units which must include 15 units selected from Civil Engineering 531 543, 565, 602; Public Policy
Administration 590 (Waste
Management and Policy
Regulation); a minimum of nine unit electives) selected from the OWing: Civil Engineering 504, 506
\begin{tabular}{|c|}
\hline \begin{tabular}{l}
49, 560, 561, 562, 563, 564, 566, \\
67, 569; Chemical Engineering 55,585 ; and Mechanical gineering 695. At least one course hould normally be from non-Civil ngineering offerings.
\end{tabular} \\
\hline 3. Passing score in Gw \\
\hline 4. File a program application ard with Admissions and Records, and file for the Certificate at least ne semester prior to completion. \\
\hline ourses (C E) \\
\hline Lower Division \\
\hline 205. Analytical Mechanics I (Statics) (3) F,S \\
\hline Prerequisite: PHYS 151. Prerequisite or corequisite: MATH 123. Application of the mechanics of equilibrium to force systems using anaytical and graphical solutions of problems involving structures and machines. (Lecture-problems 3 hours.) (CAN ENGR 8) \\
\hline 206. Computer Programming and Civil Engineering Applications I (2) F,S \\
\hline Prerequistes: MATH 122, PHYS 151. Introduction to Fortran programming and application of computers to elementary civil
engineering problems. (Lecture-problems 1 engineering problems.
hour, laboratory 3 hours.) \\
\hline 225. Surveying and Mapping (2) \(\mathrm{F}, \mathrm{S}\) \\
\hline Prereauiates: ME 172. Theory and practioe of plane surveying, including the use of instruments, measurements and keeping frien notess of distances, angles, eiverations,
traversing and plane tabling. Pioting of surveying data as related to profling contiours and topography. Study and interperetaion of maps relating to civil engineering. (Lectureproblems 1 , hour, Fieldwork 3 hours.) (CAN
ENGR 10) \\
\hline Upper Division \\
\hline \begin{tabular}{l}
300. Engineering Materials Laboratory I \\
(1) F,S
\end{tabular} \\
\hline Prerequistes: CHEM 111A, PHYS 151. Prerequisite or corequisite: C E 205. Course covers the basic properties of civil engineering construction materials. (Laboratory 3 hours.) \\
\hline 305. Technical Communications (3) F,S \\
\hline  \\
\hline 306. Computer Programming and Clvil Engineering Applications II (2) F,S \\
\hline Prerequisite: CE 206. Application of numerical methods and computer programming to the solution of civil engineering problems. (Lecture-Problems: 1 hour, Laboratory: 3 hrs .) \\
\hline
\end{tabular}
325. Engineering Surveying Mapping and Automat
Applications (2) \(\mathrm{F}, \mathrm{S}\)
Prerequiste: ME 172. Theory and practice of plane surveying inducing the use of
 treversing and plane tabling. Plotting of
survering data as related to profling contours
 applicationg. Study for and interpereation of mape maps
lefating to chil engineering
 introduction to automated engineoting
surveying and mirocomputers indurng
computeraided mapping and applications computer-aided mapping and applications
reeating. LLeoture:Problems: 1 hour, Fiedd Work:
3 houva)
335. Fluid Mechanics (3) F,S
 instructor. Properties of fuids, fuid statics, fluid
dynamics, dynamic similitude, fow of of compressible and incompresesibibe fluw of in closed conduits, uniform fiow in priematic op
channelis. (Leeture-problems 3 hours.) 336. Fluid Mechanics Laboratory (1) F,S

Prerequiste: ENGL 100 or equivalent.
Prerequiste or corecuiste:
 345. Geotechnical Engineering I (3) F

Coreauibites: ME 373 ; GEOL 370 . Soil
mechanics applied to engineering sturctuoi mechanico applied to engineering structures.
Soil explotation identification, clasasifoation,
drainager drainage, stability and
(Lectue -problems 3 hours.) 346. Geotechnical Engineering Laboratory (1) F,S
Preequisite: ENGL 100 or equivalent.
Prerequiste or Corequiste: C E 345. LaboraPrerequisite or Corequiste: C E S44. Labora-
tor inverigation and experiments in the
phenomene of soil mechanics. (Laboratory 3 phenrs)
356. Engineering Materials Laboratory II (1) F
Prerequistes: CE E300; ENGL 100 or equivalent
Advanced studies of the propertites of engineering consatruction materialas. (Laboration hours)
359. Structural Analysis I (3) F,S Preereuibise: ME 373 . Analyois of structures coniugate beam, vitual work, energy methods, appoximate methods, ann
(Lecture-problems 3 hours.)
364. Environmental Engineering (3) F,S

Preerequiste or coreauiate: CE 335 ; \({ }_{\text {Preerequiste: ENGL }} 100\) or equivalent. Study, simulations and design of the envirionnertal made in the field of water quality Introduaution enviromental health engineering. Standard aboratory methods of water and wastewater
370. Analytical Mechanics
(3) F , S

Fierequilites: Phyidics 151; Prerequisite o
 intended for Electrical Engineering majors. No pen to Cril or Mechanical Engineering malor ecture-problems 3 hour
381. Resources, Technology and

Prerequistes: ENGL 100 and a Critical
Thinking course (A3 category of GE) or consen
 of instructor. Occurrence and setting
renewable and non-enewable resourcea Opportuntities for the ueveruld develospentr of
resources, inherent risk, and the eesponsibilities resourcos, inherent risk, and the responsibilitien
of engineers in the decision proces Population, resources, environment, energy,
oecongmich,
technology and
their economics, technology and their
intereelationships. Role of engineering and technology in rescurce of engineervation and developopment, pollution control, recycling, wast
eeduction, imports and exponts reduction, imports and exports. Th
philosophical, sociological, and institution
 390. Engineering and
Clivillzation (3) F,S Prerequistes: ENGL 100 and a Cititica Thinking course (A3 category ond GE or conseen
of instructor. Study of the interaction between human beings, the environment, reseources engineering and science, inclueding the impaai
of engineering on socity Peadinge of engineering on society. Readings and
lectures providing perspective and insight into current provicimg perspective and insight int interaces betwee
engineering and other diciocipineses
 anthropology, art, ecology, economics
philiosophy, peychology, sciences and the socia
sciences. (eecture-Problems sciences. (Leoture-Problems: 3 hours.) 392. Water in Soclety (3) F,S Preerquistes: ENGL 100 and a C Citical Thinking
course (A3 category of GE) or consent of course (A3 category of GE or consent of
instructor. Water as a vital resource, its
utilization and control. Economicu Enite utilization and control. Economomics, Envirion-
mental Engineering, and aesthetics for human mentat Engineering, and aeasthetics or humman
well being in historical and modern contexts Competing social and economive priortites too
use of this vital resource. Identifcation of use of this vita esesurce. Ldentification of
technical alternatives and socio-economic problems that arise during or as
consequence of implementation of water consequence of implementation of water
resources policiees. Evaluation in socio-political
 hourars.) 404. Labo

Prerequisites: ENGL 100 or equivalent, senica standing in chil englineering and consent
instruttor. Study in the techniaues of ocganzing



\section*{405. Special Topics in Civil}

Prerequisite: Senior standing in on Pengerineering: or conseent of instructor. Selected
topics topics from recent advancos in ovi
engineering. Course content will vary trom yeak to year. (Maximum
Lectureproblems 3 hours.

\section*{406. Engineering Economy and 406. Engineering Econo
Administration (3) F,S}

Prerequisite or corequisiste:
consent of
ECON 300 or
Engineering management principlese and Engineornomic analysis: with time value of money, attertax
analysisis for rate of return. (Leeture-problem: \begin{tabular}{l} 
analysis. \\
3 hours.) \\
\hline
\end{tabular}
407. Civil Engineering Systems
(2) S

Prerequiste: MATH 370A and senior standing Mathematioal techniques associated with and their applications to the planning and
 hours.)
8. Special Problems (1-3) F S Prerequisite: Senior standing in civil engineering. Assigned topics in technical ame.
10./510. Concrete Materials and onstruction Engineering (3) F Prerequisitit: CE 300 or consent of instructo Axed deesign using computers. Moder. mixed design using computers, Modern
applications of concretele construction including appications of concretele construction includin
transportation structure
uildings, rehabilitation of infrastuctures. Poryme
concretes. Quality control, durability and sconomics. Graduate students will be required 10 do additional readings from journals a research term papeer to doal with probioms of current interest on concrete materials and
advanced concrete construction engineering nethods. (lecture-problems: 2 hour boratory: 3 hours)

\section*{420. Advanced Surveying an} (3) F,S

Treequisite: CE 225. Advanced techniques in sunvering and photogrammetry applied to cinil angineeting planning and construction promputater ase oidemole sesneying and syotem (lecture-problems: 2 hours, Laboratory:
hours.)

\section*{26. \(\mathrm{F}, \mathrm{S}\)}

Preerequisites: CE 345 , CE 406 and Senion landing, or consent of the instructor. Theon Design and operation of various modes
ransporatation. (Lecture-Problems: 3 hours). 427. Highway Design (3) S Prerequisist: CE C 345. Design problems in
highway engineeting.
(3) F

Prerequiste: \(C E 426\) or consent of instructor.
Traffic Engineecing as rolated Traffic Engineering as rielated to so sutucion
planning. operation and administaion plandingte. opeperation aill be required to do extra work, including assigned readings and a term
paper in order to understand the planning and paper in order to undorstand the plamning and
design of complex highavy projects invowing the eralationship of tratio data and interpretation
to dosion and applicatons. (eectureprolems for deeign
3 hours)
433. Drainage Engineering (3) \(\mathbf{s}\) Prerequibites: Senior standing of consent of instructor. Drainage principipes and practice applicable to construction technology
Estimation of fow, municipal storm drainage highway drainage, legal aspects of drainage Not open to Civil Engin
(Lecture-pobolem: 3 hours).
435. Hydrology and Water

Resources Engineering (3)
Prerequisite: CE 335. Fundamental surface
and ground water hydrology conceopts and
and ground water hydrology concopits and
quantiative methods. Selected topics and quantitative methods. Solected topics and development and management of watei
resource surface syytems. Lecture-probbems 3 hours.)
437. Engineering Hydraulics
(3) F,S

Prerequistes: C E 335 , MATH 370 A. Theory and analysis of stacdy unifom and
non-unitomm fow in open conduutat. Energy and
momentum momentum printiples or ortitial
computations and and
and
andiations, design channels, computations of gracually varie spatially varied and rapial
(eecture-problems 3 hours.)

\section*{438. Hydraulic Engineering}

\section*{438. Hydraulic
Design I (3) S}

Preerequiste: CE 335 . Application of hydraulic principles to the design of dams, water courses, water systems and their reletated
structures and devices. (Lecture. Problems:
445. Geotechnical Engineering II (3) F,S

Prerequibeses: CE 345, 346, ar consent of instructor. Methods of deeisign and construction tiliking theory of soil mechanice. 446./542. Geotechnical Projects (3) \(F\)

Preveruuiste: CE 345 . Design and problem sooving oriented geotechnical projects using
mechanics theory and experimenta methods according to the current state-ot.the art practice. Emphasis is placed on the fields of slope stabiury, pila foundation will be required to do adostional Iaeadings trom
and wite a research term paper to deal with current topics in geotechnical engineering.
noluding soil remediation for waste treatment Including soil remeviciation for wastat treatiment loundations and earthquake engineering.
Lectur--problems:
2 hours, laborator: hours).

\section*{(3) F,S}

Prerequisise: C E 458 , Deriled desion o components with typiatal cod design on
specifications. (Lecture-problems 3 hours.) 456./516. Timber Design (3) \(F\) Prerequisite: CE 359 . Corequibite: CE 458 .
Design of stressed skin panels. supporting Design of stressed skin panels, supporting
members,
trames and
their
connections. Applications to timber structurea and conncete
tormwork. Graduate students will be required to ormwork. Graduate studenis will oepuired to do required readings and term paper linking
matarial and structural behaviop to design
codes applation codes, applications. (Lee)
457./517. Reinf
Design (3) \(F\)

Prerequiste: CE 359. Corequiste: CE 458 . Theory, deelign and application of reintorced
masony (brick and block) tio masony (brick and block) in compliance with
the Uniform Buiding Code. Earthquake provisions. Construction and speaifications Design of high rise buildings, industrial
buildings, etataining walls. Advancod studente will be required to do a design prodect buing a
 research teem paper limking behavior ol
reiniorced masonny systems to design codes
 and design applications for wind and geiemic
effectis. (Lecture-problems: 2 hours, laboratory
3 hours).
458. Structural Analysis
458. Structural Analysis
(3) F S
(3) F,

Prerequisist: C E 359 . Solution of indeterminate truss and trame structures using moment
diatribution and slope deffection methods. Introduction to matrix methods. Computer solutions. Energy theorems and virta
principles. (Lecture-problems 3 houra)
459. Reinforced Concrete Design (3) F,S

Preerquiste: C E 300 and CE . 35 . Theory and
design of structural elements of reinforced design of structural elements of reinforcean
concrete, anaycis by working stress and
 460. Environmental System Planning (3) F
Prereauiate: CE 364 or consent of instructor.
Planning and evaluation of systems tor Planning and evaluation of systems for
management of water supolv. wastewater
 hezardous, waste, consididering system
performance, legiblation and regulations performance, legislation and regulation
envirionmental impacts. and sociouconomic
factors.
factors. Solected.
(Lecture-problems 3 hours.)

507. Risk Assessment and Decision Making in Engineering (3) F,S

Prerequisites: Graduate standing or consent of
instructor. The presentation of research and cose studiese in risk asesessment and decision making processes in engineering management
systems. Topics
include
Loss Prevention systems. Topica include Lose Pervenion
Methods, Hazards Engineering and Riak (Leoture Problems: 3 hours) Methods in Engineering Applications (3) F,S
Prerequistes: Graduate standing or consent of instructor. Civil Engineering applications of
nondeterministio models and docision theon
 509. Computational Methods 509. Computational Metho
Civil Engineering (3) F,S Prereauistes: Graduate standing or consent of
instructor. Numerical analysis and computer instructor. Numericiol analysis and computer
methods applied to various branches induding methocs applied to varius branches, including
special
problem-oriented
languages
 Checture-p
hours)
510./410. Concrete Materials and Construction Engineering (3) F Prerequisites: CE 300 or consent of instructor
 applications of concrete compstrutition including builings, transportation, structures,
rehabilitation of infrastuctures. Problems and case studies in concrete construction including iormwork design. Polymer concretees. Qualiny
durabiliy and
economica control, durability and economics
(Leeture-problems 2 hours, Laboratory 3 hours) 511. Operations Research echniques in Engineering (3) \(\mathrm{F}, \mathrm{S}\)

Preeravisit: C E 407 or equivalent or consent instructor. An anaylytical and numerical unconstrained operations revearch probleme
Calculus of variations and optimal contro Calculus of variations and otimal control engineering and syst
512./492. Reinforced Concrete 512./492. Reinf
Design II (3) \(F\)

Prerequistite or corequisite: CE 458, 459. Complete integrated design of struutural
systems in concrete. Code provisions systems in concrete. code provilions
Graduate students are equired to do assined readings and research term paper which io
linked to load and time dependent behavior ol columns, two-way and flat slabs and durability
 (Lectur)
hours).
516./456. Timber Design (3) \(F\) Preerequisite: CE 3 359. Corerauiste: CE 458 .
Deosign of stressed skin panels, supporting members, frames and their connections. Applications to timber structures and concrete
formwork. Graduate students will be required to do required readings and term papeer linking material and structural behavior to design
coces, applications. (Leeture-problems: 22 coldes, applications. (Lect
517./457. Reinforced Masonry
Design (3) \(F\) Design (3) \(F\)
Prerequiste: CE 359. Corequisiste: CE 458.
Theory, design and application of reinforced

 provisions. Construction and specilications
Doesign of high tioe builidinge, industrial
buildings, retaining walls. Advanced students builidings, retaining wals, Advanced students
will be required to do a design project using a will be required to do a design proiject using a
response spectrum of a two-stoy building: resposiged readings from lournais and a
areseach term paper tinking behavio of
reinferced masonny systems to design codes research term paper tinking behavior of
reintorced masosny ysytems to design ocodes
and design applications for wind and seimic and design appplications for wind and seismic
effect. LLectur- problems: 2 hours, laboratory: 3 effectros).
520. Airport and Harbor

Engineering (3) F
Prerequisite: C E 426 or consent of instructo
Engineering planning and Engineeting planning and design of urban
arports and harbors. (Lectureprobiems 3 arports.
522. Transportation Planning

\section*{(3) S}

Prerequisiste: C E 426 or consent of instructor.
Planning of fixed facilities for various modes of transportation in urban areaious Engineesing administratain and integration of transportation
systems. (Leeturo-probems 3 hours) 526. Pavement Engineering 526. Pa
(3) S Corequisite: C E 427 or consent of instructor.
Aggregate, binder syytem. Theory and deeign Aggregate, binder systems. Theory and deeign
of pavement structures. (Leeture-problems 3
529./429. Traffic Engineering
(3) F

Prerequisite: CE 426 ar consent of instructor.
Traficie Engineering as related to studieg Traffic Engineening as related to studies,
planning. Poetation and administration
Graduate
 work, including assinges readings and a teer
papee in order to understand the planning and
 the eleationship of traticic data and intiepretation
for deseign and applicatons. (Lecture-problem

\section*{\({ }_{3}\) hours)}
530. Mathematical Models in

Hydraulic Engineering (3) F
Prerequiste: CE E 437 or consent of instructor.
Numenical techniques for sonving hydrauio problems in water supply, waste water dispops and stom drainage systems. Predicition
important parameers by mitematica important parameters by mathematical
modeling on problems encountered in artificial
channels channels, rvers, ostuaries and mari

\section*{(3) S}

Preerequisites: C E 335 , 345 or consont of
instructor and application of of groundwater flow and seepage through earth 532. Sediment Transportation (3) F

Prerequisite: CE 437. Phenomena of sediment
tranoportaion relatad to to treame and maine
environments. (Leecture:problems 3 hours.) 534. Hydraulic Models (3) S Prerequilite: CE 336,437 or consent of

 535. Advanced Hydrology

Prerequistes: Graduate standing or consent of
 routing, trequency analyysis and fisk a nalavsis.
simulation of design flows, flocd forecasting. Simulation of design flows, filood forecaasting,
flood plaian analysis and hydrologoic design.
Mathematical models, numerical methods in analysiis
hours). 536. Water Resources Project \(\underset{\text { (3) F,S }}{\text { Planning }}\)
Prerequisites: Graduate standing or consent of instructor. Presentation of research and case
stucies in the planning and management of water reso
538. Hydraulic Engineering Design II (3) F Prerequisites: C E 437,438 or consent of
instructor. Design of water supply networks instructor. Design of water supply networks
hydraulic transtions, controls and structures. Hydraulic power conversion. Piver engineering Water resourcess systems. (Lecture-problems
hours.)
539. Coastal Engineering (3) S Prerequuiste: consent of instructor. Wave
mechanics, tides, surge, wave refraction, diftraction and reflection, application to dosign
of coastal and off shore stuctures and to the study of beach erosion 540. Mathematical Modeling in Geotechnical Engineering (3) F,S

Prerequiates: Graduate standing or consent of
instructer instructor. Mathematical modeling techniques
used in geotechnical engineering. Apolication of peven computer pprograms
Lecture-problems: 2 hours, laboratory: 3 hours).
542./446. Geotechnical Projects
(3) \(F\) Prerequisite: CE 345 . Design and problem solving ciented gettechnical projects using
poil mechanics theory and experimental
methods nethod ard acoraling to the the curren
stateot-the-art practice. Emphasis is placed on he fields of slope stability, pile foundation will be requivired to do do additional readdings from Journals, research reports and advanced texta, current topices in geotechnical engineering noluding soici remediation tor wasto treatmen ald landtill and doill dynnamics problems in
ioundations and earthquake engineering Lecture)-problems: 22 hours, laboratory: hours).
543. Waste Management and
Landfill Engineering (3) F,S rerequistes: Graduate standing or consent of
 landifll engineering for waste management and subsurface flow problems. Presentation of aspects of waste management and landifil 544. Geotechnical Project Planning and Management (3) \(\mathrm{F}, \mathrm{S}\)
ierequuistes: Graduate standing or consent of Itructor. The presentation of research an and managesement. (Lecture-probilems: 3 hours). 545. Rock Mechanics in Engineering Practice (3) \(\mathbf{F}\)
Preequisites: CE 345 , 346 , or consent Prerequisistes: CE 345 , 346 , or consent of
instructor. Principles of fock mechanics with omphasis on engineering practicess fo roblems of siopes, foundations and tunnels
Same course as GEOL 545. (Lecture-problems Same cours)
546. Theory and Design of
Foundation Structures (3) F Preerequisites: CE 345 or consent of instructo Foundation, extorations, stress and
defomation relationstipa and design of variuus
lotinge botings, piles, piers and caisons. Analysis of archinery foundations and foundation ewatering. (Leecture problems 3 hours) 47. Soil Dynamics (3) S

Prereauistes: CE 345 or consent of instructol
Theories and field behaviors of dynamically Laded foundation systems and soil response
 problems 3 hours)
548. Geotechnical Engineering III Preea
perequiviste: C E 345 or consent of instructor
 the applications and limitations in angineering. (Lecture-problems 3 hours.)
549. Advanced Soil Mechanics echniques (3) or consent of instructor
 eectur-problems 2 hours, Laboratory 3 550. Behavior and Design of
Concrete Structures (3) F Prerequisist: C E 459. Beharivo of plain, and partially prestressed concravete members and
struatures, theories of composite action,
 appliations too acvancos delesion of of oncret
tructures. (Lecture-problems 3 hours) uctures. (Lecture-problems 3 hours.). (3) concrequiste: mate 459. Pinciniples of prostrossed structural deaign, revere of existing
specifications. Lectura-problems 3 hours.) 552. Theory of Plates and Shells

Preerequisite: Completion of \(C E\) Graduat MATH Requirementit. Review of theoryato elasticity: tormulation of general equation of
bending of thin elastio plates; methods otaining exact and approximate solutione
 . 553. Behavior and Design of
Steel Structures (3) S Prerequistit: C E E 45. Study of torsion uneymentical bending, statirity. Plastic
design, code provisions and commentary
Design of complete structural systems in steel. (Lecture-problems 3 hours.)
554. Analysis and Design with
Composite Materials (3) F,S Prerequistes: Graduate standing or consent of
instructor. Mechanics of composite materials instructor. Mechanics of composite material angineering and construction. Lab experiments canned computer
555. Seismic Design II (3) Prerequisite: C E 495 or consent of instructor. Characteristice of earthquakees and seismumicity response spectra, modal methods of analysie esponse of structurues to earthquake motione ew development in cocdes, computer 556. Constructed Facilities Planning and Management 3) \(\mathrm{F}, \mathrm{S}\)

Ierequistes: Graduate standing or consent of astructor. Public Works Organization for policic
and operations planning, bucgeting and management of new and rehabilitation an existing facitites. Civil Engineering construction infrastructure Case Studies in the planning implementutation and madied management a .ecture-problems: 3 hours).
557. Advanced Structural
Analysis
(3)

Analysis (3) S
Prerequisite: CE 458 or consent of instructor.
Vitual Virtual loroes and dilaplaceements, strain energy
and complementary energy. Fore a and
displacement matrix displacement matrix methods. Computer
applications to planar and space frames applications to planar and space frames,
truses, floor beams and shear wall systems. (Lectur-aproblems 3 hours.)
558. Dynamics of Structures

Prerequisio
Prerequiste: CE 458 or consent of instructor.
Response of structures and structura Response of structures and structural
components having one or more degrees of theodom. Damping and inereastio action: earthuake and nuctoar blaats, dynamic
resictance of structura
structures, elastionents and inelastion and structures, elastic and inelastic response
structures. (Lecture-problems 3 hours) 559. Elastic-Plastic Instability of Structures (3) F,S
Prerequivistes: CE 458 or consent of instructor.
Instability of structural elements of static and Instability of structural elements of static and
dynamic loadings. Lateral and torsiona bynamic loadings. Lateral and torsional
buckingof bors, trames, plates and shelis.
Computer applications. (Lectura-problems hours) 560. Environmental
Laboratory II (3) F Prerequiste: CE 364 or consent of instructor
Sensing, sampling and laboratory analysis of
 waste and ait polution wastewater.
sampes
(Lecture-problems 2 hours, Laboratory 3 hours) 561. Waste Minimization and Resources Recovery (3) S Prereauisite: CE 364 , or consent of instructor.
Manacement
 regiuions, resource receovery systems, recycling hazardous wastes and waster erucuction as
rêated to municipal solid waste and hazardous waste reduction strategies. (Leecture-problems 3 hours)
562. Water and Wastewat
Treatment Design I (3) F

Prerequuiste: \(C\) E 364,464 or consent of
instructor. Design of physical and chemical processes for water and paysicalewater trueatiment
with with emphasis on water treatment planto.
(Lecture-problems 3 hours.) 563. Water and Wastewat Treatment Design II (3) S

 LLecture-problems 3 hours.)
564. Environmental
Engineering (3) \(F\)

Prerequistes: CE 364
Piereacuistes: CE 364 or consent of instructor
Heaeth and safety aspects of environmenta quality and related engineering systems.
Reguatory aspects. Projects and case studies. (Leecture- problems 3 hours)
565. Environmental Wast Engineering (3) \(\mathbf{S}\)
Prerequistes: CE 364 or consent of instructor Generation, treatment, resource recovery and
dispoosi of induustrial wastes, ollid wastes and hazardous materials. (Lecture-problems 566. U
566. Unit Operations in (3) \(F, S\)

Prereaquitres: CE 364 or consent of inatructor
Cvil Cund engengineering of chempicalications, of the tions, kinetics of biochemical systems, gas transter operations liquid/dosid separations, solubility equilibria,
adoortion, ion exchange and membrane a. (Lecture- problems 3 hours) 567. Liquid and Solid Waste Project Planning and
Management ( 3 )
Mrerequisitem: CE 364 or consent of instructor Prerequiaitite: CE 364 or consent of instructor
The presentation of feeseach and case tucieo
of liquid and solid waste propect planning and of liquid and solid waste propect planning an 569./469. Hazardous and Toxic Waste Engineering Management (3) \(\mathrm{F}, \mathrm{S}\)

Prevequiste: Consent of instructor. Engineering
analysis of hazardous and toxio wiste analassis of hazardous and toxic waste
problems of contemporayy interest. Current trochrical specifications at federal, state and local level. Engineering planning, desion and
management
Dotiderations.
Detailed management, considerations. Detaile
engineering. chemical biological and tikk-cosl effiectiveness and effect on public heath.
Current literature. Case studies. Temm proiect to Currant iterataru. Case sturifes. graduate
procet.) (Lecture-Problems:
3 houra.)
570. Engineering Management
Princlples and Practices (3) F,S
 Prerequisites: CE 406 , graauate standing of
consent of instructor. Tranastion of engineers into management. Anayyis of technical manager's functions at lower and middale eveve
as
support to to
corporate managemeni. as suppor to corporate manacenen and applications to pivate and public secto
arganizations. Case studies of practices organizations. Case studies of practices
different
tochical (Lecture-problems: 2 hours, laboratory: ours).
1. Construction Planning and Control (3) F,S
Prereruuistes: Graduate standing or consent of aloation for a complex construction proiecd allocation for a complex construction provect avvanced computer expert systems an optimization techniques. for construction
planning and cost control. (Leectura.Problems: phaurs).

\section*{572. Modeling of Engineering
Project Management Principles Project Management
and Practices (3) F,S}

Prerequistes: Graduate standing oc consent of iresequistres: Gradauate standing of consent of
 docisions. Application of proven
programe
computern abocatory: 3 hours) 573. Engineering Specifications, Prerequibites: Graduate standing or consent of Prerequistese: Graduate standing or consent of
instructor. Application of law of contracts to construction contracts. Legal matiers of
concuern to engineers. (Lecture-problems: 3 concerer
hours).
574. Construction Engineering Equipment and Processe (3) \(\mathrm{F}, \mathrm{S}\) Prerequisites: Graduate standing or consent of instructor. Topicics covered include equipplent
and methods in constrution engineering management. The emphasis on advancod
computer technology in robotics and compuruer technology in robotics and
aatomation in oonstruction methods and
processes is also proceseses is also presented. (lecture
problems: 3 hours). problems: 3 houra.
575. Computers and Info Systems in Engineering
Management (3) F,S
Prerequistes: Graduate standing or consent of instructor. Applications of compotursent and
information technologies in construction intiomation technologies in construction
engineening management and other areas of
and engineoring management as term projectis.
Lectures and work topics include application of Lectures and work topish includu application of artificial intellifencoe, computer aided deleisin
and dratiting and automation in construction planning, sccheduling., quality control, satery

576. Construction Organiza
and Management (3) F,S Prerequisites: Graduate standing or consent of instructor. An intrroduction to construction organization, control concopts and labol
emphasking the business aspects consturuction engineering manasemenet. TTopice
inncluce legal framework, finance in construction include legal tramework, finance in construction
management, labor, accounting and other decision making in the construction business (Lecture-problems: 3 hours) (3) S
-
Prerequistes: Graduate standing or consent of
instructor. The construction industry, its deveriopmentst, componentst, orgarivation and
importance, construction methods and importance, construction methots and
practices, applications and limitations; factort

 and estimating cousts. Field tips
78. Engineering Management Network
(3) \(\mathrm{F}, \mathrm{S}\)
Preerequisite: C E 473 or equivalent or consent Iterequitie: CE E47s or equivaent or consent
of instruto. Method in network analysis
maximal fow, shortest path, scheduling, critical maximal fiow, shortest path, scheduling, critical
paath methods, PERT diagramm, applications to proioet management and engineering, yystems nalyois. (Lecture-problems 3 hours) 580. Systems Planning and
Design: Methodology and Applications (3) F,S
Prerequisites: Graduate standing or oonsent of Instructor. The planning and design approach
 Methods for making the approach operational.
Case histories and proiects. (Lecture-problems: 3 hours).
581. Methodology of Systems Engineering (3) F,S Prerequiuites: CE 406,407 , or consent of
instructor. Systems methodiogy as applied to istructor. Systems me hociogy as applied to
complex prociects and consideration of defernse
 civil, mechanical, elecetrical and aerospace
 analysis. design constraints and limitations,
program controls, trade-ffs and alcoated prostam contriols, trade-ifs and allocated and lopoistics support. valuve engineering in
production and management actions to reduce cotts, interface controls and risk management and s) 582. Engineering Management of Productivity and Quality (3)
\(\mathrm{F}, \mathrm{S}\)
Prerequistes: CE 406,508 or consent of
instructor. Systems aporoaches to quality and instructor. Systems approaches to quality and
productivity improvement engineering Strategio productitity improvemente engineering. Strategic
managemen of enginemin operation for
compettiteneneses. Statititical ouality control competitiveness. Statititical Cualily quality Eontrol
 Management Systems, Deming's Woy. Juran's concopts and engineeting projects. Guidelines
for ownes, diesigness, contractors and
ond
 productitity in the engine
(Lectura Probbems 3 hours)
585./485. Safety Systems Engineering and Management: Occupational Health and
Environmental Safety (3) F,S Prerequisist: Consert of instructor. OSHACt and other Environmental Actstrinuabilities osthd safory documents. Hazards and their control ccoupational. environmental-naturual and ecchnological, promoting safte practices planning for emergencies, heot and
temperatue, pressure hazards, explosions and



\section*{591. Structural Materials and Laboratory (3) S}

Prerequisite: Consent of instructor. Destructive
and nond
and and non-destructive techniques of materials
and structural behavio will be considered
Achen Acoustio emissions, electromagnetio
techniques, photeolasticity and several other

 meterials. Ceramics, reinforced plasticas
ferorocment and other materials wist be wider considered with respect to design of both chi and non-civil type structures. (Lectur
Probolems: 2 hours, Laboratory: 3 hours.)
602. Seminar in Clivil Engineering
(3) F,S

Prerequistes: Graduate standing or consent of
instruct. Presentation of research in spepial
feilds of


 and/or CE EO3 may be counted for the master's
degree. (Leeture-problems 3 hours)
(3) F,S
(3) \(\mathrm{F}, \mathrm{s}\)

Prerequiaites: Graduate standing and consent
of instructor. Presentation of research, with laboratory work, in special fields: Structurea,
Transporatation,
Environmental,
Urban

and Engineeting Management. May be
repeated once for credit. No more than six units
of CE 602 and/or CE 603 may be counted for
the Master's Dogree. (Lecture-problems: 2 the Master's Degree. (LI
hours, laboratory: 3 hours).
696. Research Methods (1) F,S

Prerequisiste: Candidacy or consent of
instructor.
Bibiliographical and library instrutor. Bibliograratical and libray
tetochnitures and resurcas. Preporation tand
presentation of theeses and directed studies techniques and
peesentation of
technical paperas.
697. Directed Studies (1-3) F,S

Prerequiste: Graduate standing. Corequiste:
CE 6 or ow
witten consent of directed studies addisor MSCE and MSE digerrec candidatases in
Cvil Engineering and Inter Cinil Engineering and Interdisciplinary Areas
need to have either CE 697 or CE 698 as their program requirement. Theoretical and experimental problems in covil engineering
recuiring intensive analysis 698. Thesis (2-6) F,S

Prerequisite: Admission to candidacy for
degreo of mater degrree of master of scienco in candingoacy erging.
Creequiste: C E 696 or witten consent faculty advisor. Planning. wittepaparation and completion of a thesis and/or propect in the fifld
of civil engineering. May be repeated to a total 699. Thesis (3-9) F,S

Prevequisite: Admission to candidacy for
degree of Civil Engineer. Corequiste: CE 696
 field of civil engineering practice. May be

\section*{Computer Engineering and Computer Science}

Option in Computer Science
(3-4011)
This option is software oriented and is designed to prepare graduates for careers by providing a balance careers by providing a balance
between the theoretical and practical aspects of computer science and the mathematical basis for software and hardware development. Requirements for ther
Computer Science
Lower Division: CECS 174, 201,
\(228,271,274\) MATH 122, 123, 224, 228, 271, 274; MATH 122, 123, 224,
247; PHYS 151, 152; two approved 247; PHYS 151, 152; two approved
courses in science and/or with strong emphasis in quantil
ENGL 101 or 317 .
Upper Division: CECS 321, 325,
\(326,328,424,440,443,444:\) ENGR 326, \(328,424,440,443,444 ;\) ENGR
350; MATH 380 ; plus four courses from the Computer Science approve list of electives to total at least 135 units.
The high school student planning to enter either option is advised to pursue a strong program in science some of the above areas may result in an extension of the time required to an extension of the time re
Master of Sclence in Computer Science
The Master of Science in Computer
Science is offered by the Department of Computer Engineering and Computer Science, College of
Engineering. Two ootions are offered: 1. Ottion TWe Cater Engineering (code 6-4010) 2. Option in Computer Scien
(code 6-4011)

The Option in Computer
Engineering offers advanced study in the theory, analysis, design and applications of both computer hardware and software. The Option in
Computer Science offers advanced Computer Science offers advanced
study in modeling software systems, operating systems, compile construction
algorithms.

Prerequisite
Option in Computer Engineering (6-4010)
elor's degree in computer appropriate discipline from an accreditied college or university, with a
minimum grade point average (GPA) inimum grade point average (GPA)
of 2.7 in the last 60 semester units attempted
2. Credit in the following courses or heir equivalents: CECS 228, 274, or 444; EE 310 .
3. Students must consult with the rogram graduate advisor prior to enrolling in
Option in Computer Science 6-4011)
1. A bachelor's degree in computer science, engineering, or othe accredited college or university, with a minimum grade point average (GPA) 2.7 in the last 60 semester units \({ }^{2}\) ate . Creait in the following courses or 274, 321, 325, 326, 328, 424, 440,
3. Students must consult with the program graduate advisor prior to enlling in any course for the program. Avancement to Candidac Students applying for advancemen
candidacy must:
dergraduate deficiciencies w
undergraduate deficien
b. have attained an overall grade
. havage (GPA) of 3.0 ;
c. have completed at least 12 units
applicable to
d. have passed the University
Writing Proficiency Examination e. and have their program of e. and have their program
studies approved by the CEC
department graduate advisor. Requirements for the Option in omputer Engineering (6-4010) Students must complete a minimum
of 30 graduate and approved pper-division course units including e following:
a. at least 18 units of CECS
courses;
courses:
b. at least 18 units at the graduate
c. CECS \(530,531,546\) and 572 .

All students must complete either:
a. a written comprehensive b. a thesis with oral defense which requires a minimum of 4 units of CECS 698.
Requirements for the Option in Stuter Science (6-4011) of 30 graduate and approved upper division course units including the
ollowing:
a. at least 18 units of CECS b. at least 18 units at the graduate level of instruction;
c. CECS \(526,528,529\) and 543. All students must complete either a. a written co
examination, or
b. a thesis with oral defense which equires a minimum of 4 units of

\section*{Courses (CECS)}

Lower Division
174. Programming and Problem rereaviste: MATH
 science and the fandamental teochniqueses to solving problems with computer programs.
structured
problem
solving,
systematic programming methododosies, programming styic introduction to a block.structured, high- level humerical and non-numerical probiems. (Leectur 201. Digital Logic De
201. Digital Logic Design

Prerequiste:
Preeracuiste: MATH 122 . Basic topics in
 228. Discrete Structures with Computer Sclence Applications I (3) \(\mathrm{F}, \mathrm{S}\)

Preerequisites: CECS 174 and MATH 122. The
specication, development and anariol
 nd mathematioal structures used in computier Programming proiocts to to exempilinaty these oncepts. (L.ecture 2 hours, labocratiory/problem (3) F,S,SS (3) F,S,SS progammining using intoduction to computer programming with applications to scientific and ongineering , problems
270. Introduction to FORTRAN rogramming (3) \(\mathrm{F}, \mathrm{S}\) Preerequiste: A grace of 'CC' or beter in MATM
22 Appication of FORTAAN 77 to solve
pen to students with credili in MATH (Lecture 2 hour
(CAN CSCI4)
271. Introduction to Numerical
Methods (3) F,S

Prevequivites: CECS 174 and MATH 123. An
introcuction to numerical methods and the Introcuction to numerical methods and the
FORTTAN 77 prugraming lanouage. Topicios
induct include round-offereror in lingital computation
terative method for finding ratee of corviergenco, solution of systems equations, methods for dififerentiation and integration, difiference equations and ettucturai
Fortion 77 programming. (Lecture 2 hours laboratory/ problem session 3 houra.)

\section*{(3) \(\mathrm{F}, \mathrm{S}\)}

Prerequibite: A previous courre in computing,
such as CECS 174 or MIS 240. Fundamentalis of such as CECS 174 o MIS 240 . Fundamentals
the computer programming language COBO
Data division, input and Dapos and dieks. Compututer asosignnents using
lacien and
COBOL COBOL. (Lecture 3 hours.)
274. Programming and Problem
Solving II (4) FS Prerequiste: CECS 174.
Preerguiste: CECS 174. Disciplined methods of
design, ooding and testing. Data abstraction
 structures (linked lists, stacks, queues and treee)
Recursion. Sorting and searching. (Lecture hours, abboratory 3 hours.).
275. Programming in \(C\) (3) \(F, S\) Prerequista: A previous course in programming
or consent of instuctor. Fundamental of the programming languages and ite application in problem soding. Topics induded are structured
 the \(C\) libitray. Computer propects in C . (L
problema 2 hours, laboratory 3 hours.). Upper Division
300. Problem Solving Using Spread Sheets and Databases (3)

Prerequisises: One computer programming purpose problem solving applied to data storaces and retineval Topics include problem soling stryie and structure, a survey of storage and
trieval problems, logic and data
 \({ }_{\text {(3) }}\) 301. D,S Sigital Logic Design II

 Lecture 2 hours, laboratory 3 hours) 321. Introduction to F
Processing (4) F,S
 corganization and data management syyteme Computer proigets in the design and
implementation of such systems. (Leocture
hours, alocoratoy 3 hours)
25. Computer Organization and Assembly Language Programming
Fereacuistes: CECS 201 and 274 . Basic
ompaniter
representation of
 programming, meacros and macro procoessing.
 assemblers, linkage editiors and loadors.
Programing asign ind asembly
language. (Lecture 3 hours, laboratory 3 hours.). 326. Operating Systems (4) F,S Prerequisite: CECS 325 or CECS 346 . The
structure and functions of operating systems with n introduction to the C programming language opics indude interrupt handiling, processese and
 shaing and protection, file systems. Project
implementation in C. (lecture 3 hours, laboratory mplemene.
hours.)
328. Discrete Structures with Computer Science Applications II rereauisitios: CECS 28 and CECS 274. A
 Abstract data types, alocithms, complexity. oncepts. (Lecture 2 hours, labor all uoblem seesion 3 houra)
42. Computer Methods II (3) F,S Prerequistes: CECS 242 and either MATH 3 8 AA language and continuation of applications of computers to the solution of engineering and
cientific problems. (Lecture 2 hours, laboratorn scientific
3 hours.
46. Microprocessor Applications (3) \(\mathrm{F}, \mathrm{S}\)

Prerequistes: CECS 174 (or hs equivalent) and
CECS 20. Study of avalable microorcocesores and mircocomputer telements for apppications of

 .ecture-problems 2 hours, laboratory 3 houra 347. Microproc

Prerequisites: CECS 301 and 346 and either EE
330 o 33 . Harcware design and construction of 330 o 331 . Hardware design and construction o microprocossor system. Memory system
design including dymamic RAM and CACHE design including dynamic RAM and CACHE
memories \(A\) CD applicaion.. A matetias thee
may be charged. (Lecture 2 hours, taboratory
371. Numerical Methods (3) F, Prerequisites: CECS 174 or CECS 242; MATH umerical methods emphasizing numericel opics indude numerical methods tor approximating deffinite integrals, approximating
the dervivative of a function at a point, and solving differertial equations. FORTTAN programming rojects using theee methods will be assignea.
loe open to students with creoif in CECS 34 . Not open to students with cleod
*405. Special Topics in Computer
Science (3) \(\mathrm{F}, \mathrm{S}\) Prerequisite: Senior standing in a computer acvancos in computer sclencoe and technolog, course content will vary from year to year an
course may be repeated once for credit with the onsent of the dopartment. (Lecture-problems 3 nours.) 406. Special Topics in Computer cience (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) reerequisites: Sonior, standing in a computer
science area in computer science and technology course may be repoeated once for crodit with the onsent of the depatrment. Specifict topio will be may be charged. (Lecture-problems 2 hours aboratoy sh hours). Repeatable to a maximum o *419. Theory of Computation (3) Prerequisite: CECS 328 . Finte automata and egoliar expresions. Pushdown automata and
context-tree languages. Turing machines ar computability. Computation
(Lecture.
*420. Artificial Intelligence
(3) \(F\),

Prerequistes: CECS 228 and CECS 274 introduction to the pincipleses and procramming
methots of atricial inteligence. Topocics include symbol manipulation, knowicedge repenesedtation, logic
searching. expert systems and prorgamming. Proiect implementation in LISP
Prolag. (Lectur 2 hours, laborotory 3 hours) *421. Database Management (3) F,S
Preerequisites: CECS 228 and 321. Introduction to datatase concepts, data models, data
defintionmanipulation languages. and relational
databases design. (Lecture 2 hours, laboratory database design. (Lecture 2 hours, laboratory
422 CAD and Semicustom IC 222. CAD and

Preerequisites: CECS 301 and 346 . CAD desion methodologies as they apply to board level and semicustom integratad circurit design. Topis
 ve charged laboratory 3 hours.)
*424. Organization o programming Languages (4) F,S \({ }^{\text {Prerecuisises. }}\) SCC. 346 . Comparison of programmin languages (Pascal. Ada, PL1, FORTPAN, eto.) their design and structure regarding teatures
such as data types, control structures, runtime considerations, elc. Computer propiectic hours, labooratory 3 hours.)
\({ }^{* 426 .}\) Topics in Operatin Systems (3) S
system analyols and design. Tonced operatirng interest. proiect implementation. (Leeture

\section*{*428. Analysis of Algorithm}
(3) \(\mathrm{F}, \mathrm{S}\).

Prerequilite: CECS 328 . Appliations of
standard combinatorial techniques programming problem. R. Rignorous analysis of the programming problems. Rificorous analysis ore
correctress and complexity of algorithm. Tre and graph algorithms are emphasized. Topie
include depth-first search algorithm with relate applications, soting. union find problem
divide and
and diviceand-conquer
weighted-edge problem.
technique
(Lecture 2 hours weighted-edge problem.
laboratory/problem session 3 hours.).
440. Computer Architecture
(3) \(\mathrm{F}, \mathrm{S}\)

Preerequistes: CECS 201 and dither CECS 325 o CECS 346. Review of logic design. Registe
transfer and micro-operations. Basic computer arganization. Central procososor organination
Mirconcogam Control lorganization. Arithmetio proccessor design. Inpotitoutput organization. Memory organization
(Leeturue 2 hours, Iaboratory/projects 3 hours.) 441. Computer Applications in 441. Computer Applications in
Electrical Engineering (3) \(F\) (Samm course as E E E441.) Prerequisiste: CECS and Advanced numerical methods applied do
 equations, partial differential equations,
eigenvalues, simulation. (Lecture-problems
*443. Introduction to Software Engineering (3) F,S
Preerequistites: CECS 321 and CECS 326 . Examination of Ada's advanced features,
Sotwware IIfe cycle. Functional decomposition, data fifow and obiect-riented development.
 students sho have taken
hours, labocatory 3 hours.)
*444. Compiler Construction (4) F,S
Preerequisites: CECS 228 and either CECS 325 or
34ntax 346. Syntax directed complier study.
Organization of a compler and overall dosign:
parsing. semantic analysis, optimization and parsing. semantic anayyis, optimization and
code generation. LLecture 3 hours, laboratory 3 coder ge
hours.)
*446. Microprocesso
Applications II (3) F,S
Corequisites: CECS 347 and 440 . Computer
system design using microprocessors including system design using microprocessors including
the use of umtipie CPCUs and R Risc procesoss.
. *Lecture-problems 2 hours, laboratory 3 hours.). *448. User Interface Design (3) S Prerequisite: CECS 274. Evaluation, design and
programing of user intertace systems. Human-computer interaction. Components of
interactive systems. Tois tor builing user
interaces (lectue
*449. Computer Graphics (3) F,S Prevequisites: MATH 247 and either CECS 274 or
CECS 346 . Basic software and hardware of computer graphice. Applications. (Leecure 2
hours, laboratory 3 hours.)
*450. Applied Artificial
Intelligence (3) \(F\)
Preerequisite: CECS 420. Applications of artificial
intelligence in expert syytems, vision and natural
 Topics of current interest. Project implemen-
tation. (Lecture 2 hours, laboratory 3 hours.) *472. Distributed Computing Systems (3) F
 Distributed systems oveview. Distributed data
bases, communicition levels and protocols.
Process
schediuling and
asynchronization. Resource alloation.
computer projects 3 hours.)
*475. Object-Oriented
Programming and \(\mathrm{C}++\) (3) F,S Prerequisise: CECS 275 or CECSS 326. An
overiew of obbiect-oiented programming and overiew of object-oriented programming and
C+. Classes Constrator and destructors. Operator overioading. Inheitanco. Inputioutput. Techniques of obiect-riented design. Sunvey of
class libraries. Comparison of object-oriented Class ibraries. Comparison of obicct-riented
languages. (Leeture 2 hours, laboratory 3 hours.).
*490. Special Problems (1-3) F,S Prerequivine: Consent of instructor. A Assigned
study in topics in current computer literature or computer-r-talated proijects with a final feport. May be repeated for a total of 6 units
permision of the Department Chair.
\(* 494\). Capstone Seminar in
Computer Science (3) F,S
Prerequiuite: Senion standing. Internave study of
selected conceptual and theretical probiems in
selefected conceptual and theoretical probiems in
computer science. Student deesign project required.
Graduate Courses
521. Advanced Databas
Management (3) F Management (3) F
Prerequiuste: CECS 421. Relational database
design theory-a rigoruus anpoche recovery, trana-a rition umas approach. Security,
databases and databases and query optimization. (Leeture-
problems 3 hours.)
524. Theory of Programming Languages (3) S
Prerequiste: CECS 424. Topics in the theory
and formal description of procraming and formal description of programming
languages including functional programming,
Interpeetes.
 semantics, and recursion. LLectus
hours.)
526.

Systems (3) F,S
Preerequisites: CECS 228 and CECS 326 .
Theoretical foundations of concopts applied in Theoretical foundations of concopts applied in
the design of operating systems. Topics include
control of the detign of operatitg systems. Topics indude
control of concurrent pocosesses. d deadluccks.
mutual exclusion mutual exclusion, vitual memory, teosurce
management and scheduling. (Lecture.problems 3 hours.)
528. Advanced Analysis of

Algorithms (3) S
Prevequubite: CECCS 428 . Theoretical anayvis of
 basic search and traversaal teentriniques inotududing
bearch trees; sotring: matrix manioulations search trees; sorting; matrix manipulations:
NP-completenesess. (Lecture-problems 3 hours.) 529. Advanced Compiler Design
(3) F S (3) F,S

Prerequisit: CECS 444. Real-world and the Cortical problems encountered by the compile
wititer Topiciss include eeror handiling, table
management management, the symbol table, runtime
problems, code opptimization, code generation problems, code optimization, code generation
and register allocation. (Lecture-problems 3 hrs.) 530. Advanced Computer
Architecture I (3) F,S

Prerequisist: CECS
computer
architecture. \(\begin{aligned} & \text { Fundamentals } \\ & \text { Desecciption of }\end{aligned}\) computer archinecture. Description of
architecture and and deciption languages. Basic
computer design and
 Por Pyptems and mutipipocososor Pypteme

\section*{531. Advanced Computer}

Architecture II (3) S
Prereauisite: CECS 530 . Advanced computer chitecture With emphasis on pararelel
processing. Vector processors and multi. rocossing. Vector processors and mutti-
Docesos sysume
Datafow computation. RIISC/CISC. Hypercubel Paralel inel software
 computing. (Lecture-problems 3 hours.
543. Software Engineering (3) F,S

Prerequiste: CECS 326 . Study of software engineering as a broad. problem.toshing
discifinine discipiline. Includes structured programming and laboratory 3 hours). 544. Software Ve
Validation (3) S Prerequisiste: CECS 543. Overiew of sottware verification and validation. Testing stratetegien Verification of validitaon acctivities. Formal (Lecture problems 3 hours.)
546. Fault Tolerant Computing Systems (3) F rerequiste: CECS 530 . Fauth tolerant echniques are studied as tools to assure the
efiability and continuous avaliabily of computing system. Case studies of modern laut tolerant systems reviewed. Sotware faut
oolerant systems studied as aternatives to
 5ilabily. (Lecture-problems 3 hours 549. Advanced
Graphics (3) \(F\)

Prerequiste: CECS 449. Three-dimensional Peperesentitations, transtormations and viewing.
 Lighting and shading. Visual realism. Topics of (Lecture 2 hours, laboratory 550. Pattern Recognition using
Artificial Intelligence (3) F Preerquisite: CECSS 450. General concepts pattern recogntition and trainable classifier
Topics include dopicsion theory, ineal dupervised liminant, Bayng,
pon-
parametric echiniuwe perametric tecchniques, ruleobased systems and
neural networks.
Lecture problems 2 hour neural networks.
laboratory 3 hours.)
551. Advanced Artificial
intelligence ( 3 ) S
Preerequiste: CECS 420 or 450 . Advanced concepts in atififial intelligence. Topics include
knowelegee accuivition and repereestation, turary logic, , ogicical reasoning, multitesenoro intergation,
Dempster-Shater's theory of evidential reasoning Demposte--Shater's theory of evidential reasoning
feat-ime expert sytems and neural networks. \(A\) reatitime expert syotems and neural networks.
materias fee may be charged. (Leoture roblems 3 hours.)
552. Computer Simulation and
Modeling (3) \(F\) Preerequisites: EE E 380 (or MATH 380) and CECS
342. Sudies of 342. Studies of egeneral purposes and specicea
simulation sottware. Model verifoation induding simulation sothwere. Modiel verification including
graphica models. Applications in various areas araphical modelis. Applications in various areas
A materias foe may be charged. (Lecture
problems 3 hours) problems 3 hours.)
553. Machine Vision (3)

Preerequisite: Graduate standing in engineering
or computer science. Discussion and laboraton or comperter ociernce. Discussion and laboratory image understanding. Topics inducue image \begin{tabular}{l} 
lormation, early processing. segmentation, \\
relational structures in \\
2.0 \\
\hline
\end{tabular}
 methods and computer architecture for machin
vision. A matreias fee may be charged
(Leotureproblems 2 hours, labocatory 3 hours.). 570. Parallel Processing with Ada (3) S Preveequisise: CECS 443. Study of parallel and
mutitrasking computer proceesses for advanced applications using the Ada programming language. Topics include rendezvous, timing
and scheduing, select statements, taik typees
and activation, teemmination and exceptions, and and activation, temmination and exceptions, and
resource handing. (Lecture 2 hours, laboatory 3 eours.)
572. Advanced Distribute
Computing Systems Computing Systems (3) Preeequisite. CECS 472 Interconnected net-
works and gateways. Routing mechanisms, error

 590 . Specilit propects 3 hours.) 590. Special Topics in Computer
Science (3) FSS Science (3) F,S
Preerequisites: Graduate standing and consent of
instructor. Each offering is based on an area in instructor. Eacc offering is based on an area in
computer coience and technology in which
recent advances have to recent advancees have been made. The course
may be repeated once for credit with the consen

 Charged. (L.ectur-problems 3 hours.) Repeate
to a maximum of 6 units with different topics.
694. Seminar in Computer Science (3) F
Prerequisiti:: Six unity of 500 or 600 level CECS
cursees. Intensive study of a broad selection of courseestual and theovetical problems in computer science. A witten studentr teesearch project and
an roal presentation are eqeivired
697. Directed Research
(1-3) F,S,SS
Preerequiste: Clasaified Graduate standing. Theoretical and experimental problems in in
computer science and engineering requiring computer science and engineering
intensive analysis. (ndepenendent Stud)
698. Thesis (2-6) F,S,SS Preerequisite: Advancement to candidacy.
Planning, peparation and completion of a thesis Planning, preparation and completion of a thesis
in computer science and engineering. In compurer stionce and engineeering.
(Independent Stucy.) May be repeated to a total of 6 units.

\section*{Electrical Engineering}

\section*{ollege of Engineering}

Department Chair: Radhe Das Department Office: ECS Building, oom 512
Telephone: (310) 985-5102/5103 aculty: Professors: James Ary, Radhe Das, Christopher Druzgalsh Michael Hassul, Kenneth James, himias Jordanides, Rajend Kumar, Frank Paal, Nick Reddy, Bahram Shahian, Michae Singh, Raymond Stefani, Stanley Wolf, Henry Yeh; Associate assan Nour, Alfonso Ruodzinsk, obert Teng, Chit-Sang Tsang Mahmoud Wagdy; Assistant Professor: Tom Johnson. Boyd Kendall, Rodney Lewis, Harold Washburn, Robert Winchell ndergraduate Advisor anley Wolf Gahram Shahian iomedical Engineering Advisors: James P. Ary Department Secretary epartment Secretar
The Department
Students desiring detailed department office for referral to one department office for re
Advisory and Development ounci.
The Department of Electrical Advisoery and is supported by an onsisting of outstanding engineers and executives from industry and government in Southern Californ etween the University and industr and to keep the administration and aculty informed of modern engineering practices. This ensures ate. It also advises on placeme opportunities before and after graduation.
ABET Accreditation
The Bachelor of Science in
lectrical Engineering is accredited
by the Accreditation Board for

Engineering and Technology program are strongly advised to in touch with an undergraduate advisor as eary as possible eto know
the details of the ABE requirements ABET requirements
humanities and social sciences areas.
Bachelor of Science in Electrical
Engineering (code 3-4330)
The degree in electrical
engineering is designed to prepare
graduates for responsible enginee ing positions in design, development, research, applications and operation in the fields of commun systems, control systems, electromagnetics, digital and analog electronic circuits, physical electropower systems. The curriculum is built around a strong basic core o mathematics, physics and enginee ingermediate courses in electrical engineering topics and finally a specialized elective sequence course.

A choice of senior elective coverage of any of the above fields. Laboratory facilites are available include engineering buildings and advanced laboratory instruction electronics, digital signal processing control systems, hybrid circuity systems.
Requirements for the Bachelor of Sclence in Electrical Engineering Core: CHEM 111A; CECS 242 EE 201, 212, 230, 310, 330; MAT 122, 123, 224, 370A; PHYS 151,
152, 154. Each of the foregoing courses must be completed with a grade of ' \(C\) ' or better. Students equesting transfer credit for EE 20 or 212 may be required to pass a
qualifying examination in these areas. CECS 342: EE 330L, 346,
\(347 \mathrm{~L}, 350,370,370 \mathrm{~L}, 382,430\), 430L, 460; MATH 370B; ME 330 o
sequence with capstone senio project as follows:
Analog Elective Sequence: EE
\(410,420,420 \mathrm{~L}, 432\); analog electives* to at least 137 units.
Communications/Digital Signal Processing Elective Sequence: EE
\(380,401,482,485\), and either 488 or 489; plus approved communications electives* to east 137 units.
Controls Elective Sequence: E 411, 470, 471; plus approved
controls electives \({ }^{\star}\) to at least 137 units.
Digital Elective Sequence: EE
\(301,301 \mathrm{~L}, 332,446,447 \mathrm{i}\) 301, 301L, 332, 446, 447; plus approved digita/
Power Elective Sequence: EE 452, 452L, 453,458 ; plus approved
power electives * See undergraduate advisor for
list Engineering Option in Biomedical and Clinical Engineering (code 3-4336) The Department of Electrical Engineering administers an option in
Biomedical and Clinical Engineering that allows the student to acquire substantive competence in biomedical engineering and biology base of biology, mathematics, physics, chemistry, and engineering science to develop a clinically orientated biomedical engineer to
serve in community medicine. It includes a core of standard electrical engineering courses as well as courses and laboratories in bhysiology and biology. Elective units are available in the senior year to explore individual areas of interest. Laboratory facilities in the field of
biomedical engineering are available in the engineering buildings, and laboratory facilities for anatomy and physiology are available in biology Ccomputer systems are available to
collect, process and display physiological data
Requirements of the Bachelor of Blemedical and Clinical
Bian enging Engineering
CHEM 111A; CECS 242; EE 201 212, 230, 310, 330; MATH 122, 123
224, 370A; PHYS 151, 152, 154. All of the foregoing courses must be completed with a grade of ' \(C\) ' or better. Students requesting transfer
credit for \(E \mathrm{EE} 201\) and/or 212 may be required to pass qualifying exams in these areas. A/P 207; CECS 342; EE 330L, \(346,347 \mathrm{~L}, 350,370,370\) 382, 406, 406 L, \(407,430,460 ;\)
MATH 370B: ME 330 OR CE 370 plus approved biomedical elective to at least 137 units.
Certificate Program In Energy Conversion and Power Sy
Engineering (code 1-4000)
The 27 -unit Certificate Progra
Energy Conversion and Power Systems Engineering is an undergraduate erogram designed to engineering students to become engineering studenits
proficient in the analysis and design of power generating systems, such as direct conversion, coal burning various other types of power plants, elements of electrical power systems, and indusin
For certificate requirements see the Mechanical Engineering Department section of this Bulletin. Master of Science in Electrical
Thing (code \(6-433\) )
opportunity for engineers and others opportunity
to advance their competency in analysis and design to better meet the high technology needs of local graduate courses in one area of emphasis, and the remaining courses must augment and support that area of emphasis. Some current examplestimal control and estimation, networks and filters, communication theory and signa processing, integrated circuit electronics, and biomedical engineering. Students may create other areas of emphasis with approval of the graduate adviso
Some laboratory and teaching
ssistantships are available qualified graduate students. Prerequisites
1. A bachelor's degree from an engineering or a bachelor's degree from an accredited engineering, hatural science or other appropriate
curriculum with the requirement the essential undergraduate deficiencie n electrical engineering are removed prio to Advance int to Candida consult with the graduate adviso and obtain the MSEE Handbook which covers procedures and equirements. A tentative program must be approved by the gracuate
advisor. That program must exhibit an area of emphasis comprised of a east three related graduate course 0 level)
3. The prospective graduate student must have attained a GPA o at least 2.7 for the last 60 semester units ( 90 quarter units) attempted prior to enty in the MSEE progra
Advancement to Candidacy deficiencies as determined by the graduate advisor. The GPA must be at least 3.0 for all such courses attempted.
2. Demonstration of competence in electrical engineering by passing 3. Demonstration of competence in technical writing by passing an apprope of ' \(C\) ' or bettor or by providing acceptable proof of technical witing ability. This requirement can be waived for thesis students upo recommendation of the gradua
advisor and the thesis advisor.
4. Passing the Writing Proficiency Exam.
5. Completion of at least 12 units as a graduate student in residence at least 30 and a maior GPA of at east 3.
Requirements for Master of Science in Electrical Engineeri
EE core courses consist of the following: EE 501, 505,508 and
509 . Students must select at least ? out of the above 4 courses appropriate to their area of
approval of the Graduate Advisor. ompletion of a minimum of 30 units
400.500 or 600 level courses as approved in advance by the graduale advisor. students must hesis alternatives. Successful completion of a thesis provides a nitying culmination to the program and an enhanced resume for future Thesis Alternative: EE 500/600 ncluding the above core
equirement (18 units); EE 697 (3 equirement (18 units); \(E\) E 69 units); EE 698 (6 units)
Comprehensive Oral Exam on
Thesis.
Non-Thesis Alternative: EE 500/600 including the above co equirement (27 units); E
Comprehensive Oral Exam on MSE rogram.
Courses (E E)
The following courses wer Department (with prefix EE) but have een transferred into the Computer Engineering and Computer Science with prefix CECS): CECS 242, 340
\(342,346,442,444,494\). In making the transfer of courses only the prefixes were changed (e.g., CECS 42 was formerly
201. Digital Logic Design (4) F, S
Preerequistit: MATH 122. Basio topics in combinational and sequential switching ciricuits
with appliations to the design of ofital
deicioce. A materaias the may be charged.
and only.
211. Fundamentals of Electric Cliccuits (3) F,S
Prerequivites: PHYS 152, MATH 224 . Linear lawa, network, the rems. Mosth Mard notols Simple RL and RC circuits. Phasocors, balanced. 3-phase systems and power. (Lectic
hhurs.) Traditional grading only
212. Electric CIrcuits I (4) FS


 3-phase systams and power. (Lecture-problems
hours: labocrato py grading only.
\begin{tabular}{|c|c|c|}
\hline & & dergadu \\
\hline  & Prerequisites: E E 201. microprocessor and microco for applications of these de & \begin{tabular}{l}
*406. Biomedical Engineering (3) F \\
Prerequisites: EE 330 or consent of instructor. Application and design of medical electronic instruments and automated systems. (Lecture -
\end{tabular} \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
Devices (3) F,S \\
Prerequiste: CHEM 111A. Corequisites: MATH 370A, PHYS 154. Introduction to solid state eleactronic devices and models: diodes, \\
 problems 3 hours.) Traditional grading only. Upper Division
\end{tabular}} & 347L Microprocessor & \\
\hline & & \\
\hline & & \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
301. Sequential Circuit Design \\
(3) F,S \\
Prerequisites: EE 201. Synthesis of sequential circuits. Asynchronous sequential circuits, algorithmic state machines, hardware design
languages, sequential circuit design using programmable logic devices. (Lecture problems 3 hours)
\end{tabular}} & Prerequisites: EE 211 or EE 212 conversion processes and systems. storage. Energy issues. Compo & Prerequisites: EE 346 or consent of instructor Principles of analysis and design for computer and data collection equipment for real-tim on-line medical systems. A materials fee may projects 3 hours) \\
\hline & & \\
\hline L. Sequentia oratory (1) & & \\
\hline \multirow[t]{3}{*}{Prerequisitites: Corequisite: EE 301 . Design
implementation and verfication of digtal systems using medium scale integrated and
large scate integrated dircuits. A materias fee may be charged. (Laboratory 3 hours)} & & \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline  two port . & & \\
\hline \begin{tabular}{l}
Analog Electronic Circuits F,S \\
requisites: EE 211 or 212, 230. Analysis sign of diode, transistor, and operatio plifier circuits. (Lecture - problems 3 hou
\end{tabular} & Prerequisites: EE 310 . Introduction to
probability, statistics, random variables and probabiity, statistics, thanderials fee may be charged. Not open to students with credit in EE 480. (Lecture-problems, computer projects 3 hours.) Traditional grading only. & . Leature-problems 3 hours) \\
\hline OL. Engineering E boratory (1) F,S & & \\
\hline & & \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
331. Electronic Circuit Design \\
(3) F,S \\
Prerequisites: EE 211 or EE 212 (Not open to EE majors). Analysis and design of diode circuits, transistor amplifier and operational amplifier circuits. (Lecture - problems 3 hours.)
\end{tabular}} & & \\
\hline &  & \begin{tabular}{l}
Analog Electronic Circuits F,S \\
quisites: EE 330, 330L, 370. Analysis and
\end{tabular} \\
\hline & & \\
\hline 332. Digital Electronic Circuits (3) F,S & & \\
\hline Prerequisites: EE 201, 212, 230. Analysis and and operation of MOS transistors, including SPICE models. NMOS and CMOS inverters. & & \\
\hline ar transistor inverters. (TTL and ECL). its (flip-flop, Schmitt trig conductor memories. ems 3 hours.) & Prerequisites: Senior standing in engineering of consent of instructor topics from recent advances in engineering. Course content will vary to year and may be repeated once with the consent of the de & EE 430 . Advanced transistor amplifier, and linear-integrated nd systems design laboratory. ee may be charged. Not open to \\
\hline
\end{tabular}

Laboratory (1) F,S
Prerequibites: EE 212. Laboratory study of
electric and electronic circuits and instrumertation. Introcuction to transformers
and rotating machinery. Amaterials foe may be
charged. (laborator 3 h houra).
230. Solid State Electronic

Prerequiste: CHEM 111AA. Corequisites: MATH
electionio devices and models: diodes,
transistors, microelectronics. Not open to students, with creditit in E. 3220 . LLecture
probems 3 hours.) Tradtional grading only. Upper Division
301. Sequential Circuit Design
(3) F, S Prerequisites: EE 201. Synthesis of sequential circuits. Asynchronous. sequential circuits, languages, sequential circuit design using
progammable logic
levices. (Lecture.

\section*{(1) \(\mathrm{F}, \mathrm{S}\)}
rerequisites: Corequiste: EE 301 . Design
mplementation and verification of digital arge scale integrated dircuits. A materials tee
10. Electric Circuits II (3)

Prerequisites: EE 211 a EE 212, MATH 370 A .
Fourier series, Fourier and Laplace transtorm
lechniques, two
Lesture-problems 3 hours).
(3) \(\mathrm{F}, \mathrm{S}\) design of diode, transistor, and operatione
amplifer circuits. (Leeture - probolems 3 hours) 330L. Engineering Electronics I rerequiste: EE 330 T mplifer circuit design laborataroy. (Laborotatory
31. Electronic Circuit Design Treraquibites
EE miaiors). Analysim and design of doiod mplifier circuits. (Lecture - problems 3 hours) 332. Digital Electronic Circuits
(3) F,
rerequisites: EE 201, 212, 230. Analysis and and operation of MOS transistors, including
SPICE models. NMOS and CMOS inverers. Polar transistor inverters. Bipolaras digital gate ircuits (fipp-flop, Schmitt trigger, multhibratoro). Semiconductor memories. Basic IC design
Gato Array. Standard Cell, alA. (Lecture
problems 3 hours.)
nd Aproprocessor Principles Prerequistes: E E 201. Study of available br applications of these devicess to practica eystem. A materials fee mayy ber charged
(Lecture - problems 2 hours, laboratory 3 hours) 347L Mlcroprocesso
Laboratory (2) F,S
rereauiste: EE 346. Design and construction tee mey be chargeod. LLecture: problems 1 hour

Prerequistes: EE 211 or EE 212 . Energy
conversion proceoses and systems. Energy orage. Energy issues. Components conversion, control, tranemisaion, distribution
and utilization. Power electronics in energy hours)
Control Systems (3) F,S tersequisies: EEE 310 . MATH 370 B . Control raphs, stability citieria, roet locus, trequenci 70L. Control Systems
Pemite: \(E 5\)
digtal simulation and senvomotor control
380. Engineering Probability and
Statistics Terequistes: EE Soir application. At random variables and harged. Not open Ao matudeniats with croditit in Ee
EE 82. Communication Systems F,
ad transtorms. Introcuuction to passine seaties digna fiters. Basic elements of proboability and vestigial modulation narrowband and wideband \(F M\). Not open to students with credi
in EE 482 . (Lecturo-problems 3 hours. aditional grading only
401. Advanced Engineering
Mathematics I (3) F,S Prererauiste: MATH 370 A. Corequisite: EE 310.
Analytice tecenniques relevant to electrical 405. Special Topics in Electrical erequisites: Serior sta topics from reconstrt ad inanctustor. Selecticed oyear and may be repeateded vince for creadil
undergraduat actioor (lestre *406. Blomedical Engineering (3) Application and desian of conent of instructor instruments and automated systems. (Leecture *406L. Biomedical Engineering (1) study of medical-instrumentation. transaracoer and computer data processing. A materials fee *407. Applications of Computers in Medicine (3) S
Principles of analysis and design for computert on-line medical syytems. A material realtime be charged. (Lecture-problema, computer *410. Analog Filter Design (3) Prereauistes: EE 310 . Theory and design of
actuve fithers using operational amplifers. (lecture-problems 3 hours) old low-pass filters.
*411. Linear Systems Analysis
Prevequisite: EE 370 Introduction to
continuous and discrete systems. Difference equations and \(z\)-transtorms. Matrix theory and
linear algebra. State-space anayysis and inearization. Stability, controllability, and *420. Microelectronics (3) F Prerequistes: EE 301 , EE 330 . Mirroelectronic
fabtication processes and characterization of devices. Fulir custom doesign examples with CMOS devices, beth analog, and digita
formats. (Lecture:problems 3 hours) *420L Microelectronic
Laboratory (1)
F

Croequiste: EE 420. Laboratory evaluation of final test. Empirical device model formulation
from teest data. (Laboratoy 3 hours) *43. Analog Electronic Circuits
desogn of multi-transistor amplifers, subuccircuits, applications. Operational ampilifers. Lineal Computer-aided cirruit analysis and deoign
Feeecback amplifiers and stability. (Lecture problems 3 hours.)
Laboratory (1) F,S Corequiste: EE 430. Advanced transistor,
operational amplifer, and linear-integrated materials fee may be charged. Not open to
students with credit in EE 433L (Laboratory 3
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
*432. Design of Analog Circuit and Systems \\
(3) F,S
\end{tabular} & \begin{tabular}{l}
*455. Space Electric Power Systems \\
(3) S
\end{tabular} \\
\hline Prerequisite: EE 430. Corequisite: EE 410. rade-offs to meet design specifications. Nonlinear analog circuits. MOS circuits. Noise. Computer aided electronic system design. Laboratory projects. (Lecture - problems 2 hours, laboratory 3 hours.) & Prerequistes: \(\mathrm{EE} \quad 330, \mathrm{EE} \quad 350\). A comprehensive treatment of charciesicis and requirements imposed by missions on spaceecratt power systems, power sources electrical equipment, power converters and \\
\hline *440. Digital System and Computer Architecture (3) F,S & loads, power future space missions and technological needs. (Lecture-problems 3 hours) \\
\hline system and computer organization an architecture including studies of the arithmel & *458. Design of Power System Components (3) F,S \\
\hline processes and memory organization. (Lecture problems 3 hours.) & Prerequisites: EE 330, EE 452. Design of electrical, electronic and electromechanical \\
\hline \begin{tabular}{l}
*441. Applications of Numerical Methods in Electrical Engineering (3) \(F\) \\
Prerequisist: CECS 342 or consent of
\end{tabular} & components required for power conversion, control, transmission, distribution, protection and measurements in terrestrial and space electric power systems. (Lecture-problems 2 hours, laboratory 3 hours) \\
\hline instructor. Advanced numerical methods applied to engineering problems not readily solvable by analytical methods. (Lecture problems 3 hours.) & \begin{tabular}{l}
*460. Electromagnetic Fields \\
(3) F,S \\
Prerequisites: EE 310, MATH 370B. Electic
\end{tabular} \\
\hline \begin{tabular}{l}
*446. Advanced \\
Microprocessors and Embedded Controllers (3)F,S
\end{tabular} & Maxwell's equations. Transmission lines. Not open to students with credit in EE 462. (Lecture-problems 3 hours). \\
\hline Prerequisites: EE 346 . processor bus interface using 16 bir pre bit processors, study of introduction to 32 bt procossors, stuay controller systems. A materials fee may be charged. (Lecture - problems 3 hours) & \begin{tabular}{l}
*463. Microwave Engineering \\
(3) S \\
Prerequisite: EE 460. Propagation of guided waves in lossless and dissipative media. Radiation and antenna design. Waveguides,
\end{tabular} \\
\hline \begin{tabular}{l}
*447. Design of Digital Systems \\
(3) F,S
\end{tabular} & microwave tubes, microwave circuits. (Lecture-problems 2 hours, laboratory 3 hours). \\
\hline Prerequisites: EE 301, 346. Design of medium and large scale digital systems. Hardware & *465. Fields and Waves in Electro-Optics (3) S \\
\hline design languages, programmable logic design, custom LSI circuits. Hardware compilers. (Lecture - problems 2 hours, laboratory 3 hours.) & Prerequisite: EE 460 . Electromagnetic field theory from Maxwell's equation viewpoint. Description of optical components. Lasers, optical waveguide and fiber optics, \\
\hline \begin{tabular}{l}
*452. Electric Power Systems Analysis \\
(3) F,S
\end{tabular} & accusto-ptic modulation. (Lecture-problems 2 hours, laboratory 3 hours). \\
\hline Prerequisites: EE 310, 350. Elements of power systems, transmission line parameters and performance. Load flow. Symmetrical faults. Power system control, stability and protection. Economic dispatch. HVDC transmission. (Lecture - problems 3 hours.) & \begin{tabular}{l}
*470. Digital Control (3) F,S \\
Prerequisites: EE 370L, 411. Analysis and synthesis of digital control systems. General application of both the \(Z\)-transform and the state-space approach for discrete system design. A material fee may be charged. (Lecture-problems 2 hours, laboratory 3 hours.)
\end{tabular} \\
\hline \begin{tabular}{l}
*452L. Power Electronics Laboratory \\
(1) F,S
\end{tabular} & \begin{tabular}{l}
*471. Design of Control Systems \\
(3) \(\mathrm{F}, \mathrm{S}\)
\end{tabular} \\
\hline Prerequistes: EE 452. Testing and performance validation of electric, elecectronic, electrochemica and electromechanical components and
apparatus. (Laboratory 3 hours) & Preerequiseses EE 40. Desion using root- locus and Bode-plot methods. Design of state-space control systems and
obsenvers.
Computer-aided
design. \\
\hline \begin{tabular}{l}
*453. Industrial Power Systems \\
(3) S
\end{tabular} & (Lecture problems 2 hours, laboratory 3 hours.) \\
\hline & Communication (3) F,S \\
\hline  & Prerequistes: EE 382, 460. Fiber optic communications from systems viewpoint, communication system components including optical fiber, light sources, light detectors, - problems 3 hours) \\
\hline
\end{tabular}
optical fiber, light sources, "ight detectors
analag and digat fifer optic systems. (Leeture
482. Communication Systems II (3) F

Preerequistes: EE 382 . Information sources and oprresentation of sytemne. Othogonals, series
pulse and digital
podulation techniques,
band moduation techniques, banc-pass digital
communicator systems. special topis in
communications. (Lecture - problems 3 iours) ommuni (3) \(\mathrm{F}, \mathrm{S}\) S (3) F,S Prerequisites: MATH 370 A . Image formation.
mage detectors and their characterisicics. Pecreeption, image models. Sampling and
quantization.
Pixeel relationships. Statistical
 denaty modols. Image fídolity criteria and
inage intellibility. Image transtorms. Image mate intelligibitity. Image transtorms. Image
enhancerment techniqueve. (Leeture - problems
hours) enh hancemenin
3 hours)
*
484. Satellite Communication
(3) \(\mathrm{F}, \mathrm{S}\) (3) \(F, S\) rerequisites: EE 380,382 . Oveniew of saetellite syytems, satellite orbits, and launching


 *485. Digital Signal Processing I
(3) F,S (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: \(E E 310\). Study of
continuoustime signals and systems, and the continuoustime sisnalas and systems, and the
corresponding discrete-time enalysois
tanstorm anayysis.
Sampling ranstorm analysis. Sampling theorem, appoximation. Analysis and design of digital filers. (Leecture - problems 3 hours) *486. Digital Signal Processing Prerequisiste: E E 4 . . Digital lignal processing

 cepatum, analyses, and hoctrom omphic
deconvolution. (lecture - problems 3 hours) *487. Data Compression (3) \(\mathrm{F}, \mathrm{S}\)
 Classes of of data compression (reversible,
ireversible).
Reversibile: revurndancy reduction. Ireverasible:
 coding (Hutfman coding). bininary soorree
coding, non-edundant source coding etc Entropy reduction: quantization (plock, sequential, zero memory). Applications to (Lecture - problems 3 hours.)
*488. Communication Systems
Design (3)

\section*{Design (3) F}

Prereauisites: EE 430, ,430., 482. Application of
communication theory to the design communication systemempoubsystems and thei implementation with digitital and analerg
integrated circuits. LLeture - problems 2 hours. laboratory 3 hours)
*489. Digital Signal Processing
System Design (3) S
System Design (3) S
Prereauisites: EE E 346, 3474 and 485. Dosion of
digital fiters, including Finite Impulse Response (FlR) and Infinituing Implise Pesponse (Il) filters.
Design of figital Design of digital signal processing systems
and implement digital fiters with figital signal procossors in real time. Llecture - problems 2
hours, laboratory 3 hours \({ }^{*} 490\), laboratory 3 hours \()\)
*490. Special Problems (1-3)
\(\mathrm{F}, \mathrm{S}\)
Prerequiste: Consent of instructor. Assigned
topicio in tocenhical Ilterature of laboratory projects and reports on same. May be repeated
for a totola of six units.
Graduate Division
501. Linear Multivariable

Prerequisite: EE 411. Linear spaces and
operators. Linear system and realizations. Stabilty. annyasis system and reatiolizations.
obsenvability. Composite systems. Llecture. obsenability. Comp
problems
hoours.)
505. Advanced Engineering
Mathematics II (3) F,S Mathematics II (3) \(F\),
Prerequistes: EF 401 or 411 Prerequisites: EE 401 or 411 or Math 37708 of
consent of instructor. Acvancead analytical
 electrical engineering. Optimization. Advancec
linear algebar. matrix theory. numerical tech hiques
(Lecture-problems 3 hompurs). (Lecture-problems 3 hours).
506. Theory and Practice of
Biomedical Instrumentation (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: Graduate standing in
engineering or natural sciencos, EE 406 or consent of instructor. Advanced design
conceppts and practical utilization of bliomedical instrumentation. Theory trandouction of
physiological parameters. (Lecture-problems 3
507. Advanced Biomedical Systems (3) F,S Prerequistes: Graduate standing in
engineeng or natural science, EE 406 or
consent of biotecthnology, design and organization of modern hospital systems. and utilization of
advancod
simutation of pochoobogies. advanced technologies. Modeling and
simulation of physiogoical and medical
systems. (Lecture - problemems hours). 508. Probability Theory and
Random Processes (3) FS Prerequistes: EE 3so, EE 411. Probability
spaces, random vectors and proceseses convergence concepts, stationarity and ergosedic
systems, correation and spectral
representations. Some applian procesesses. (Lecture probblems 3 hours)
509. Network Theor Prerequisite: EE
Study
(3)
F,S Study of continuuus and dilcreete-time signals
and trantorms. Network olasificat

 ptatespace teconiquues. Characietization o
passive and active entwork usin scatering
and other parameeters. Tellogenist theorem and and other Parameters. Tellegen's theorem and
its application. (Lecture-problems 3 hours) 510. Circuit Synthesis (3) F

Corequisite: EE 509 . Synthesis of passhe
lumped networks, cascade synthesis (ink with fitier synthesis), realization of commensurate distributed networks, discre
(Lecture-problems 3 hours)
511. Active Filters (3) S

Prerecauiste: EE 410 or EE 510 . Clasasifacation of
continuousu-time and sampled.data syytems. continuuus-time and sampled-data aystems,
apporomation theory, mutiple-foop feedback topologies, low.sensitwity highoroder filters,
switchedcoapacitor fiters. (Leecure-problems 3 hours).
513. Digital Filter Design and Implementation (3) S
 Using FFT, ideal fiter response, digitalal and
trequency transtomations. FFT, FIR, \(\|\) IR and digital fitter design and implementation
techniques. (Lecture-problems 3 hours). 514. Advanced Circuit Synthesis and Design (3) S
Prerequiste: EE 510. Scattering synthesis in
\((s-2)\) domains, wave active and dighal fiters.
 digital filiers with an emphasis on strucuture
suitable
for
implementation. suitable for V.SI
(Lecture-problems 3 hours).

 using \(n\)-channel metal oxide semiconductors
(n-MOS). (eeeture-problems 3 Sours). 528. Speech Signal Processing (3) s

 processing. Speoch synthesis, recogntion,
encoding. and compresion Application o of
neural networks. (Lecturs - problems 3 hours) 531. CMOS Electronics (3) F Prerequisito: EE 430 . CMOS and design modeling, device characterization and simulation). Design automation, silicon
compier, CMOS and BiCMOS subbircuits, ampliers, Op amps and systems. (Lecture. roblems 3 hours.)
532. Analog Electronics for
Signal Processing (3) F
ng (3)
Preeqequistes: EE A30. CMOS Subcircuits and
Op-Amps. Advancod lechniques ind
owithed-capacitior analog signal processing
elements such as: amplifers, SH circuits,
fiters, oscillators, comporators, \(D / A\) and \(A D\)
 Lecture - problems 3 hours.) 533. Quantum and Optical
Electronics (3) F Prerequistes: EE 430 and
 concepts of relevancer in luastum, fiber oppticios, optical technology and semiconductor solid
state electronico. Contents indudue both basic
theory and the applications to stateot the at theory and the applications to stata-o-t.theart
electronics engineering. (Lecture - problem 3 hours.)
540. Advanced Digital System and Computer Architecture
(3) F,S
(3) F,S

Preerequisite: EE 440 or 446 . High level
computer architectures including studies of
 procesesing, direct exec
(Leecture - problems 3 hours.)
541. Computer Arithmetic Unit
541. Computer
Design (3) \(F\)
Prerequites:

Prerequisites: EE 446 or EE 540 . Hardware
mplementation of computer mplementiation of computer arithmetio.
Accolerated alootiths used by dedicited
Computers and by supercomuters Compley Accelerated algorthms used by dedicated
comptuers and by usperomuters. Complexty
vs speed trade off. (Lecture - problems 3
542. Dedicated Processor Design (3) S
Prerequiste: EE 446 or 540 . Dosign of
distributed computing systems. Design of fautt distributed computing systems. Design of fautt
toterant computing systems. Intitocuution to
systolic araray.
Case studies. problems 3 hours.)
545. Computer Networks (3) F,S Prerequistes: EE 482 and EE 540 Design and
analysis of computer communication networks
 protocols and standards. Local area, baseband
and broadband networks are covered as well and broadband networks are covered as well
as the use of fibero optics. A material fee may
be charged be charged.
550. Power Electronics and Applications (3) F
Prerequisistes: EE \(350 . A C-D C\) and DC.AC
Power corverters, choppers, cycloconventers power converters, choppers, cycloconventers.
PWM and PFM techniques. Harmonics and fiters. Magnetics. Necwniquev. Harmanerics and in motor controls in indusctial. applicatations.
enereg. conversion, HVDC transmision and.
 Lecture-problems 3 hours). 551. Theory and Applications of
DC/DC Converters (3) S C/DC Converters (3) s Prerequiste: EE 550 or consent of instructor.
Modoling.
appolication of atabity
onalysio.
Desigign and
converters. application of DCD
(Lecture-problems 3 hours). 552. Electric Machines and
Robotic Applications Robotic Applications (3)
Preterquistes: EEE 370,452 or consent of
nstuctor Applications and design of smal
tectric maching
brushless DC motors with emphasis on robotio control. Performance characterisitics of electric
machines interfacing with robotic systems. (Loctura-problems 3 hours).
553. High Voltage

\section*{553. High Voita
Systems (3) \(F\)}

\section*{Prerequiste: EE 452. Design of insulation}

 breakdown phenomen. High voltage tend
procedures, instrumentation tocchnicues and procedures, shemes for meicr pour
poomponenents. (Lecture-problems 3 hours).
560. Applied Electromagnetics (3) \(F\)

Prerequisites: EE 460 or consent of instructor. Electromagnetio theory appled to components and systems. Topics induce transmission lines, wave guides, fiber optico phased array antennas, radar crosasestion,
Fourier optices, near and far fiedd aperture radiation, Doppler radar, quasistaticis a nad DC 564. High Frequency
564. High Frequency
Transmission Lines (3)

Prerequisites: EE 460 or consent of instructor. Electromagnetio theory applied to high
trequency comuniaction thansission line trequency communication transmission ines
and systems. Topicics inctude cooxial lines waveguides, fiber opplics, stripline, microstip finline, slow and surface wave transmission
lines and antenna tranamiscion systems. lines and antenna trans
(Lecture-problems 3 hours).
569. Remote Sensing (3) Prerequisites: EE 40, 460 and 483.
Interaction of electromagnetio waves with Interaction of electromagnetic waves with
surfaces and atmospheres.
Scattering of surfaceses and atmospheres. Mcroatereves and thermal emission trom atmospheres and
surfaces. Spectral refection trom surtaces and atmospheres in the near intraered and visble regions. Review of modern spaceborn sensors
and ossociatd imaning tectnologyy and data
anaysios. (Lecture-problems 3 hours).
570. Optimal Controls (3) F Prerequaiste: EE 471. Corequiste: EE 501 . The applications of continuuus and discreie Calimulutus of vecriationess. Pontryagin's minimum Principiple. Optimal traiectary, open-loop contria and closed-loop contro. Nu
(Lecture - problems 3 hours.)
571. Estimation Theory (3) S

Prereauistes: EE 501, 508. Stochastic dynamic systems. Theory of parameter and state
estimation, least squares and maximum estimation, least squares and maximum
likeolihood oppimal
Kifieting and prodition. Kalman, ffleting. smoething, and noontine
estimation. (Lecture - problems 3 hours) 572. Linear Quadratic Control (3) F

Prerequisises: EE 471, 501 . Corequiste: EE
571. In depth study of the Linear Quadratio
 and the Linear Quadratio Gaussian (LLOG)
probolem. Robustress properties and Loop

Transter Recover. (Leecture - problems 3

\section*{573. Robust Multivariable} Control (3) S
Prerequisite: EE 572. Muttvariable control
Matix traction description and the tactoration Mariri traction description and the factorization
approach to control system dosign. Robust control of uncertain oystems. Introduction to H 574. Robot Dynamics and

\section*{574. Robot Dy
Control (3) S}

Prerequisiste: EE 501 or consent of instructor.
Basio methododogy for anen
Preerequiste: EEE 501 or consent of instuctor
Basio emethodogoy for analysis and deisin of
robotic manipulatators. Clasasicication of Iobote robotic manipuluataro. Clasififation of robots
homogeneoous transtormations, kinematics homogeneous transtormations, robots. (Leeture - problems 3 hours) 575. Non-Linear Control Systems Prereauiste: EE 501 ar consent of instructor
Basio methododocoies and results to deal with stablity of nonlineer systems which can be applica ho contro) \(\begin{aligned} & \text { systems, robotiss, atrificiaa } \\ & \text { neural networks, circuit theory, eto. Solution of }\end{aligned}\) differential equations, limit cycles, Lyapuno stability theory, stability of linear systems
Lure's problem, feedback stabilization Lure's
(Lecture - problems
3
hours.
580. Statistical Communication Theory (3) F
Prerequistres: EE 482,505 and 508 ar consent
of instuctor. Power pectral denity and digital communication signals. Matched fitters. Signalto-nise-ratio performance
analysis for analog and pulse modulation analysiss. Ver analog and ppatse modepresentation of digitit signals. Ertor rate analysis for various signgiling
formats. Optimum digital receivers. Fading formats. \(\left.\begin{array}{l}\text { Optimum digital receivers.) } \\ \text { channels. (Lecture-problems } 3 \text { hours.) }\end{array}\right)\)
581. Satellite System
Configurations (3) S

Preerequiste: EE 580 . Basic orbital mechanices Link analysis. Mutipipe access. architecture and
 58 .

\section*{(3) S}

Prerequiste: EE 550 . Review of digital


 583. Advanced Digital Image Processing (3) F,S
Preerequistes: EE 401 and 483 or consent of instructor. Image restoration, ennooding,
segmentation, repesesentation and description segmentation, representation and description.
image ecoonstruction from projection LLecture - problems 3 hours).
584. Information Theory and

Coding (3) F
Perequisistes: EE 482 and 508 . Information
theory and coding: information measures source coding, Shannon's fist theovern, mutua
econd theorem, ooding techniques for reliable intomation transmission over noisy channels. 585. Advanced Digital Signal
ocessing (3) F
Preerequisites: EE 380 and 485. A study of
 nduding adaptive fifters. \(\begin{aligned} & \text { State space } \\ & \text { deocription of linear diccete time systems. }\end{aligned}\) desectiption of linear a discretete time systems.
Realization
applications. 586. Real-Time Digital Signal Processing (3) F
Prerequisistes: EE/CESE 346 and EE 485 ; Digital signal proceesorss architecture and
language. Real-time DSP considerations and limitations. Digital fiter and sonsignerations lrocesing
system implenentations (lecture - problems 3 system
hours)
587
587. Radar Systems (3) F Preerequiste: EE 482. Prinipiples of radar theory
and systems. Radar equation, detection and systems. Radar equation, detection,
ground
effects, ambiguty
function. Applications include moving target indicator
radar and tracking radar. LLecture-problems 3 radar ars.
hours.)
588. Advanced Digital

Communication Systems (3) S
Prereauisises: EE 580 . Baseband and
passband modulation/demodulation, sequence passband modulation/dem odulation, sequenco
diemodulation, block and convolution codes for data transmission, trelllis codese for digital
modution, , ata translation and compression modulation, data translation and compression
codes.
synchronization,
adaptive equalzation.(Leeture - probilems 3 hours) 589. Neural Networks and
Applications (3) S Applications (3) S
Prerequisite: EE 485 . \(\begin{gathered}\text { Pinciples, and } \\ \text { applications of of atifcial } \\ \text { neural networks. }\end{gathered}\) appolications of artificial neural networks.
Modeling of human neural network systems
Mechanisms of comeetitive learning self Mechanisms of compoittive learning, seif
learning algorithms, and associative networks Applications in signal processing, communications and control. (Lecture
problems 3 hours.)
590. Special Topics in Electrical 590. Special Topics in
Engineering (3) F,S

Prerequistes: Graduate standing in electrical engineering and consent of finstructort. Selectical topics thom recent advances in eleactical
engineering. Course content will vary trom year eng yeering Topuriss will be announced in the
to yeheruie of Classes. May be repeated to
So Schediue of Classes. May be repeated for a
maximum of six units. Lecture-problems 3 hours).
591. Adaptive Systems (3) S Prerequisites: EE 508 . Adaptive systems and
their uaplications to communication, control their applications to communication, control
and
pisheleal processing systems. Lecture problems 3 hours)
605. Advanced Mathematics Seminar for Electrica
Engineering (3) \(F\) Prerequiste: EE 505 or consent of instructor.
Avarcod topics in ineaz and non-inear.
Ordinary and partial differential equations. Avdrancal and partial differential equations,
integral transtorms and contormal mapping.

Applications to electrical engininering. Writing
and presenting a report on a topic chosen ftom and prepoveved list. This course is s recosmenmonde for students planning a Ph
research. (Seminar 3 hours).
610. Seminar in Circult Theory and Design (3) \(F\)
Prereququistes: EE 509 and dither EE 510 , or 511
or 513 . Intensive study of current protenion or 513 . Intensive stacdy of current protesasional
Iiterature and recent technicues related to iltierature and Iecent techiquues
circuit theory. (Seminara 3 hours)
\({ }_{6} \mathbf{6 3 0}\). Seminar in Electronics (3)
F,S

Prerequistes: EE 531 or 532 or consent of
instructor. Intensive study of olectedted topics of
current professional literature and recent
current profesesional ilierature and recent
techniques related to electronics. (Seminar 3
hours)
hours)
Systems (3) S
Prerequisites: EE 540 and at least one trom EE
\(541,542,543\), and 545 . Study of selected topicas in computer systems in which receent
significant acvancos have been made significant adran act
(Seminarar h hours)
650. Seminar in Power and
Energy Systems (3) FS

Prerequiste: At least one of EE 550
Prerequibite: At least one of EE 550,551 or
552 . Study of selected advanced topics in the

\({ }^{\text {(3) }} \mathrm{s}\) Seminar in Control Systems (3) S

Prerequuiste: At least one of EEE \(570,571,572\),
or 573 . Study of selected topicas in the areas or 573 . Study of selected topicis in the areas of
syntesis and deign of optimu
systems. (Semineara 3 hours.). systems. (Seminar 3 hours.)
680 . Seminar in Communication 680. Seminar in Communication
and Signal Processing Systems (3) S

Prevequisite: At least one of EEE500, 581,583
or 585 . Study of selected topics in or 585. Study of selected topics in
communication
(Seminetems and signal processing communication sytems and signal processing.
(Semminar 3 hours).
697. Directed Research (1-3) F,S 697. Directed Research (1-3) F,S Prerequistes: Graduate Standing. Theoretioal
and experimental probems in electical engineering requiting intensive analysio. 698. Project or Thesis (3-6) F,S Prereauioite: Advancement to Candidacy.
Planning. preparation and completion of a Planning. preparation and completion of a
thesis in electiol engineering. May be
repeated to to toal of of units

Engineering and Industrial Technology

Department Chair: Tesfai Goitom Department Offici: Industrial Telephone: (310) 985-4271
Faculty: Professors: Tesfai Goitom, Stephen S. Heineman, Emanuel Jarasunas, Nicholas C. Voulgaris,
Jay Webster; Assoclate Professors: Jay Webster; Assoclate Professors:
Anastassios G. Chassiakos, Asfaha Gebre-Meskel, Henry J. Krauser, Satish P. Singhal, Ray R. T. Wang, William H. Welch, Donald E. Zimmerman; Assistant Professo
Nezih Gunal, Tom L. Robinson
Undergraduate Advisors: Nezih Gunal (Construction Management) ay R. T. Wang (Electronics), Tom L. Robinson (Quality Assurance)
Certificate Advisors: Stephen S, Heineman (Safety Operations), Emeritus Faculty: Robert C. Brice, Arthur W. Grossman, Glenn E. ayes, Paul L. Kleintjes, James L
Young.

\section*{Department Secretary:}

Eleanor L. Caplan
Students desiring detailed
information should contact the department office for referral to one of e facuity advisors. Engineer
The advisory council, composed of eaders actively engaged in areas of echnology with which the program is ooncerned, continually provides industrial developments in methods, materials and techniques so that the
program reflects the best of current program refictics. The members examine various aspects of the program and make recommendations for changes facilities. Present membership in the council is made up of representative from the different sectors of the Programs
The programs in the Engineering and Industrial Technology (ET)
Department are designed for students
who demonstrate an aptitude and promise for high level technical work
with related administrative and with related administrative and management responsibility. Leadership awareness and abily
integra to the curricula and accomplished through a combination
of lectures, seminars, discussions and of lectures, seminars, discussions and
workshops which expose the student workshops which expose the studen
othe real world of industry and the eadership challenges that it offers. Emphasis is placed on the
technological as well as the sociological and managerial aspects of modern industry.
The ET programs have been designed to accommodate students
who may wish to enter the University in a four-year program, or who may wish to transfer credits earned at other colleges or approved technical
miltary service Schools. It is recommended that prospective students, prior to submitting an
application for admission, be advised application for admission, be advised
by a member of the Engineering and Industrial Technology faculyy to discuss departmental requirements
and the admission requirements of and the admiss
Accreditation Information The Construction Management program which is accreditied by the American Council or
Education (ACE). ABET accreditation is pending for othe programs.
Bachelor of Science Degree in Engineering Technology Students desiring this degree must select one of the
options available:
Construction Management (code 3-4376
Construction Managese of the to provide students the opportunity to obtain a quality education in
constricction which will qualify them for positions of leadership and
responsibility in the construction
industry.
Every effort is made to provide a well integrated program which will give the student the opportunity to give telop the proficiencies necessary
der for a successful, professional career program is a member of the

Associated Schools of Construction an organization dedicated to the development and advancement o
construction education. The constructioction program is accredited by the American Council for Construction the American Coun)
Education (ACCE
Electronics (code 3-4377):
This program focuses on the
application of scientific and engineering knowledge and methods with technical skills to the field electronics. The electronics
technologist is applications oriented building upon a background of applied mathematics including the concepts and application of calcu
The Manufact The Manufacturing major prepares
individuals in the various skills. necessary in adapting new scientific knowledge to new systems.
Research in the field of
manufacturing has produced much new knowliedge in recent years. Many of these achievements have been
unused due to the shortage of manufacturing technologists specifically trained to convert this information into practical devices and
systems. The Bachelor of Science syith a major in Manufacturing is a technologist who can bridge the gap between scientific advancement and systems.
Quality Assurance (code 3-4379) Commitments and challenges increase the quality of American goods and services have become
maior focuses and are being given top priorities in business and industry. There is a growing need for people who have the necessary skill
the technical and managerial aspects the technitical and managerial aspect of Quality Assurance. The scope of
modern businesses. Qualypand, opening up new
thallenges for graduates in this field. Quality Assurance graduates are prepared to sence, quality con quality assurance, metrology,
software quality assurance. configuration management, statistica process control, quality engineering
and testing aspects of industry. This and testing aspects of preparation includes both
manufacturing and service companies.



Option in Quality Assuranc
Lower D
(1), ET 244L Dision: ET 220 (2), ET 24 Upper Division: ET 302 (2), ET 312

(3), ET 420 (3), ET 496 (3) Select four units of approved
electives in consultation with an adviser from the following: ET 314
(2), ET 318 (3) ET 374 (3), ET 409
(1-3). ET 461 (3), ET 472 (3) ET 497 (1-3), ET 461 (3), ET 472 (3), ET 497 (3)

Fieldwork Requirements: Fieldwork experience is required,
consisting of no less than three months (or equivalent part-time) of employment in an approved industry or governmental agency. The stude
must continuously hold a position equivalent to a technician or highe which affords the opportunity to
exercise responsibility usually given those who have completed two years of college. The fieldwork must be completed prior to graduation, be
certified and approved by the faculty of the Department.
\(\underset{\text { (codite 1-4010) }}{\text { Facilition }}\) Opertificate (code 1-4010)
The Certificate Program in Facilities
Operations is designed to qualify the graduate to serve in plant engineering, industrial construction
coordination, facilities development and design, plant layout, and facilities project management. Examples of the myriad positions available to the graduate of this program include
facilities planner, construction supervisor, facilities or plant supervisor, facilitites project analy
and faciltes designer analyst
This program provides the Fac This program provides the Facilities
Operations graduate with a depth of technical knowledge in facilties operations-oriented technical courses
as well as the knowledge of as well as the knowledge of behavioral sciences essential for
managing technical functions.

Requirements for the Certificate in acilities Operations
1. The Certificate in Facilities
Operations may be earned concurrently with or subsequent to the
baccalaureate degree accalaureate degree. 2. This program is open to al
majors who have fufilled the prerequisites as stated below. 3. The program requires a total of 5 units as specified below. a. The completion of supporting technical courses chosen in
consultation with an advisor. b. The following 25 units of facilities
operations oriented courses are perations oriented courses are required: ET 221, 321,
\(432,433,434\) and 436 .
4. Any deviation from this program requires the written permission of the program adviso

\section*{Safety Operatil
(code 1-4020)}

The Certificate Program in Safety Operations is designed to prepare students for safety positions that
require a strong background in the require a strong background in
technology of safe industrial environments. Examples of this kind of position are manufacturer's safety representative, manufacturing tacilittie
safety analyst, traffic safety analyst, and representative of California or Federal agencicies involving public satety. This interdisciplinary program
provides the student with a depth of technical training in sately, and related
technical courses including the technical courses, including the experiences in human resources management necessary supervise safety programs.
Requirements for the Certificate in Safety Operations:
Operations may be earned
concurrently with or subsequent to the baccalaureate degree.
2. This program is open to all
maiors who have fulfilled the required majors who have futtiled the 3. The program requires a total of 24 units as specified below: a. The completion of supporting
technical courses chosen in technicaltiourses an advisor.
consultation with an ade b. The following 24 units of safety operations-oriented courses are
required: \(\mathrm{ET} 207,307,308,309,310\) required: ET 207,
401,404 and 410 .
4. Any deviation from this program requires the written permission of the program advisor.

Engin
All courses in this Department are
Al courses in this Department
Traditional Grading Only unless otherwise stated.
Lower Divisio
101. Introduction to Engineering, and Industrial Technology (i) F,S Prerequisite: Sophomore standing. Sunvey of the
profoesisanal activities and ennironments of the engineering and industrial technologolst. Courso
covers the roie of the technologoist in American industry, the history of technology and the growt and future of those poofessionals who hold the Bachelor of Science degree in Engineering and
Industrial Technology. Credit:No Credit grading only. (Leeture-Discussion 1 hour
170. Industrial Drafting (2) F,S Prerequisite: Sophomore standing. Graphic
communication and drawing, use of instrumente. lettering. dimensioning. and detaling of engineering drawing. drating procedures.
Introduction to blueprint reading and computer introduction to butuepint reading and computee
aided d drating. (lecture 1 hour, laboratory 3 alded drataing. LLe. Lat 202. Probability and Statistics for Technology (3) F,S,SS
Prerequisite: Hilgh School Algebra. Statistics and probability theories, sampling, correlation,
regrosion as applied to tochnology. (Lecturee
(3) F,S,SS

Prerequistes: MATH 122 , PHYS 100A\&B. Force equilibrium, centrocids, truseses, beam, momen trames, machines, triction, section properties measurements. (Lecture 2 hours. Actuity 2 hrs) 205. Computer Applications

Prerequisite: None. Survey of computer Prevequisite. None. Survey of computer
appicaions in busines, manutacturing,
research and simulation research and simulation. (harr)
hour 205L (1) Computer Applications Lab Preerequiste: none. Coreaquiste: ET 205 . Laboratory exercibes in Basic programming to
solve problems in business, manutacuturing, research and simulation. (Laboratory 3 hours.) Lab flee: 115.
207. Ergonomics (3) F,S

Prefequisite: sophomore standing. Interface
between people and machine related to work between people and machine releted to work
area, design and use of equipment, protective
eacuipment and lifesuppor equipment and life-support requirements for
hazardous envitonments. (Lecture--iliccussion 3 hours).
220. Fundamentals of Inspection

Prerequisiste: none. Theory and application of
 inspection, inspection exercises. (Leeture 1 hour,
activity 2 hours)
\({ }_{\mathrm{F}, \mathrm{S}}^{221 .}\)
Preerequiste: ET . 170. Architectural, structural,
topographic, plan and profies and sureying dopographic, plan and profile and surveying
drawing practices, ues of darating machines,
office practices, detall blueprint readings. office practioces, detal bluepritm
(Lecture 1 hour, labocatory h hours.)
225. Construction Surveying

Preerequistes: ET 221 and High school algebra
 methods as appied to construction layout.
of level and transit for location and control of of level and transit for hocation and control, area
structures, vertioal and horizontal coll determination, care and use of instrum 225L. Construction
\({ }^{225 L}\) Leonstructio
Preerequiste: ET 221 ; corequisite: ET 225.
Laboratory exercises on land
Laboaratory exercises on Iand measurement.
differential and profie leveling, construction
 232. Fundamentals of

Prerequisite: ET 221. An overiew of conatruction Preerequisite: EI 21. An oveniew of construction
trends. Etects of scientific and engineeng
actancements on the building team acting as advancements on the building team a ating as
consmitants to the archititect. Fied trips.
(ectura-Disusion 1 hour. Activity hours.)
 235. Concrete Construction (1) F,S

Prerequistes: ET 204, ET 232, Chemistry 111A.
Conorete terminology, tools, prastices and
buididing condes. Includes concrete form
 placing. -finishing and our
(Lecture-Discussion 1 hour)
235L. Concrete Construction Laboratory (1) F,S Prerequisites: CHEM 111A, ET 204, ET 232:
 support of ET 235, Concretete Construction.
Develop conceete mix design and prepare con-
crete samples tor teesting, such as compressive
 244. Machine The (1) FS 244. Machine Tools (1) F,S
Preerequiste: None. Operations and use of the
conventional and non-conventional machine
 441. Mochire (cature Discussion 1 hour) 244L. Mach
(1) \(F, S\) Prerequiste. reeracuisite: None. Corequiste: ET 244.
Labocatory exercises using conventional and honconventionel machine tools...nNtonal open to (Laboratory 3 hours.) Lab tee: \(\$ 15\).
250. Circuit Analysis I (2) F
 250L Fundamentals of DC theory, units of
neasurementis, systems of units. Current
 Series and parallel circuits. Methods of analysis
and selected topics. Neework theorems such as and selected topicice. Networkt theorems such as

250L. Circuit Analysis I Paboratory (1) \(F\) Preerequisites: PHYS 100 A\&B; corequiste ET
250. Laboratory exerices will be conducted AC and DC ciroutrtusus wing proto concuarted ond
power supplies, muti-meters power supplies, multi-meters, function genera-
tors, Larts, osclilosocopes. and tequenc.
(Laboratory 3 hours.) Lab fee: \(s 15\). 252. Circuit Analysis II (2) F,S Preerequistes: MATH 120, PHYS 100 ABB, ET
\(250,250 \mathrm{~L}\) study of circuit analysis techniques in AC, including network theoriese meshs annd nocdal analpsisis.transientst, time domamin and phosoris,
magnetio circuits, siuusidal and non-sinusoidal
 and bandstop). (Lecture-Discussion 2 houra)
252L. Circuit Analysis I
Laboratory (1) F,S
Prerequisites: MATH 120, PHYS 100 A8B, ET 250, 2500 . corequishe: ET 252 LLabarabory
exercises will be conducted on AC circuits using exercilises will be conducted on \(A C\) circuits using
proto boards and \(A C\) power supplies, function
 255. Introduction To Digital 255. Introduction
Electronics (2) S

Prerequisites: ET 250, ET 250L Combinational
logic utirizing Boolean algebra and the binary
 Controls and control computers. This beginning
course induces Karnaugh maps, tuuth tables, coding, switching circuits, converters and logic
circuit elements. (Lecture-problems 2 hours.) 255L. Introduction To Digital
Electronics Laboratory (1) S Electronics Laboratory (1) S Prerequisites: ET 250, ET 250L; corequisite ET
255 LLabotary exercises in basic logic icruits. 2555. Laboratory exereciseses in basic logic circuits.
Topics included are breatboarding, basic gates,
and combinational ol orruits. (Labooratory 3 hours.) Topics include
and combinat
Lab teo: 115
260. Solid-State Electronics I (3) F Prerequisites: ET 252.252L. Analysis and design of solid-state electronic circurts using
diodos, bibola, unjuinction and fieldeffect
devices
260L. Solid State Electronics I
Laboratory (1) F
Prerequistes: ET 252; crequiste ET 280 .
Laboratory exercises in breadboarding and measurements of solid-state circuits utilizing all
types of eelotronic measuring equipment. (Laboratory 3 hours.) Lab fee: : 15 .
264. Industrial Tooling (1) \(\mathbf{F}\) Prerequisites: EI \(170,205 L\). Design of tools for
production. Typical tooling problems include production. Typias. Toting problems include
working drawings and harchware. (Lecture-
Discussion 1 hourt) 264L. Industrial Tooling Preerequibites: ET 170, 205L: coreacuist: ET 264 .
Labocatory experiments in tool design in relation
 265. Welding Metallurgy (1) \(F\)

Theory and applications of current and emergent
joining processes with consididation of welding
ability of metals and thermal effects on 265L Welding Metallurgy Laboratory (1) \(F\)
Coreequiste: EIT 265. Applications of current and emmergent idining procosses with consiridratitions
of weldability of metals and themal effects on properties. Welding techniques in selected
procoseses exercised in liaboratory. (Laboratory 3 procossese exercicesd in
275. Circuit and Electronic

Devices (3) F,S
For those transter students who satisty the lower
division Electronics courses. Review of \(A C\) and DC theory including O Ohm's. law. Kivewhoffe and mesh and nodual analysis, complex numbers and sinusooidal wave forms. Analyeis and design of ransistors, Elementantary digital functions and theif mplementation. (Leecture- Discussion 3 hours.).
286. PASCAL Programming
(2) (2) \(F\) Preerequisites: ET 205, 205L, Basic concopts of
fle organization and retrieval of data from magnetio tape and diso storage meme
introduction to PASCAL structured drooraming Introcuction to PASCAL stuctured programming
language
(Lecture-(Lecture-Discussion 2 hours.)
286L. PASCAL Programming 286L. PASCAL Prog
Laboratory (1) F
Prerequisites: ET 205, 205L: corequiste: ET 286 . Laboratory exercibes on PASCALL proveramming. Upper Division

\section*{300. Industrial}

Wrierequistes: ET205, 205L, English composition, of technologogical information. and inmetrpuetitaion. iorms and procedures of industry, with computer 301. Materials of Industry (2) F,S physical and mechanical 111A. Study of physicical and mechanical properties and
applications of industrial materials. (Leoture. Discussion 2 hours.)
301L. Materials of Industry
Laboratory (1) F,S (1) F,S
rerequisites: ET 204, CHEM 111AA; corequiste:
T 301. Labocratory investigation and expeimentid
 302. Industrial Electronics 302. Indu

Prerequisite: PHYS 100B. An overiew of
Pectronics principles and applications in electronics prinoiples and applications in ectronics manulacturing industries including
distratibution.
power Cecture-Discussion 1 hour, Activity 2 hours 304. Applied Mechanics Prerequisite: ET 204 Analyio \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) rierequisist: ET 204 . Analysis of strength and
ridigity of stucturul members in resisting applied oroces, stresss, strain, shearn, moment, doffections, combined steseses, connections, and mo
distribution. (Leeture: Discussion 3 hours.)
306. Manufacturing Processes (3) \(\mathrm{F}, \mathrm{S}\) Preerequistes: ET 301,301 . Survey course of
the variety of methods used in industria)
 fasten industrial
Activity 2 hours.)
307. Industrial Safety (3) F,S,SS Prerequisite: ET 300 . Survey of industrial safety administration, engineering and management Emphasis is placeo on the role of the first line healhthur work enviroment for employeec
introcuction to supporting computer resolree Introduction to supporting computer resourcee
usued in the safely field. (Lecture- Dibcussion, used ins.)
hours.
308. Systems Safety (3) F Prerequisite: ET So7. Sayefy assurance as it
relates to management policies, work planning relates to management policieg, work planning,
deoign, manuracturin
implementheds and
and the mplementation of safety prochedures. (Leoture
Discossion, 3 hours)

\section*{309. Industr
(3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)}

Prerequisite: ET 300. Theories, principles, and concoeptste. Industrial Adminies, pritincioples, and and
is placed on the supenisery functions of Is placed on the supenisory functions of
planing, organizin. mottating. directing.
controlling and stafting. Introduction to basic models and tools ind ilvding supporting to bampuster 310. Industrial Hygiene (3) S Prereqquiste: ET 307 . Detection, analysis and
control of heath hazards that affect the body and atmosphere in the induastial environment.
Lecture-Discussion 3 hours.) 311. Quality Assurance (3) ,S,Ss
Prerequisiti: ET 202. Quality assurance principles
and practices in indusutry. ind uding manage and practices in industry, including managemement
concopsts inspection practices, coosts of quality
and testing function and testing functions. (Leeture-Discussion 312. Statistical Quality Control (3) Prerequiste: ET 311 . Statistical process control
 and improvement of product quality, control
chats, inear corfelation; sampling proceedures, htarts, inear cortelation: sampling procedure)
statifacion, cause and effeot analysis, process
capabilyy and introduction to design capability and introduction to depign
experiments. (Lecture-Dicussion 3 hours.)

\section*{313. Metrology (1) F,S}

Preerequisites: ET 220, 311 I Instrument calibration, standards and precisison. meesurumement caltoreation, qualty
assurance and reliability. (Lecture-D ilscususion \({ }^{313 L}\) L. Metrology Laboratory (1) F,S

Prerequiste: ET 220, 311; corequiste: ET 313 Laboratory experiments in instrument calibration
standards and precision measurement tor quality
assurance and telibilin assurance and deliability. (Labooratory 3 hours) (2) F,S

Prerequisite: Junior Standing. Improving
productivity through quality. Cultural infuences
quality cost reduction. Oranizational and leadership influencose on ind
(Leecture-Discussion 2 hours.)
318. Food, Drug, and Cosmetic Quality Control (3) F Preerequisite: ET 311 . Technical diciciplines and
equirements for the contro of qualiry of focds. drugs and cosmetios, regulaterey laws governing hese field as well as the accepted practices of quality co

\section*{320. S}
2) \(\mathbf{F}\) (ware Quality Assurance rerequisite: ET 205, 205L. Theory and practices of software Quaility Assurance. Curse emphasizes Government specifications such as
221. Construction Supervision (2) s

Prerequisites: ET 235, 2235L. A study of the duties
and responsibilities of construction on-site and responsibilitites of construction on-site superisory personnen. Emphasis is placed on the ffficient on-schenctule operation. (Leoctur Discussion 2 hours, 322. Mechanical Equipment for
Buildings (3) S Prerequisites: Physics 100B. Principles and current practices in water supply, waste disposal.
heatingi, ventiating. ar
protection. (Leoture-Discoussidition 3 hours.). 323. Soll Mechanics Technology (2) \(F\) Prerecauisit: ET 3 3.4, Soil composition,
desciption, and clasasifaction: soil compaction description, and classification; sopil compaction
determination of physical ppoperties of soiliz (Leeture-Problems 2 hours.)
323L Soils Mechanics
Technology Laboratory (1) F Prerequisites: ET 304 ; crequisite ET 323 .
Latobatory investigation and experiments in the
phenamen phenomena of sill mechanics. Field
(Laboratory 3 hours.) 325. Construction Methods (3) F,S
Preeraquistes: ET 235L. 223L. Properties and applications of mateerials for the construction
industry. Current practices in fabbication, and industry. Current practices in fabication, and
erection methods used in industial, commercial and heay construction. Field Tripp. (Lecture-
Problems 3 hours.) Problems 3 hours.
326. Structur
326. Structural Analysis and
Design for Technology (3)

Prerequisites: ET 304, 325. Analysis of statistically determinate and indeteminiate structures,
induring turses, trames, beams and bridges. inducuding trusees, trames, beams and bridgeses.
Deeign of reintorced concotete and reintorced masonry builings in compliance with the
Unitiorm Building Code. (lecture-Problems 3 Unitorm
327L. Computer Applications for Construction Management Laboratory (1) F,S
Prerequisites: ET 205, 205L, 221. Laboratory exercises in computer ssytems to control
construction operations in the building industry.
development of construction management
games. (Laboratory 3 hours) 328. Construction Safety (2) F,S Prerequisite9: EI 225, 225L, 232 , Terminology, sately functions, accident costs, workman
compenation and libility laws. O.S.H.A., and
 codes, reguiations and field safety methods
pertinent to the construction induuty. Field tripes. pertinent to the eonstruction ind
(Lecture 1 hour, Activity 2 hours.)
330. Construction Estimating
(3) F,S

Prerequisites: ETT 325,327 L. Theories and
systems of building estimating syytems of building estimating. Cuantity survey
techniques, standard tommats, clasifiction and
anayysio of work, organization of tetails, unit coost analysis of wark, rgaanization of retails, unit coot
detemmination, simulated bids. Lecture 2 hours Aoterminityaton, hours.)
Alt
\({ }_{\text {F.S }}^{341 .}\) Solid State Electronics II (3) F,S Preerequisites: ET 280, 200L. Milier's Theorem, integrated circuits, feediack, operational
ampififers, Fourier series, distotion modulation amplifers, Fourier series, distotrion, modulution,
phase-lcoked lopos, ineara and non-tinear circuits, and
hours.)
341L. Solid State II Laboratory (1)
F,S Preerequisites: ET 260 , 280 : corequisiste: ET 341 .
Laboratory exercieses in design and measurement of various circuits using opepational amplifiers. comparators, regulators, silicon oontrolled
 350. Motors and Generators (2) \(F, S\)

Prerequistes: ET 252. Study of electric rotating machinery, ths theories, principles, design and
applications in and aumation induutries. LLectureProblems 1 hour.)
350L. Motors and Generators
Laboratory (1) \(F\),
Prerequiste: ET 252;
Preerequiste: ET 252; corecauiste: ET 350 .
Laboratory exercibes in applications and design of rotating mactines in .popicications overed deresign machines, synchronous machines, senvomotor,
ttep motor, and control circuits. (Laboratory 3 step motor, and cor fours) Lab fee: \(\$ 15\).
F,S
Prevequisites: Et 341,341 L. Application and
basicu desiosn of analog and digigtal control physical and electrical propertios of thermal, physical and electrical propertien of themal
meochanical and potical transocucers with (lecture-
Procbiems 2 hours.). 360L. Control Instrumentation Laboratory (1) F,S
Preerequishes: ET 341, 341L; corequisite: ET 360 . Leaboratioy exercices in douveloping and
measuring varius control systems utiving measuring various control systems utiring
operational ampififers, tansyucers, themo-
couldes bridone couples, bridgen, and various pressure devices.
(Laboratoy 3 hours) L lab fee si5.
361. Metallurgy and Applications (2) F

Preerequisite: ET 306 . Physical and process
 including metallurgical principles, theory and
practices in themal treatment processes to
ferrous and non-terourus metals fertrous and nor-ferours metals, plastic
deformations in metas and powder metalurgy. deformations in metals and
(Leoture-Dicoussion 2 hours.)
361L. Metallurgy and Applications Laboratory (1) \(F\)
Prerequiste: ET 306 . coreauiste: ET 361 .
Labocratory exercises in metalurgical specimen Laboratory exercisese in metallurgical specimen
pereparations for microscopic examination of metal structures, heat treating and teote
evaluations of both ferrous and non-ferrous evaluations of both ferrous
metals. LLabocatory 3 hours.)
362. Heat Treating (1) S

Prerequisites: ET 361 . 36 LiL. Theory and Preerequisites. ET themal treatement procosses to
applicaios
non-erious and ferrous metals with reviting non-terrous and ferrous metals with resuting
changes in properties as used in current phocuction. (Lecture hour.)
\({ }^{362 L}\). Heat Treating Laboratory
(1) S

Preerequishtes: ET 361 . 361 L: corequivite: ET 362.
Metalographic stucty of heat effects of themal treatments of metals, and mechanical propertien
of metals. (Labocatory 3 hours.) Lab tee: \(\$ 15\).
363. Kinematics of Mechanisms
(3) \(F\)

Preerequisites: EI 170, 304 . Mathematical and
graphical approaches to analyze the motion of graphical approaches to analyze the motion of
mechanisms, for further machine development mhrough studuies of displacement, velocoity and acceleration of mechanivace elemenests. (Lecture 65. Industrial Fluid Power (3) S

Preerequistes: PHYS 100A, ET 302. Fundamentala and application of hydrauclic, ppeeumatio and
vacum poweras us use in urrent manutacturing
plants. (Lecture-Discussion 3 hour.) 71. Nondestructive Testing (1) F,S

Preerequistes: ET 311, 361L. Theory and concopts on non-destructive testing of matereials, including
ultrasonic. magnetio particle eddy curren penentant and radiographic tests. (Lecture
371L Nondestructive Testing Laboratory (1) F,S
Preerquibites: ET 311, 361L: corequiste: ET 371 Laboratory exerctises in the use of non-destructive 374. Plant Planning and Layout (3) F,S Prerequiste: ET 170. Planning practices
procedures and requirements for laying out Procedures
industrial facitr
Activity
1 hour.)
386. Sensor Based Computer Applications (2)
Preerequiste: EI 286L. Theory and conceppts of




 Contracting seevices; furnititure standards; security systems and plann
Discussion 3 hours.)

\section*{438. Structural}

Design (3) F
terequisite: ET 326 . Anayysis and design of ith the Uniform Builing bodidiggs in compliance Activity 2 hours.)
40. Construction Projec
Management (
(3)
F,

Prerequistes: ETE 424, 428, 431, and senior tanding. Principiples of project management are
applied to a case study of an actual construction applied to a case study of an actual construction
ppoject. Topics include site etailities planning,
procurement, shop drawings, scheduling coorrinating
administration.
subontracts
Relationships and conth contract
with and
desionerss and ond other officials with oune analyzed.
441. Theory of Electronic Control (3) S

Treequisites: ET 360L, 387L. Procedures for the lesign, preparation, and evaluation of electronio ystems that control manufacturning and ensing, programming, and actuating operation Lecture-Discussion 3 hours.). rerequuistes: ET 255, 255L Sequential 10
 Integrated circoutst to logic controls. Counters
data storage, registers, circuit synthesis, and data storage, registers, circuit sy
442L. Computer Circu
Laboratory (1) F,S
Laboratory (1) F,S
Prerequisites: ET 255 , 255L; corequisite: ET 442.
Laboratory stucy of digital computer circuito Lesignatand implementation. Standuard derignoing
and troublestocting and troubleshooting procedures will be
discussed. Topics covered are muthibrators discussed. Topics covered are mutrvibatiors and memory. (Laboratory 3 hours.) (3) F,S

Prerequiste: ET 360 . National Communication

 optics, microwave, impedance matching, and Smith chart. (Leoture-Discussion 3 hours.)
445. Microelectronics (2) F,S
 mirecoirrouits for
(Lecture 2 hours.)
445L. Microelectron
Prerequisist: ET 341L, 442L; corequiste ET 44 Laboratory exercibess in the processing of
thick-film and thin-film materials, ultrasonic and thermocompression wire bonding and lasee
equipment utilization
hours.) Lab fee: S
emphasized. (Laboratory 460. Electronic Packaging and
Design (2) \(\mathrm{F}, \mathrm{S}\) Design (2) \(\mathbf{F , S}\)
Prerequistes: S 341

41, 341L. Techniques Prerequistes: ETT 341 , 341 L . Tecchiques and
nateterias used in making permanent versions of
 dircuits, inculuding printed dircuit, wirie-wrap, and
 mplementations. Methods of enclosure,
including safe handling of AC power. (Leoturencluding sate handling
Discussion 2 hours.)
460L Electronic Packaging and
Design Laboratory (1) \(\mathrm{F}, \mathrm{S}\) Prerequisites: ET 341 , 341L: corequiuite ET 460 Project oriented laboratary exercilies in various
methods of making permanent versions Becits. Handd-on exercicies in printed circuit

 461. PERT/CPM (3) F

Preerequisites: ET 205, 205L. 306 . Project planning, scheduling and control by ortitial pati
method, work breakdown structure, mater and control level scherdules and miestone chatt. cost optimization through resource allocation
Computer and noncomputer methods presented Computer and noncomputer
(Leeture:-Poblems 3 hours.)

\section*{465. Automated Production}

\section*{Systems (3) S}

Prerequisites: ET 410, 418, 475. Application the pininiples of automation, including
considication of the procuution function

 involved in the manutacturing processe.
Evaluation of different producution conditions to
select the beest application and level of select the besta application and level
automation. Lecture-Discussion 3 hours.)
466. Foundry Technology (1) S Preerquiste: ET 306. Foundry practices and caresting techniques used in industry.
(Lecture-Discussion 1hour) (Lecture-Discussion 1 hour) 466L. Foundry Tec
Laboratory (1) S Prerequistes: ET 306; corequiste: ET
 laboratory environment. (Laboratory 3 hours.)
Lat fee: : 15 .
472. Computer Integrate

Manufacturing (3) F
Preerequistes: ET 205L, 300, senior standing. Role of computers in controlling the manutacturing computer automation, computer architectures used in manutacturing, computer-aided design, manuufacturing systems, computerctiontroled
manutacturing equipment, simulation, qualify control, programming
(Lecture-Diccussion 3 hours.)
474. Manufacturing Processes Theory (2) S
Prerequiste: ET 244 L . 370 L . 466L. Metal removal processeses emphastzing miling. grinding turret

Application of machinability theory to practice
Production feeds, speess, and tool wear 474L. Manufacturing Processes 474L (1) S

 processeses emphasking milling, grinding turre
and tace \(\begin{aligned} & \text { athe } \\ & \text { (Laboratory } 3 \text { hours.) }\end{aligned}\) and outter sharpening. (LLaboratory 3 hours.)
475. Proposals and Specifications
(3) F,S (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: ET 418 . Development of the
technical knowiedge neecosary to structure an
 of thi different forms of letters of transmital
inquiry, bidding specifications and a diagnosisis of the financili, teschnical and management aspects
of a proposal, leading to a contract. of a proposal, leading
(Lecture: Activity 3 hours.)
486. Data Structures (2) F

Preerequiste: ET 388 L Data structures and
applications. Choice and implementation of applications. Choive and implementation of
appropiate data structures for applications.
 lists, trees, and assorted algorithms. Introduction to search and sorting. File orgen
techniques. (Leecture. Problems 2 hours.)
486L. Data Structures Laboratory 486L F
(1)
Prequisto
Prerequiste: ET 38 L; corequiste: ET 486.
Labocatory exercises in data structures and Labocratory exercises in doata sering language
apliciton. A eursive programming
will be used. (Laboratory 3 hours.) Lab fee: \(\$ 15\). 488. Microcomputer Systems
(2) F,S
(reequiste:
 micrecomputer architecture, software includuct assembly language, central procoessing unit,
nputioutput, memory manipuation, and interfacing, (Lecture-Discussion 2 hours.) 488L Microcomputer Systems aboratory (1) \(F, S\)
Prevequisite: ET 442L: corequiste: ET 488.
Laboratory
exercises
in
microcomputer archite eture, assembly language programpunieng, and interfacing. Topics covered are central and inputtoutput operations. (Laboratory 3 hours.) Lab fee: \(\mathbf{s} 15\).
39. Computer Interfacing (2) F,S Preerequistes: ET 442L, 488L. Study of theories and techniquese that are used in peripheral tetacing, Paralel interfacing, titining, UARTs. (Lecture-Discussion 2 hours.)
489L. Computer Interfa
Lereoruister: ET 442 F, 4888
Cabocatory exercises in computer interfacing applications and design. Avaluable computer system and its assembly language instructions
will be used. (taboratory 3 hours.) Lab fee: \(\$ 15\).


492L. Robotics System Laboratory (1) S
Preerequishes: ETT499, 489L. Corequisite: ET 492
Laboratory:
exercicies on
robotic
 sensing. programming and actuating
sub-ystems within industrial and aducational
lobots (abouto obots. (Laboratory 3 hours.) Lab tee: \(\$ 1\) 494. Applied Systems Peveroquistes: ET 488L (2) F, development concoepts, prinipiples, and pryactices to a comprehenesise systems deveraticmen
project. Hands-on approach is used to analye propect. Hands-on approach is ised to analazze
design and document a realistio syttem. Actual
use of project management inteniew use of project mananeomentistioseriewing. Acturus
analysis, structured
methods,
behavioral
 494L Applied Systems Pevelopment Project Lab (1) F,S Laboratory. exercioses on anterapisied eve system
development. Emphasis will be on systems development. Emphasis will be on syytems
development concepts, principles, and practices aje compretensive systems deveriop

\section*{495. Manufacturing Systems} (3) F,S Prerequiuithes: ET 418, 460. Application of
analytical, planning and control technicues to th
 equipment, inventories, personnel and suppliee
usued in the provuction of roducts and serices
(Lecture Discussion 3 hours) used in the production of prod
(Leecture Discususion 3 hours.) (3) F,S Sal Quality Management (3) F,S
 LLecture Discussion 3 hours.)
497. Advanced Study in
Technology (3) F.S.SS

Preerequistes: Senior standing in industria
 done within the area of specialization designed
for the indusurtial tocchnologist who desires
uporading in hither fold upgrading in hissher fifel of conconentation.
Covers new intormation in or elated to industrial Covers new intormation in or related to ind
lechnology, (Leeture-Dicuission 3 hours)

\section*{Mechanical Engineering}

Department Chair: Hillar Unt Department Office: ECS Building, Room 651
Telephone: (310) 985-4407 Faculty: Professors: Mihir K. Das, simon desoto, Walter E. Edelman, rnest R. Miliares, Edward Miller, Ornwin Ohtmer, Leonardo Perez y Perez, Bruce J. Torby, Hillar Unt, Richard Williams; Associate Professors: Karl-Heinrich Grote,
Sally Mclnerny, Reza Toossi, Jalal Torabzadeh, Hsien-Yang Yeh; Assistant Professors: Ramin Esfandiari, Hamid R. Rahai, Hung V. Stuart D. Hanno, Chester R. Kyle,
Mark N. Larson, Wan-tswan Tsai, Paul Van Valkenburgh.
Emeritus Faculty: Chester R. Kyle, John L. Mason, Herruf P. Nielse, Ching H. Tsao, Hans H. Vandermeyden
Undergraduate Advisor:
Graduate Advisor: C. Barclay Gilpin Department Secretary:
Donna Paoli
The Department
Students desiring detailed
information should contact the
department office for referral to one of department ottice ofs
the faculty advisors:
Industrial-Management Engineering Coordinator, Materials Engineering Coordinator, Ocean Engineering lastics Processing and Design Director, Certifificate in Energy Engineering Director, Undergraduate Advisor, Graduate Advisor.
All upper division Mechanica
Engineering courses requi
proficiency in FORTRAN
programming. Before attempting any upper division courses, studen
expected to have completed expected to have completed
satisfactorily all lower division m courses. It is a departmental policy that a grade of 'C' or better must be departmental courses.
Majors must take a minimum of 32 units of basic science and
mathematics; students should see the departmental advisor early to determine whether they must take a biological science course
their science requirement.
Admission to any of the graduate programs requires a minimum GPA Alvisory and Develempt Advisory
Councils:
Councils:
ngineering ngineering is supported by a
rofessional Advisory and Development Council. This council executives from industry and government in Southern California. It function is to form a liaison between eep the administration and faculty informed of modern engineering practices.

\section*{BET Accreditation}

The Bachelor of Science in Mechanical Engineering program is for Engineering and Technology (ABET). Students enrolling in this program are strongly advised to arly as possible about the details 0 me ABET requirements in sciences areas.
achelor of Science in Engineering Degree Op
Modern engineering applications in all fields require new materials with properties well beyond those several years ago. New materials are needed tor such diverse applications as the supersonic air transport vessels, magnetic and semiconducting devices. Scientific knowledge in this area has expanded recentil at a rate comparable
experienced by the field of electronics. The materials option is dffered to meet the demand Course work is directed toward understanding of the properties materials in terms of their atomic structure, and emphasis is plater
the behavior of materials in engineering applications. The
laboratories have excellent equipmen for studies in this field and includ accilites for the determination of X-ray diffraction, and Scanning
Electron Microscope examination of Electron Microscope examination of reatment and the determination of properties at low and high emperatures
Requirements for the Option in Materials Engineering
(code \(3-4352\) )
Lower Division: M E 172. 205, 272
E 205: E E212, 230; MATH 122, 123,2
152.
Upper Division: ME 305, 322, 323,
330, \(371,373,374,375,376,459\), 476; CE 406; CHEM 371A; ECON
300; MATH 370A: approved electives 300; MATH \(370 A\); approve
o total at least 135 units. Eor information concerning admission to this program, Dlease contact Dr. Hillar Unt, Chair, Engineering.
Bachelor of Science in Engineering Degree Option in ndustrial-Managemen ngineering This is an interdisciplinary degree in
which both the S Administration School of Business Engineering provide coulses which enable the student to have a technical engineering background plus a good foundation in business
and management practices The and management practices. engineering courses through the junior year with an addition of business courses in accounting,
business law, management, inventory practices and operations research. The elective structure within this
option is such that the student may option is such that the student may
specialize in either engineering, or a specialize in either engineering, or a
combination of both engineering and business.
Requirements for the Option in Industrial-Management
Engineering (code 3 -4342)
Lower Division: ME 172, 205; CE
205: E E 212; MATH 122, 123. 224; ACCT 201; FIN 22
PHYS 151, 152.
 training must be broad and basic,
providing grounding in fundamentals


Applications should be sent to the department offic
(1) A bachelor's degree in an accredited curriculumi in mechanical
engineering, with a minimum GPA of engineering, with a minimum GPA
2.70; or: (2) A bachelor's degree in 2.70, a natural science or other
ent
and appropriate discipline with th undergraduate prerequisites in mechanical engineering be satisfied; (3) Graduate students must consult information concerning procedures and requirements for appropriate approval of their courses of study programs;
(4) The Writing Proficiency
Examination (WPE) must be ta Examination ( (PPE) must be taken and passed during the first semester
in residence. Failure to pass WPE will prevent registration in engineering courses in subsequent semesters. Courses taken after the semester
without having passed the WPE will not be counted toward any graduate engineering degree.
Advancement to Candidacy:
(1) Removal of all undergraduate
deficienciesas as determined by the
Department Graduate Advisor;
(2) Students may, at the discretion
of the Department Graduate Advisor
of the Department Graduate Advisor, be required to take
their chosen areas.
Requirements for the Master of Science in Mechanical
Engineering: Engineering:
(1) Completion of a minimum of 30 units beyond the bachelor's degree in upper division and graduate courses approved by the student's
Department Graduate
(a) A minimum of 21 units in engineering or mathematics
courses with 18 units of 500 -and/d courses with 18 units of \(500-\) a engineering:
(b) Six units of electives selected from approved upper-division or graduate courses from appropriate
areas;
(c) Completion of an acceptable
thesis. The thesis will be waived if thesis. The thesis will be waived
the candidate has published a the candidate has publishe
technical paper of a quality equivalent to a thesis.

Master of Science in Engineering (code 6-4301)
For requirements, see the
description in the College of Engineering part of this catalog. Courses (ME)
Lower Division
172. Engineering Design Graphics
\(1^{(3)}\) F.s 1 (3) F,S Computer Aided Drating. Orthographic
projection, a auxiliary
dimens
 wrapped surfaces, intersections,
development. (Design-aboratoy 6 hours). 205. Computer Methods in Mechanical Engineering (2) F,S Prerequisites: MATH 122, PHYs 151. Digital
computer programming with applications to computer programming wint appilationt io computer graphics.
labocatory 3 hours.)
265. Engineering in an Ocean 265. Engineering in an
Environment (3) \(F\), \(S\)

Prerequisites: Sophomomer Standing. Study of
probiems involved in engineearing proiects in, on problems involved in engineating propects in, on
and under the occean.
Environmental and unders and enginearing contribibutions to
consididation and
development and use of ocean resources. devilopment and use of
Lecture-problems 3 hours).
272. Engineering Design Graphics II (2) \(\mathrm{F}, \mathrm{S}\) Preerequisite: ME 172 Graphical expression with
emphasis on sketching, machine drawing (detail emphasis on sketching, machine drawing (detail
and assembly), standards, tolerances, surface finishes, gears, cams, fasteners, piping and welding. CAD/CAM, 3D wireftame modelling. Upper Division
305. Numerical Methods in Mechanical Engineering (3) F,S Prerequisites: M E 205, MATH 370A. Application mechanical engineecing probolems. Roots of algebraic and transcendental equations. Solution it simutaneous linear algebtraic equations. Numerical integration of ardinary differential equations: intialvathe problems, boundar-value problems. Partial diffe
Leeture-problems 3 hours)

\section*{322. Metallurgy and Materials \\ Processes I (3) F,S}

Prerequisite: CHEM 111A; MATH 123; ME 172. Machines and processes for modern
nanufacturing. Structure and properties of Mantacurnin. Suructure and properiese of equilibria and. transtormations nucleation and
grain growh. Heat treatments and mechanicaal working. (Lecture-problems 3 hours.) 323. Engineering Metallurgy I
Laboratory (1) F,S aboratory (1) F,S
 Netalographic study of the effects of themmal
prope
330. Engineering Thermodynamic I (3) F,S Prerequites: MATH 224, PHYS 151 an Preerequistes: MATH 224, PHYS 151 and
approved chemistr. First and second laws of therevododnmamics: propertites of iliquicsc, gases and
vapors: sources of energy and conversion to vapors; stourcus of energy and conversion to
work. Introduction to heat transerer and
peschhromety (lecture-problems 3 hours) poychrometry, (Lecture-problems 3 hours.) 331. Engineering Therm
I Laboratory (1) F,S

Prerequistes: M E 330; ENGL 100 or equivalent. Measurements of thermocynamic properties, fluid flow and heat transiefr; calocimetry. (Laboration 3
336. Power Plant Design (3) F,S Prerequisites: M E 3 30. Design of power production syytems, incuuding steam power
plants, gas turbines and auxiliary power units. Survey of aternate power sourcese inducuding wind,
solar, geothermal, ocean thermal and biomass. (Lectur-problems 2 hours, design laboratory 3
337. Engineering Thermodynamics II Laboratory (1) \(\mathrm{F}, \mathrm{S}\)
Preerequisite: \(M E\) 336. Measurements of energy and power, Testing and evaluation of the
performane of thermodynamic equipment. (Laboratory 3 hours.)
365. Ocean Engineering I (3) F Prerequisiste: MATH 377 A and ME E 255 or consent
of instructor. Probabilistic methods in ocean of instructor. Probabilistic methods in ccean
engineering. Speetral methods, introduction to engineeting. Spectral methods, intucduction to
wave theories:
transter tunction concepts:
appliations in in ceaan engineering design. applications in \(_{\text {(Lecean }}\) octure-problems 3 hours.)
366. Ocean Engineering II (3) S Prerequivites: MATH 370A and ME 265 or


71. Analytical Mechan

Prerequisistes: CE 205. Nemon's Laws and the principles of work energy and impulue and nigmentum applied to the study of particice and emphasis on plane mation problems
(LLecture-problems 3 hours.)
373. Mechanics
Bodies (3) F,S

Prerequiste: CE 205 . Application of the prinicipleo
 members and cornections; stress anayyis of
beams and columns. Properties and strength of engineering mateerials. (Leecture-problems hours.)
374. Mechanical \(P\).
Materials (1) F,S Preerequisites: \(M E 373\); ENGL 100 or equivalent.
Laboratory course in the physical Laborotary course in the physical an
mechanical properties of engineering material menh thica proporties of engineering materiab
and the properties. (Laboratory 3 hours
375. Kinematics and Dynamics of Mechanisms (4) F,S of linkagases, came, gears and gear trainos. Vellocoity and accoleration, analysyis of gear tratinn. Velocoity
 aplication 3 hours.)
376. Mechanical Systems
Analysis with Applications

Analysis with Applications
(3) F,S
Prerequisites: MATH \(370 \mathrm{~A}, \mathrm{ME} \mathrm{E} 371\) and \(305, \mathrm{CE}\)
335. Modeling and analysis of mechanical 335. Modeling and analyses of mechaninial,
thermal, and hydraulic aystems. Use of complex Mermal, and hycraulio eystems. Use of complex transtorms. Intreduction to Feredback Laplace
Systems. (Lecture-problems, 3 houra.) 379. Industrial System Engineering
(3) \(F\) (3) \(F\)

Prefequisites: Upper Division Standing and \(M E\)
376 , or consent of the instructor. Introcuuction and
 process of defninustia customet requirementits,
allocating those requirements down to a level that allocating those requirements down to o level that
desioners, can work to, systematicall tracking
progress towards those erequirements through
 Timprovements. (Lecture-
390. Safety and Rellability in
Systems Design I (3) S Prerequisites: ME E 205, MATH 37 37A \(\alpha\) conssent of
instructor. Introduction to proabilistio design

 the adequacy of the designs; identification of
citical elements of the dosign and praticical
deesign guidance: complance
with


*405. Special Topics in
Prerequisite: Senior standing in mechanical
engineering or consent of instructor. Selected engineering of consent of instructor. Selecticd
topiciss from recont advances in mecharical
enoineeting course content will vary tom year to
 year and may be repeatad onco for cor ceid with
the consent of the department. (lecture-problems the consen
3 hours.)
*407. Modern Developments in
Ocean Engineering (1-3) F,S Prerequiuite: Senior standing in Ocean
Engineering or consent of instructor Solecter Engineering of consent of instructor. Solected
topics on recent advancos in Ocean Engineering. Content will vary. May be repeated once for credit
to a maximum of six units with consent ot the to a maximum of six units with consent of the
department. (Lecture-problems 1 to 3 hours) *409. Modern Computational Aspects In Mechanical
Engineering (1-3) \(F, S\)
Prerequisite: Senior standing of consent of the
instructor branches. ompectanical Engineeecing. Content will
vary. May be reepeated once for credit to a vary. May be repeated once for credit to a
maximum of six unis with the consent of the
department ( (eecturepoproblems 1 to 3 hours)
*425. Chemical and lectro-chemical Manufacturing
Processes (3) F
Prevequisites: \(M \mathrm{M}\) E 322 , 330; or CHEM 371 A or equivalent. Theory of electrochemical procossing,
Electroplating and electroless plating solutions, Electroplating and electroless plating solutions,
procosess and equipment. Anodizing and other
surface surface treatments. Carburtizing, net nitidiner
atmospheres and equipment. Diffusion in solids. atmosphereses and equipment. Diftusion in solidds
The effect of surface treatments on mechanical properties, (Lecture-problems 3 hours.) \({ }^{\text {(3) }} \mathrm{S}\)
reerequisite: ME 322 or CHEM 371 A or consent
of instructor. Princides of oxdo film growth and electrochemical corrosion. corrosion thesting enviromentital and metalurgical effects on
corrosion, environmental
corrosion
stresess
coacking corrosion control and prevention.
(Lecture-problems 3 hours.)
*431. Heat Transfer Systems 431. Heat Tran (3) F,S Prerequisites: \(\mathrm{M} \mathrm{E} \mathrm{305}, \mathrm{330;} \mathrm{CE} 3\) 35; MATH 370 A ;
WPE. Analysis of heat transer by conduction, WPE. Analysis of heat transter by conduction. statee and and randiation. heavestigation of steady
Computer methods Desifer systems. Computer methotod. Devisign of theat exchangoers
and other heat transmiscion devices and Other heat transmission devices
(Lecture-problems 2 hours, laboratory 3 hours.) *450. Special Problems (1-3) F,S Preerauisite: Senior standing. Assigned topics in
technical literature or laboratory projects and 459. Professional Practice Seminar (1) F,S Prerequisite: Senior standing in Mechanical Engineering. Protessional practice of engineering, graduate studies, recent
developments, ethics, legal requirements, impact of governmental reguations, professional societies. Oral and witten presentation of
engineeting reports. (Lecture-problems 1 hour) 463. Principles of Naval Architecture I (3) F Prerequiste: ME36 or consent of instructor. architecture, temminology, hullut form goometry) buyvance, stability, trim, stability in damaged intodution to design of ship structures.
hecture-problems hoours.) 464. Principles of Naval ierequiste: ME 463 ar consent of instructor. Fundamentals of the resistance and propucusion
of shipe, model testin. Theory and practice of shipe, model testing. Theory and practice of
opeler
design. Fundamentals of ship maneuvering and control. Behavaio) of ships in
waves. (Lecture-problems 3 hours) *465. Ocean Engineering *465. Ocean Enginee
Laboratory 1 (1) F Prerequibites: ME \(\mathbf{M} 55\), 463, WPE ar consent of both in the clabouratory (wevert tank) anperimet at seation on board the Mectaninaal Engineering research
*467. Current Developments in Ocean Engineering (3) S
Prerequiste: M E 465. Study Prereacuisite: MEE L465. Study of cocean
engineering developments and aceal envirionmental probblems as as they onccur. ©ceapl
of real and hypotheticical ocean systems design
 illustrate and amplify realistic design experience
for the student. (Lecture-problems 3 hours.)
*468. Design of Ocean
Engineering Systems (3) S
 WPE. Project approach to ocean engineering
syytems design stresing oreative and
 design conception and
(Lecture-problems 3 hours)
*469. Ocean Structures (3) S

 hydrodymamic forcess due to wave excitation;
random proceasd
methods; ocean structure eesponsonee preceicition by
 application
*471. Analysis and Design of
Machine Components (3) F,S
Machine Components (3) F,S
Preerequistes: M E 373, 374, 375;
 physicial properties of of metecials. to thice the
proporiong of machine elements, including
consideration consideration of function, production an
economic factors. (Lecture:problems 2 hours design application 3 houra.)
*472. Design of Mechanical Engineering Systems (3) F, S
Prerequistes: M E \(322,330,373,375\),

 and methodical techniques in problem definition,
deisinn conoeption and probem solution
(Lecture-problems 2 hours, design application 3 hours).
476. Mechanical Control Systems I (3) F,S
rierequiste: MEE 376. Feedback control analysis, and design. System performance Moling deeign criteria: stablity, transient response locus. Introducution to nonlinear constratol systems state space analysis
Leecture-problems, 3 hours.)
*480. Petroleum Engineering (3) S

Prerequuistes: Senior standing in engineering of
science. Oveview of petroleum engineering
 ocks, single-phase and muttipheose flueid flow through porous media, Properties of resen
fuids. Field trips. (Lecture-pobotems 3 hours) *490. Safety and Reliability In Systems Design II (3)
Prerequisites: ME E 390 or consent of instructor.


537. Inviscid and Compressible

Flows (3) F , Even Years
Prerequisites: \(M E\) E 330, , CE 335, , MATH \(370 A, M E\)
405. DOynamics of ideal and compressible fuidss;
 equations, steady and unsteady complessiblo
fiow, basio wave phenomena. (Lecture-problems 3 hours.).
538. Air Conditioning and
 condtitioning poychrometry: calculation of heating
and cooling loads in buildings; design of heating
 refigigatiton and crycge
(Leetureproblems 3 hours.)

\section*{540. Measurement Techniques in} 540. Measurement Technic
Fluid Mechanics and Heat
Transfer (3) F, Odd Years

Transfer (3) F, Odd Years
Experimental uncentainty, electical transducers Experimental uncortainty, electrical transducors
and presure measurements thermocruples and
other temperature
measurement
devicess, other temperature measurement deicices,
resistance bridges, amplifiers and fiters, optical
measurement devices dioital image processing. measurement deviceses, digital image procossing,
holography and laser doppler velocimeter. holography and laser
(Lectureproblems 3 hours.)

\section*{541. Aerodynamics of Vehicles
and Structures (3) F and Structures (3) F}

Prerequisite: CE 335. Theoretical and
experimental aercoynamics applied to surface experimental aercolynamics applied to surface
and flight vehices such as autmomilies and
Arain trains, corventional VYOL and STOL aircatit,
paracocutee and hang gliders: also applications
 testing techniques.
taboratory 3 hours.)
543. Linear Finite Element Analysis (3) \(F\)
rereaguistes: ME \(405,501,502\). Finite Element (FEI) torms of dififerential equation. Boundary
value problems, energy
theorems, matric
 method. Generation of FE stithnesss, masss, and
damping matrices; isoparametrio concept damping matrices; isoparametric concept
Dynamic response of damped elastic structures,
medal and direct integaration analysis. Sandard modal and direct integration anayyis. Standard engineeting command language, automatio
adaptation to STRUDL., NASTRAN and ANSYS
FE fulid flow and heat transefer analysis EE fuid fow and heat tran
(Lecture-problems, 3 houras.)
544. Advanced Control of
Mechanical Systems (3)

Preerequiste: ME \(\mathbf{4 7 6 \text { . Advancod topics in }}\) and analysis and design of modern control systems in mechanicai engneeving. Mapunov equation,
space. Ricati
Linear Cuadratic Regulator (LLOR). Kalman fither
 hecovery (LTR), optimal control, robust control,
 Contron of distibuteded-parameteres sytems with
applications to structural
dymamics. applications \({ }^{\text {to }}\) (20 \({ }^{\text {s.ture-problems } 3 \text { hours). }}\).
545. Robot Manipulators (3) S Prerequistes: MEE M75, 501,502 . Robot arm
kinematics. Robobt amm dynamices. Planning of
manipulators. Sonsing. Robot programming
language. Fobots in fexible manufacturing system. (Leoture- problems 3 hours.)
561. Automotive Engineering 561. A

Prerequisites: ME \(330,371,373\) or consent of instructor for non-engineering majoro. Analysis and detion of automotite equipment.t. Theoretical
and practical aspects of comustion. fiels.
 power planis, ar
testing, sately,
Crielation of Correation of desion with performance.
Laboratory testing will be conducted to verity


\section*{574. Computer-Alde}
574. Computer-Alded
Manufacturing (3) \(F\)

Preerequistes: ME \(\mathrm{M} 22,501,502\). Fundamental
concopts in automation. High volume discrete
 parts production systems.
Numerical control
mantuactung systems
monitoring.
Direct
Computer techniques. Fiexibe manufacturing system
(Lecture-problems, 3 hours.)
575. Analytical Mechanics III. Advanced Dynamics
(3) \(F\), Odd Years

Prerequisites: M E 371, MATH 377A. Detaled
study of particle and rigid body mechanics. Three dimensional analysis. Llagrayge's equatios. The and
diarialional principles. Vibrating systems.
variable variational principles. Vibrating systems, variable
mass problems. Euler's equations and


\section*{576. Engineering Vibrations}
(3) S, Even Years

Prerequiste: ME M 376. Fundamentals of
mechanical vibrations, types of oscillatory Motions. Single-Degree-ot. Freedom (SDOA) and
 isolation, vibration measuring instruments. Modal
analysis. Lagrange's equations. Introcuuction to anaysis. Lagrange's equations. Introduction to
Finto Elemen Metrod and modal teting.
(hecture-problems: 2 hours, Laboratory: 3 hours.) (Lecture-problems: 2 hours, Laboratory 577. Advanced Mechanics
Deformable Bodies (3) F Prerequivites: \(M E 373,374,471\) or consent of
instructer. Analysis of stress and deffection in instructor. Analssis oos stress and deffection in
unsymmetrial bending, heear center for beams,
curved beams. Stress concentration, deformation beyond the elastic limit Energy method;
Castigiano's Theorem; Rayeigh-Ritz technique. Castigliano's Theorem; Rayl
(Lecture-problems 3 hours)
578. Creep and Fatigue (3) F Prerequisites: \(M E\) M 322 , 377, or consent of of
instructor. Phenomena of creep and fatigue: instructor. PPenomena of creep and fatigue;
effecc on stress distribution in structura elements;
bucking caused by bucking caused by crepp: ffleftra of space
environment on fatigue; cumulative fatigue enirionment on fatague; cumuliative fatitue
damage at nommal and elevated temperatures.
(Lecture-problems 3 houra)

\section*{579. Engineering Acoustics}
(3) F , Odd Years

Prerequisites: MATH \(370 A\), EE \(310, \mathrm{ME} 371\).
Theory and application of acoustical principles to Theory and application of acoustical priciciples to
generation, transmision, measurement control of suond. (Lecture-pobilems 2 hours.
Latoratoy: 3 hours.)
621. Advanced Materials Engineering (3) Prerequisite: \(M E 527\) or consent of instructor.
Imperfection in metal, dislocation thencies od strength of metalas, coldd wortion theories of orientation and texture due to deformation and
revritalazation,
transtomation
Lecture-probiems 3 hours.)

\section*{622. Fracture of Engineering}

Materials
Prerequiste: \(M E\)
Preerequisite: ME M 527 or 577 or consent of
instuctor. Mecharics of fracture, fracture
 macroscopic and microscopic aspects of crack
propogation, stress corrosion cracking, hyydrogen
 designing for fractict
(Leecture problems 3 hours.)
629. Design of Composite

Structures (3) S
Preeraquistes: ME M 522 . Fatizue and creep of
components. design guidelines for compoite components, design guidelines for composite
struucture. Botted and bondod joints. Design of
selected selected.d. configurations. (Lecture-problems 3
631. Viscous Flow Theory (3) S , Even Years
rierequistes: M E 431, 501, 502 and 537. Introduction to viscous. fow, integral and
differential equations for laminar flow, enact differertitia equations for laminat flow, exact
solutions for lamina flow, transition to turbulent flow, wall bounded and thee turbulent shear flows
(Lecture problems 3 hours.)

\section*{632. Thermal Rad} Even Years
Fundamentals of thermal radiation, properties of
matter, radiative exchange in enclosures, abaorting ermintitign. ford radiative transfer in ecture-problems 3 hours.)
633. Numerical Methods in Momentum, Heat, and Mas Prerequibites: ME \(M 55,501,502,532\) and 537.
\(M\) athematical
descitition Mathematical descrition of physisal
phenomena, discretzation methods, numeical phenomena, cliccretization methods, numerical
hethods in conduction, convection and diftusion, methods in conduction, coonvection and difitusion,
Siew of TEACH and GENMX codes and
numerical solutions to the internal and external numerical solutions to the internal and
flow fields. (Leture. problems 3 hours.) 636. Analytical Thermodynamics (3) F Pretequisites: M \(\mathrm{M} 536,539\) or consent of
instructor Non-equilibrium themmodyamics. kintretiot theory of gaves: transport procosss; shock
 637. Advanced Gas Dynamics (3) 637. Advanced
S , Odd Years
 Conservation \(\begin{gathered}\text { equations, } \\ \text { compresible } \\ \text { fiow, shock on-dimensional } \\ \text { omes. }\end{gathered}\) one dimensional unsteady flow, method of characteristics tor plane and axisymmetric flows,
slender-bocy theor. (Lecture-problems 3 hours)
640. Inviscid Flows II (3) S Preerequistes: \(M E 637\) or consent of instructor,
Compressible inviscid flow equations, flow Compreasible inviscid fow equations, fiow
equation for small perturbations, Panatl-Gliuvert
transformation,
 and Eulier e euations.
problems 3 haurs.)
642. Combustion Processes (3) S
 Fundamentals of combustion, chemical
equilibrium, consenvation equations, chemica equilibrium. conservation equations, chemical
kinetis, diftusuon flames, air pollution. (Lecture-
problems 3 hours.) problems 3 hours.)
643. Nonlinea
643. Nonlinear Complex
Structures and Mechanisms Struct
(3) S
Proerequiste: ME543. Anaysis and optimization
of frame. plate and shell of frame. plate-. and shenl structures with
STRUUL, NASTRAN and ANYS, senstivity
analysis STRUDL, NASTRAN and ANSSS, sensithiy
analysis. Generation and idealization of comple
and


 plastic deformation, nonlinear beckling
composit
Ntructures.
 647. Modal Analysis
647. Modal Analysis
(3) \(F\), Even Years

Preerequibite: \(M E 576\). \(A\) thorough coverage of
modal analysis technicuers
 Processing, including Frast Fourier Transiorm,
Hilbbert Transtom,
complex complex modes, statato speace, damping
nonsymmetries, modal parameter eatimation nonsymmetries, modal parameter estimation
techniques, and application of modal neaniquese, and application of modal Vibration
3hours.)
648. Engineering Calculation

Methods for Turbulent Flow (3) S Prerequisites: M E 631,633 or consent of
instructor. Introduction to numerical methods to Instructor. Introciuction to numerical methods tor of two-dimensional initernal and external
boundar-lyer problems. Unteady
Calculation of boundary-layer problems. Unsteady forw,
Cacoulution of tablity
and transtion. (Lecture-problems 3 hours).
649. Turbulence (3) F
Preerquistes: ME E 61 or consent of instructor Nature of turbulent flows, dynamics of turbulence
statistical description, homogeneous turbuience
 671. Random and Nonlinear

Prerequibite: ME 576 . Characterization and transmisision of trandom vibataracterization and falure duv to
tandom vibration. Clasificication of onile random vibation. Classification of nonlineaa
problems; exact, roaphical and appoximate
solutions. singular points, stabity
s. Lecture-problems 3 hours.)
672. Stress Analysis in Design (3) Prevequisites: ME57. Modes of failure and
tealure coteria. Stability of mechanical models
elastio bars and trames by kinetic and energy
aproaches; design of columns, beam columns and tramed cooume. Plastic collapse and ilimic
analysis. Experimental methods of strese aly. Theory of Elasticity (3)
Trerequiste: ME E57. Fundamental equation

 Bodies. Three-dimensional problem. Propagation
of waves in lastio media. Approximate metiods


\section*{676. Engineering Vibrations II}

\section*{(3) F, Even Years}

Preerauiste: ME 576 . Free, forced, and
 continuus systems, induding eexact and approximate solutions. Rayyligh's quotient.
Rayleight Rith Galekin, collocations. Finte
Element Methods. Vibrations in ortating and Element Methods. Vibrations in rotating and reciprocating machines. Response orfer frunction
to random and shok bads. Tranter
and frequency response methods. Vibration and trequency response methods. Vibration
control of diocrete systems and frexibe structures, induding large
(Lecture- proboleme, hours.)

\section*{77. Digital Simulation in}

Engineering (3) S
Prerequisistes: ME \(405, \mathrm{ME}\) E 409 . Program bank at an enginer's workstation. Opotimization 30 -modeling and animation of real structures
Internal structure of a program bank. Dynamic data structure, program, structure., and
and location information of dynamic arrays support of graphical interactive dialog, efficierit deffine a format-ifiee command language
Maintenance and modification of a progran Maintinanaco and moorifiation of a progra.
Toals to debug source codes. 691. Directed Studi

Study of information in enines (1-3) F,S Study of information in engineering and scientifio lierature on a aurrent topit under the direction based on this reading. Engineering (3) \(\mathrm{F}, \mathrm{S}\) Prerequibitit: Consent of instructor. Presentation
of research in special feids: (a) enoineering of research in special fields: (a) engineering
mechanics (b) heat transer and thermocynamices
 astronautics. May be taken in
maximum of six units of readit.
697. Directed Research (1-3) F,S

Prerequisite: Graduate standing in mechanical
engineering. Theoretical and experimental enginioering. Theoretitalal and experimentral problems in mech
extensive analysis.
698. Thesis (2-6) F,S

Prerequisite: Enrollment is limited to students advanced to candidacy or eligible for
Department Graduate Advieor must be consuited and an Independent Stucy Aggreementrt form submitted for each semestest of enrollmen.
Planning, preparation, and completion of a thesis
 total of 6 units.

College of Health and Human Services

Dean: Donald P. Lauda
Associate Dean: William A. Sinclair
Director, Development and Grants:
Andrea Taylor
Technology Building, Room 200
Technology Building, Ro
Administrative Manager
Jay Flack
acillities Coordinato
Director, Student Life and
Development: Cindy Hale
Assistant to the Dean:
Assistant to th
Diana C. Walti
The College
The College of Health and Human Services offers a wide range of programs at the undergraduate and College are ten diverse departments
our separate programs, and four
centers:
Departments:
ommunicative Disorders
Criminal Justice
Health Science
Health Science
Home Economics
Nursing
Occupational Studies
Physical Education
hysical Therapy
Technology Education
Programs:
Aerospace Studies (Air Force
ROTC)
Gerontology
Health Care Administration
cience (Army ROTC)
enters
enter for Criminal Justice Research \& Training Center for Career Studies
Studies
Objectives
The College of Health and Human Services, as a professional College, is united by the following purposes: The academic and professional
preparation of students for careers in their chosen field of specialization;

The development and maintenance of high standards of academic The encouragement of critical The encouragement of critical and professional preparation The conduct of ongoing research, training, and community
by faculty and students.
To achieve these objectives, College seeks to create an environment at both the undergraduate and graduate levels providing:
A broad educational experience the liberal arts:
Specialized instruction leading to
competence; and
Integration of academic and
professional course work to develop
the whole person.
Degrees Offered
Bachelor of Arts:
Bachelor of Arts:
Communicative Disorders
Communicative Diso
Home Economics
Home Economic
ndustrial Arts
Physical Edicat
Physical Education
Recreation
Bachelor of Science:
Criminal Justice Dietetics and Foc
Administration
Health Care Administration
Heath Scien
Nursing
Physical Therapy
Vocational Education
Vocational Education
Bachelor of Vocational Education:
Master of Arts:
Communicative Disorder
Home Economics
Industrial Atts
Industrial Ants
Physical Education
Vocational Education
Master of Science:
Crimina Justice
Health Care Administration Heath Cari Adm
Health Science
Nursing
Nutritional Science
Nutritional Science
Recreation Administration

Master of Public Health: Community Health Educatio Certificates

Administration of Outdoor
Recreation Resources Administration of Volunte
Services Automotive Supervisio Cartography
Community Physical Fitness Food-Service Systems Administration Gerontology
Graphic Arts Supervision
Health Care Administration
Industrial Plastics Processing \& Leisure C

Counseling (Graduate Certificate) Pre-Athletic Training Pre-Corrective Therapy
School Nursing Credentia Therapeutic Recreation Travel and Tourism Wilderness Studie
College Facilities
The College of Health and Human
Services is characterized by perhaps the greatest diversity of programs in the University, and it facilities reflect
this. The ten departments, four programs and four research centers are housed within eleven physical are housed within eleven physical
structures. You may view our communicative disorders speech and
hearing clinic or nursing simulation lab or travel to the Technology Education buildings to observe computer-aided design or the creation of a surf board
in a plastics lab. You may swim in the Olympic size pool, be tested in the underwater weigh tank in the Exercise Physiology Lab or create designs for
commercial interior environments in the Home Economics building. The Physical Therapy labs offe demonstrations on that and
locomotion analysis; whereas Recreation may involve you in a discussion on the characteristics of
aging as it relates to leisure or Health aging as it relates to leisure or Health
Science on AIDS awareness and Criminal Justice may walk you through a forensic investigation of a crim As one of the largest of the
hirds of the facilities are laboratories
accommodate the
College of of Health hand Human . The ervices' programs combine theory with exciting practical experienc rofessional Accreditation Programs in the College have been
accredited by the following state and
national accrediting agencies:
American Association of Colleges of Nursing, American Dietetic
Association, American Speech Language and Hearing Association Association of University Programs in Health Administration, Council Foundation for Interior Desion Education Research, American Home Economics Association
American Physical Therapy Association, California State Board of Registered Nursing, National Athletic Training Association California Council on Parks and Recreation, National Recreation and Park Association Council on
Nursing.
The College maintains an active The Coliege maintains an a

Special Interest Clubs Air Force ROTC, Archers, Army
ROTC Association, Army ROTC angers (AROTC), Arnold Air Society (Aerospace Studies),
California Nursing Student Association, Child and Family Association Student (CAFAS/ Home conomics), Pershing Rifles
AROTC). Siver Wing (Aeros AROTC), Silver Wings (Aerospace
tudies), Student Council of onsumer Interests (Home conomics), Student Dietetic Sudent Faculty Council (Home Economics), Students in Fashion. Professional and Honorary Organizations
American College of Healthcare
Executives, American Execulves, American Society of
nterior Designers (ASID), California Association for Health, Ómicron Tau Theta (Vocational Education), Phi ducation), Physical Ed Recreation and Dance (CAHPERD), Epsilon Pi Tau (Technology
Education), Eta Sigma Gamma Heacation), Eta Sigma Gamma
Health Science), National Leagu for Nursing, Omicron Nu (Home Economics), Sigma Theta Tau (lo ta Chapter) Nursing Honorary Society.

\section*{College and Departmental} Organizations
Health and Human Services tudent Council, California Nursing tudent's Association, Criminal
ustice Students Association Health Care Administration Student Forum, Health Care Forum, Health Science Student and Faculty Club, Physical Education Majors Club, Physical Therapy Student Association, Recreation Society, Home Economics Student Speech Language Hearing Association.
Association.
College-Based Courses (HHS) 292. Career Exploration (1-3) F,S Prerequisites: Consent of the instructor and
minimum GPA of 2.0 . Provides a student with minimum GPA of 2.0. Provides a student with
career-related experience by allowing the student career-elated experienco by alowing the stuceen
owork in the fied or profession nelated to his of her major. Students qualiting may work in eith
major or coareer-elated volunteer oo pair asignment in private industry, ar non-pro agency, or a p publica agencyustry, a addition-torofty
practical experience, students will atted a sethe practical experience, students wil attend a series
of seminars deilined to complement this fiel
experience by focusing on common issues to the
rofessor of Aerospace Studies t. Colonel James

Department Office: Technology
Education Building 2, Room 100 Telephone: \(985-5743\)
Council: of the Advisory
Air Force Reserve Officer Training programs develop officer candidates who have broad understanding and high growth potential Cadets eadership and managerial skills hrough dialogues, problem solving, and other planning activities. A course work is done on campus
except Field Training (conducted at an active Air Force base) and Light
Aircratt Training for ROTC (conducted Aircraft Training for ROTC (conducted
at Hondo Field, Texas). All cadets attend either a four-or six-week Field Training camp during the summer
between the sophomore and junior between the sophomore and junior
years. Field Training emphasizes miltary orientation for the officer candidate. Caddets receive physical
training and participate in competitive training and participate in competitive
team sports. They are trained in drill and ceremonies and observe selected Air Force units performing
day-to-day operations
program and obtaining a bachelor's degree, cadets are commissioned as second lieutenants in the Air Force and serve a minimum of four years
full-time active duty. Flight-qualified candidates attend flight training atter graduation. Other graduates begin
active duty in a specialty consistent active duty in a speciaty consist desires, and existing Air Force needs.
Graduates may request a delay from. Graduates may request a delay from
entry on active duty to continue their education or may apply for Air Force-sponsored graduate study to
begin immediately upon starting begin immed
active duty.
Applying f
Program
CSULB students enroll in Aerospace Studies by signing up for courses in the same manner as other university
classes. Academic classes are open to all CSULB students, whether

State Schools use the concurrent enrollment system. Students who are
not enrolled in any Cal State School enroll through the CSULB Extended Education Office. Freshman and
sophomore classes (AS 100/200) do not require advance application. not require advance application. commission must compete for
enrollment in the AS \(300 / 400\) class enrollment in the AS 300/400 classes occurs in the fall of the sophomore year, includes the Air Force Qualifying Test, a physical
examination, and a personal interview Supplemental Courses Program The AFROTC Supplemental Courses Program enhances the value and performance of persons
commissioned through AFROTC. The program consists of required and recommended college or university
courses. All contract cadets (ROTC scholarship and AS 300/400 cadets) must successfully complete, or
demonstrate proficiency in, the demonstrate proficiency in, the
required supplemental courses in required supplemental courses in
addition to all Aerospace Studies courses. Each contract cadel completes one semester of AFROTC scholarship also complete one semester of college-level English
composition and one academic year of a foreign language. All students are encouraged to complete a speech class.
Courses (A S)
Lower Division
100. The Air Force Today I (1) F Introduction to the U.S. Military and the U.S. Air Force (USAF) arganization and functions; human
nights issuess the soviet threat; Strategic Air Command orgainiazion, command, control and
weapons systems: introduction to
 (Leecture 1 hour; Laborato
only of AFROTC cadets:)
101. The Air Force Today II (1) S

Examines the Navy, U.S. Ammy: tactical air, arifit systems; logistics, ait training, and
communication commands; Reserves, National Guard and separate operating agencies; and the nature of wararee. Leeture hour: Laborat

\section*{Aerospace Studies}

College of Health and Human Services
200. The Development of Air
Power 1 (1) \(F\) Power I (1) F
Developing of aerospace power in the United States through World War IIt. (Lecture 1 hour;
Laboratory 1 hour - required only of ARROTC
201. The De

Power II (1) S
Post World War
power: emphasis on invelternationant of aerospace
 (Lecture 1 hour: Laborato
only of AFROTC cadetis.)

\section*{Upper Division}
300. Air Force Management and Leadership I (3) F
Examines motvation, behavior processes and
groun dynamico in an Air Force environment; will group dynamics in an Air Force environments will
address the thanning. organking and address the planning, organcing and
coordiation funtoions of the manager as wel as
concopts and technicues for decisisen making. 301. Leadership and Managemen (3) S

Examines current leadership theories and models
and their applicability for funior miltary officers.
 counseling, oral and witten communications,
supenision, coordianation and deficion-making. supenision, coordination and decision-making:
Traditional grading only. Leecture 3
heursi: Laboratory 1 hour - required only of AFRO
cadetss.) 400. National Security Forces in (3) F

Examines armed forces as an integral element of society: miltary image and profession in today's
society: cilil-miltary values and socialization society; cini-military values and socialiazation
process; factors infuencing the formulation and
implementation of fational stategy. (lectures implementation of national strategy. (Leecture 3
hours: Laboratory 1 hour - required only of hours; Laborator
AROOTC cadets.
401. National Security Forces in
Contemporary American Soclety (3) S (3) S U.S. Strataegy: contempors and U.S. evolution of issues; miticay / unticice system. (Leeture strategic 3 hours Laborato
cadets.
490. Independent Study (1-3)

P,S,SS
research and ostudy approved by procian research and study approved by program
diector. May se repeatec tor a maximum of \(s\) si
untit

\section*{Communicative Disorders \\ College of Health and Human Services}

master of arts degree in
options in audiology and with speech-language pathology. This coursework meets requirements for
certification by the American Speech and Hearing Association and
Bachelor of Arts in
Bachelor of Arts in
Communicative Disorders (code 2-6842)
Students desiring a bachelor's
degree in Communicative Disorders must complete ANTH 170 and a course in language and 170 and a couture/society, (e.g. ANTH 4121 o SOC 485I), before completing the ollowing required courses:
Lower Division: C D 260,
271, PSY 210 or equivalent.
Upper Division: C D 329, 330,
\(373,431,432440,456,466,476\), 373, 431, 432, 440, 456, 4696, 4776, \(481 \mathrm{~A}, 481 \mathrm{~B}, 483,489\). Credentials for Service in Public Education
Students who wish to complete
credentials for service as langle credentials tor service as language
speech and hearing specialists, ducational audiologists or teachers of the severe language disordered must be admitted to the gradual audiology.
Clinical-Rehabilitative Services - Language, Speech and Candidates must:
Candidates must
A. Complete the master's degree
in speech pathology.
B. Complete EDP

489, 686A (Field Experience(s) in order to complete 100 contact hours as a Language, Speech and
Hearing Specialist traine in the school setting).
Clinical-Rehabilitative Services - Audiologist Credential:

Candidates must:
A. Complete the master's degree in audiology.
B. Complete EDP 350, 451 or
564. C D \(280,669 \mathrm{G}\), and 680 (internship to be completed in the (internship to be completed in the
schools in order to complete 100
contact hours as an contact hours as an Audiologist
trainee in a public schoo
Clinical-Rehabilitative Service - Language, Speech and Hearing Specialist Credential
with Special Class Authorization to Teach Language Disordered
Candidates must:
A. Complete the master's degree
in speech pathology: A speech pathology;
B. Complete EDP 350, 451 or
564, CD 483, 489, 582A, \(582 B\), EDP 686 A (in order to complete 100 contact hours as a Language,
Speech and Hearing Specialist trainee in the school settinglist D686B (in order to complete 100 contact hours as a teacher of severe language disordered children trainee in a school setting)

\section*{Master of Arts in C
Disorders Degree}

\section*{Admission to the Graduate} Program:
Enrollment in 500/600 level courses in communicative disorders is restricted to students who have been admitted to the graduat
program of the department. Students wishing to be admitted must complete the following
procedures
(A) Students must meet the criteria
for acceptance by the as a graduate student; (B) Every student (new or continuing) must apply to the
Office of Admissions and Records Otfice of Admissions and Records
to obtain admission to the to obtain admission to the (C) Every student then must apply to the Department of Communicative Disorders fo
admission to admission to the graduate
program using the department popplication form. This form must
be file with the department chair be filed with the department chair by March 1 for admission in the
fall semester. The following tal semester. The following
supportive materials must be filed with the department admission
(1) Change of objective form available at department office only);
(2) Transcripts of al
undergraduate and graduate work. These transcripts are in addition to those required by the Office of Admissions and should reflect the following minimum criteria:
(a) a GPA of 3.0 or better in the last 60 units of
coursework; and
(b) confirmation of acceptable
(b) confirmation of acceptable
GPA obtained during the final senior semester.
(3) Three letters of ecommend- ation fro cademic faculty in
Speech-Language Pathology, ecommendation forms can be btained from the Graduate Advisor and must be completed
(4) Results of the Graduate

Record Examination (GR Students must make arrangements to take this test in admission to the department graduate program. This is to Insure that the student's test esults will be available by the filing date since test scores sed as one criterion for program. Students can make arrangements to take the GRE at the Testing Office in SS/AD Room 216. The testing Office will supply students with further information and provide them
items. ficies will
(D) Any deficiencies will be
determined by the department graduate committee after consultation with the student and
the student's faculty advisor and study of transcript records.
(E) Student will have completed ne of the two prerequisites listed in the next section.

\section*{rerequisites:}
ccredited institution with amaior in
communicative disorders (speech pathology and/or audiology); or:
(2) A bachelor's degree from an accredited institution. In addition to courses in (1) anatomy and
physiology of the speech an hearing mechanism, (2) phonetics and
(3) introduction to communicative disorders, the applicant must have
24 units of course work in speech science, speech-language pathology or audiology, II student
has not completed sufficient units has not completed sufficient units o courses to meet this requiremer he/she may enrol in the University as an 'unclassified' graduate student to complete the required undergraduate courses prior to
being admitted to the Graduate Program in Communicative Disorders.
Advancement to Candidacy:
In order to be advanced to
candidacy for a master's candidacy for a master's degree,
student must meet the following criteria:
(1) enrollment in the semester or summer session in which
advancement take
(2) selection of
(2) selection of
Speech-Language Pathology or Audiology option:
696 and three addition (3) sation of CD 696 and three additional units CSULB Writactory completion of the CSULB Writing Proficiency
Examination. The Wititing Proficienc Examination. The Writing Proficiency
Examination must be passed before the student is advanced to candidacy. (Atter paying a fee at the take your receipt to the Testing take yours/eceiptoom 216) and sign up for the examination. This examination is administered
times per year. A detailed description of the test is available at the Testing Office);
(5) maintenance of a GPA of 3.0 (a) all graduate work completed in graduate work completed at CSULB, and (c) all graduate work trensferred to meet graduation requirements;
(6) filing of the student Program Tor the Master of Arts Degree
Communicative Disorders after completion of items 2-5;
(7) a written program of graduate department advisor, the department
graduate advisor, the department
chairperson, and the College of
Health and Human Services Health and Human
Associate Dean.

\section*{Requirements for the Master of} Arts in Communicative Disorder code 5-6842)
Students must elect one of two available options:
speech pathology
speech pathology. course work are required: CD 696, \(662,663,664,665,666,6699\) or 669C, 669D, 669F, 669G, 6691, 670
or CD 686 A and CD 698 OR 695 (Comprehensive Examinations) plus a three-unit elective. Within the context of the clinical courses (669A
\(669 \mathrm{~B}, 669 \mathrm{C}, 669 \mathrm{D}, 669 \mathrm{~F}, 669 \mathrm{G}\), \(669 \mathrm{~B}, 669 \mathrm{C}, 669 \mathrm{D}, 669 \mathrm{~F}, 66 \mathrm{GG}\)
\(669 \mathrm{~J}, 670,669 \mathrm{H}\), or 686 A ), the student will complete 25 hours of clinical experience under appropriate supervision with a client determined to be of a language or
dialect different from that of the student clinician. CD 483 and 489 or 460/560, or equivalent content, For audiology 40 units of course work are required: CD 696,530 , wro are required: \(5669 \mathrm{~A}, 673,67\) \((3-3), 675,6\) units \((2-2-2\) ) or 67
680 , and either 698 or 695 680, and either 698 or 695
Comprehensive Examinations) and 3 units of electives.
Regulations governing the preparation and eligibility for an
administration of comprehensive examinations are available in the Department Office. Departmental egulations concerning preparation of theses office. Becialingogram or Students Who Studenqual in Spanish.
native proficiency in demonstrate as advanced proficiency in English may take the clinical practicum courses with a bilingual supervisor, working with clients who are monolingual in Spanish, monolingual
in English, and bilingual. See Advisor in English,
for details.
\begin{tabular}{|c|c|c|}
\hline & &  \\
\hline  & & \\
\hline Historical and interpersonal features of human communication dysfunction. Survey of major communicative disorders. Role of speech language pathologist and audiologist in
medical, educational, and private practice settings. & Principles of language and speech development related to cognitive, linguistic and communication behaviors of monolingual and bilingual children. Not open for credit for (Lecture-Discussion) & \begin{tabular}{l}
C D 261, 271, 330. The processes \\
and resonance and their etiology, diagnosis and therapy
\end{tabular} \\
\hline Mechanism (3) F & 373. Audiology I (3) F,S & \\
\hline & king, the
\(\qquad\) ples of taking a case his g. & \begin{tabular}{l}
IV: Disorders of Language (3) F \\
Prerequistes: C D 261, 271, 329 and 330 . An
\end{tabular} \\
\hline & atric Audiol & \multirow[t]{3}{*}{Prerequisites: C D 261, 271, 329 and 330. An analysis of the components of language and how each is involved with language disorders in
chidren. Provides for the understanding and recognition of variables for the assessment and clinical management of such children.} \\
\hline Pio be & & \\
\hline & & \\
\hline rs, laboratory 2 hours.) & acterist of & /581B. Speech Path sorders of Languag pathologies (3) S \\
\hline 30. Sign Language (3) & & \multirow[t]{4}{*}{Prerequisite: C D 481A. Neurophysiological and neurolinguistic basis for language and speech disorders associated with central nervoun system pathoogies. Provides. for tor
recognition and understanding of variables for the assessment and clinical management of such disorders.} \\
\hline & & \\
\hline & 32. Audiology II (3) F,S & \\
\hline & & \\
\hline  & & 483. Assessment of Monoling \\
\hline 281. Inter & & \\
\hline Language (3) & & \\
\hline Prerequisite: CD 280 (Sign Language and emphasis on vocabulary. Introduct language in education Discussion of philos & Prerequisites: C D 373 and C D Acoustic features of speech, visu speech, hearing impairment and vibrotactile communication and the deaf speech reading, the geriatric & 481A. Introductions to principles underlying
assessment language disorders for both monolingual and bilingual clients. Focus is on the coutural and linguistic variables affecting standardized and (Lecture 2 hours, laboratory 3 hours.) \\
\hline credential & & 9. Management of Monolin \\
\hline & & \multirow[t]{3}{*}{Preerequistes: CD 432, 456, 476, 481A, 483; Co-requisites: C D 466, 4818. Introduction to principles undertying management procedures
in speech and language disorders for monolingual, blilingual and/or bicultural clients. Focus is on relationship of assessment to management, formulation of objectives, task and materials, and transfer and maintenance programs (including parent training). 25 hours
of clinic observation and participation are of clinic. observation and participation are
included. (Lecture 2 hours, laboratory 3 hours.)} \\
\hline \begin{tabular}{l}
329. Introduction to Languag Acquisition \\
(3) F, S
\end{tabular} & 456. Speech Pathology I: Disorders of Phonology (3) F & \\
\hline Introduction to the stucy of the acquistion of first and second languages. Linguistic perspectives on the
phonological, ovelopment of
syntactic,
semantic, and pragmatic aspects of language. The influence of developmental stages and social and grading only. Same course as LING 329 . & \begin{tabular}{l}
Prerequisites: C D 260, 271, 329, 330. Etiolo assessment, and treatment for disorders phonology. \\
460./560. Language Assessment of the Limited English Proficient Child (3) F,S
\end{tabular} & \\
\hline 330. Speech and Hearing Science (3) F,S & an understanding of the Non-Discrim assessment process for the Limited & 490. Special Studies in Communicative Disorders \\
\hline This course examines human comm its neurological, psychological, & Proficient child referred for a Language Assessment. (Lecture-Discussion.) Traditiona grading only. Same course as CD 560/460. & \multirow[t]{3}{*}{Open only to communicative disorders majiors with senior or graduate standing and consent of department chairperson. Individualized
laboratory or library research selected in consuitation with instructor. Witten report of the research is required. Not acceptable for graduate credit toward the master's degre.
May be repeated to a maximum of six units.} \\
\hline & 466./566. Speech Pathology Fluency Disorders (3) S & \\
\hline & Prerequisite: C D 261, 271, 329, 330. Etiol assessment, and therapy for disturbances & \\
\hline
\end{tabular}
491. Proctoring in
Communicative Disorders (2-3) F,S
(Open only to students who have achieved the
grade of \(A\) ' in the course in which they are grade of 'A' in the course in which they an
senving as proctor.) Advanced students shal engage in peest teaching and examination
scoring in specifio Communicatve Dioarders undergraduate coursess undder the specifio undefgraduate courges under the specifo
direction of the course instuctor. May be
repeated for creditit to a maximum of 6 units. 499. Directed Studies in

\section*{(1-3) F,S}

Prerequisite: consent of instructor.
Independent stucy under superision of a
Pererequisite: Consent of instructor.
Independent stucy under superision of a
faculty member. May be faculy member. May be repeated for
maximum of sit units. Not acoppable for
graduate credit toward the master's degiee. Graduate Division
530. Audiological

Instrumentation (3) F, Even Years
Prerequisiste: Consent of instructor. Acoustios/
decibel, peychoacocustics, calibration of pure decibel, pyychooacoustics, alibibation of pure-
tone and speoch audiometers, sound ffeld
cailibation, industrial audiology and calibration, industrial audiology and noise
measurement. (LLecture 1 hour, laboratory 6 measure
531./4

S . Pediatric Audiology
Prereauisite: CD 373 . Pathologies of hearing
loss (e.g.s, syndromes), High-Pisk Register/case history, speech and voice characteristics of the hearing-impaired, behavioral obseveratio lay audiometry, speech audiometry, audito evoked response, acoustio imititance
counseling parents, nearing screening in the counseling parents, hearing screening in the
choocts, hearing aidsl/pecial listening devices. Lecture 2 hours, laboratory 3 hours.)
532./432. Audiology II (3) F,S

Prerequisites: CD D 373 . Anatomyppathology/
evaluation of the (1) outer and middie ears, (2)
neer ear, (3) central auditory system, and (4)
nctional hearing loss, taking case history, an port witing.
560,/460. Language Assessment
of the Limited English Proficient
of the Limited
Child (3) F,S
Prerequisistes: C D 329 and CD 481A, or equivielent, or permission of instructor. Provide
an understanding of the Non-Discimination

566./466. Speech Pathology II:
luency Disorders (3) S Etiolog Hsessment, and therapy for disturbances - fluency of speech with emphasis on riables correateded to disffuent behavior.
574. Hearing Aids (3) F, Odd

Prerequisite: Consent of instructor. Electro-
 in children and aduits, casss history, probe tube
measurements, earmolds, binaural hearing measurements, earmolics, binaural hearing
aids, CROS and its modifaction, signal
procesing and ontrol procrammable hearing processing and oontrol, programmable hearing
aids,
aligital hearing aids, batteries, asositive aids, digital hearing aides, batteries, ascistive
listenind devices, hearing aid orientaion and
counseling, cocheaear implants, clasasroom counseling, cochliear implants, classroom
amplifcation and acoustios, amplification
dispensing. 576./476. Speech Pathology III:
Voice/Oro-Faclal Mechanism

Prerequisites: CD 261, 271, 330. The procossese
of phonation and Preerequisites: CD261, 271,33. The processes
of phonation and resonane and their
application to etiolcgy, diagnosis and therapy appliation to etiology, diagnososis and therapy Of tunctional and crganic viove disisdiens, such
 impairment and oro-facial abnormalities.
\(581 \mathrm{~A} . / 481 \mathrm{~A}\). Speech Pathology \(581 \mathrm{~A} / / 481 \mathrm{~A}\). Speech Pathology
IV: Disorders of Language (3) F Prerequistes: CD 261, 271, 329 and 330. A anaylysis of the components of language and
haw each is involved with language disorders in how each is involved with language diborders in
children. Provideses for the understanding and childeren. Provives for the undertstanding and
reconition of vaiables for the asisesment and
cinical management of such \(581 \mathrm{~B} . / 481 \mathrm{~B}\). Speech Pathology IV: Disorders of Langug Neuropathologies (3) S
Prerequisites: C D 581 A481A. Neurophysio-
logical and neurrolinguistio basis for language logical and neurolinguistic basis tor ranguage
and speech disorders asesciated with central
 recognition and understanding of veriabies to
the assessment and cinical manaegement of the a asesesment
such disorder.
582A. Teaching the Severe
Language Handicapped Child
(3) S

An introcuction to the core curriculum
components of Math, Reading and Social components of Math, Reading and Social
Studies. The course will include: theoretical studies. normal developmental patiernes
bases nement precedures for diagnostic and
assesment placement purposes, instructional methods, common learning difficutities, and the scop and sequence of each comitient
by the current State framework
582B. Teaching the Severe
Language Handicapped Child
Prerequisites: C D 582a. Incorporation of a language base into the curriculum araeas of
Reading. Speling,. Math, Social Studies Science, Heath, Witten Language, Musio, and Att The courso mirir include: A desciptiotion of the

 management techniques for the classroom,
mainstreaming, vocational implications, and
supenision of the classroom aide. Traditional
grading only. (Lecture 2 hours, laboration 3 590. Advanced Topics and Current issues in Communicative Disorders (1-3) F, Selected topics from the most recent
developments and issues in Speech-Language
 vary with each offering. May be repeated for
credit under different topics for a maximum of credit under different topicis for a maximum of
three units. . Topics will be announced in the
schedue of Classes. 662. Seminar in Language
Disorders in Children (3) \(s\) Disorders in Children (3) \(\mathbf{S}\) Prerequiste: \(C D\) 481A, 696 . The subsystems of
anguage:
linguistio
structure,
ognititve competency and commurication abilities are
investigated in ix maior language intevention investigated in six major
therapeutic approachos.
663. Seminar in Disorders of Phonology (3) F
Prerequisitites: C D 456 or equivient, 696 .
Intormation in the description, asesesment and treatment of phonosogogical disiodsesssment Survey of
current literature and practices. Praticies in current iterature and
conducting procedures.
664. Seminar in Disorders of Voice and the Oro-facial
Prerequisistes: CD . 476 , 69 . Selected problems
in voice disorders through an investigation of in voice disorders through an in
the lierature and dllinical lesearch. 665. Seminar in Language
Disorders in Adults (3) F

Prereacuistes: C D 4818,696 . Provides an
understanding of neuropathological substrates understanding of feerropathoropical subustatates
of language diosoders in aduts resulting tom of language disorders in adutst resultity from
brain damage. Provides tor the recocgntion and
 666. Seminar in Fluency 666. Seminar in
Disorders (3) \(F\)

Prerequistes: C D 466, 696. Historical and
 disorders.
669A. Clinical Practice in
Phonological Disorders (2) F,S Prerequistes: CD A89; pre- or coorequibite:
C \(O 63\) or consent of instuctor. Studen conducts assessment of phonological disorders and management of therapy, under
superision, with clients in the university speech and heaxing clinic. Studentst handiele all aspects of clinical program including intitial interviews.
parent counseling, and testing 6698. Clinical Practice with Pre-School Language
Disordered Children (2) F,S Prerequistes: \(C D\) 489: pre or co-requisite:
\(C D 662\) or consent of instructor. Studeri C \(D 662\) or consent of instructors Student
conducts individual and group language conducts indididual and group language
therapy, under supernision, within a nurseny
shocol. studente makes a developmente school. Student makes a developmental
diagnosis through assessments and formal


\section*{Criminal Justice}


Supporting courses: Complete division social science courses (taken outside the Department of Criminal Justice) supporting major objectiv consultation with a criminal justice
Minor in Criminal Justice Requirements for the Minor in
Criminal Justice (code 0-1031) A minimum of 18 units which must
include: CRIM 301,404 ; three units selected from CRIM 351,353 ; and the
completion of an additional nine units completion of an additional nine units
of upper division criminal ustice of upper
classes.

\section*{Master \\ Justice}

Graduate study in criminal justice provides the opportunity for men and adequately prepared personnel to fill college and university positions in the need for highly skilled and broadly educated persons to engage in research, (3) the need for persons
planning professional careers in the planning portessiona careers in the
administration of criminal justice, and (4) the need for persons with advanced education to engage in the
administration of programs of administration of programs of
corrections, policing and security. The master of science degree in criminal justice will expand and increase individual competenc
develop and mature thought processes, aid in gaining insights into professional leadership and
knowledge to assure leadership knowledge to assure leadership
positions and permit an exchange of student-faculty ideas to further the
spirit of research and scholarship to spirit of research and scholarship to enhance pro
capabilities.
In addition to being admitted by the Office of Admissions and Records, applicants also must be accepted for
admission by the Criminal Justice admission by tene Criminal
Department before their program for a master's degree can be formulated.
The following factors are considered The following factors are considered (1) Scholastic achievement as
represented by official transcripts of rell resenteg course work. Each
all applicant should request that a copy
of the official transcript be sent to the graduate advisor in the Criminal

Justice Department, in addition to the copies required by the Offfic
Admissions and Records;
(2) Resume and statement of goals (3) Three letters of recommendation Prerequisites:
(1) A bachelor's degree with a major in criminal justice or a combination of
18 units of upper division course work in the social sciences, law, the
humanities, public or business humanities, public or business
administration, and the physical administration, and the physical or
biological sciences which reflect a basic understanding of the field of criminal justice. Adequate under-
graduate preparation shall be graduate preparation shall be
determined by the Department Graduate Councili, with experience in a criminal agency given significant
consideration on a case-by-case basis;
(2) A student must have an undergraduate upper division average of is made by the Department Graduate Council.
Advancement to Candidacy:
(1) Student must satisfy the genera University requirements for
(1) Student must satisty th
Un advancement to candidacy, as
specified in this bulletin and must complete the specific requirement set forth in the Bulletin and in th
College of Health and Human Services Handbook in effect during the semester of advancement to
candidacy,
(2) The graduate program must be
approved by the department approved by the department Graduate Studies and Research College of
Services;
(3) Students must complete six graduate units and have passed the Graduation Writing Proficiency
Examination prior to advancement to Examidacy.
Requirements for the Master of
Science in Criminal Justice Thesis Option
Thesis Optio
Complete a minimum of 30 units of upper division and graduate courses.
CRIM \(581,582,583,69\), and 698 are required courses. CRIM 694 is highly recommended. Remaining courses
are to be selected after consultation with graduate advisor. Student must
take a minimum of 18 units of 500 -60 take a minimum of 18 units of \(500-60\) CSULB. Up to six units of gradua work may be transferred from another 12 units may be taken from 400 level
ourses designated with * in CSUIB catalog. Undergraduate courses tha are not designated with * may not be Comprehensive Examination Option
per divisia minimum of 36 units of upper division and graduate courses 99 are required. Remaining course to be selected after consultation ke a minimum of 22 units of \(500-60\) vel work in Criminal Justice at work may be transferred from anothe accredited university. A maximum of 14 units may be taken from 400 level courses designated with * in CSU LB
catalog. Undergraduate courses that are not designated with * may not be oplied toward the master's degree Prerequisites: Advancement to candidacy and
CRIM 691 and CRIM 699 (may be CRIM 691 and CRIM 699 (may be
taken concurrently with CRIM 699). Each student will be required to ollowing areas: theories of crime; esearch design; and synthesis of e require to answer one question elated to his/her area of
oncentration
Comprehensive examinations will be given on one day each semester
Students taking comprehensive examinations for the first time must ke all four examination questions lowed 2 hours to rospond to each question.
At the discretion of the Department
Criminal Justice Graduate of Criminal Justice Graduate examination once. The Department Giminal Justice Graduate Committee om re-taking portions of the a stude examination that were passed the first time. A student must re- take all sive examinations on the same day. Repeat examinations must be taken olater than one year from the end examination was taken.
Students will be notified of their scores within three weeks atter taking any portion of the examination will be any portion of the examination witb be
given a critique of their work on the questions failed and counseled by the
graduate advisor on re- taking the graduate adv

\section*{Courses (CRIM}
01. The Criminal Justice

History and philosophy of the criminal justice sotem; survey of theocies of orime, punishment and rehabilitation: study of ethical issues in social
contro. The functions and rote expectations of ne oriminal lustioe system will be extexpored.
beraction between the oitizen and the components
151. Basic Concepts of Criminal
aw (3) \(F\) L51. Basic
(3) \(F\)
Histotical develioment, ppilisoophy of law and of crime and their application to the system of dminisistration of fustice: legal research study of assiaw, methodologyy and
bocia force. (CAN AJ 4)
155. Basic Concepts of Evidence 3) \(F\)

Origin, development, philosophy, and
constitutional basis of evidence: constitutional onstitutional basis of evidence: constitutional
and procoedural considerations affececitg arrest, search and seizurue: kinds and deegreese of evidence and rules opeverning admissibility:
fudicial decisions interpereting individual rights nd case studies. (CAN AJU6)
157. Principles and Procedures of Uustice System (3)
In-depth study of the role and responsibilities of
tach segment within the administration of fustice Yystem: law enforcement, judicial, corrections. \(A\) past, present and future exposure to each
subsyotem procedur from intiol entry to final
discosition and the relationship eech segment disposion nond the reamitionship eac

\section*{1. Introduction to Investigation} (3) Spring, Even Yrs

Preerequisites: CRIM 101. Fundamentals of Preerequistes: Collution and prondamentals of
inhestication: collotion of
phyical evidence; sources of information;
 Upper Division
301. Contemporary Issues in
riminal Justice (3) F,
Trerequisite: CRIM 101. Ciminial iustice studied parole, probation and the judiciary. Special
emphasis is placed on current issues and
ommunication for Crimina Justice (3) F,S
Prerequistes: ENGL 100 . Upper division
standing; open only to Criminal Justice maiors. standing: open ofly to Criminal Justice majiors.
Winten
the criminam iunuticicetiono profesinicion. he ciminal justice profession. 303. Statistics for Criminal rs (3) F,S Statistical procedures used for the analysis of
cata by
criminal
justice administrators in decision-making situations. Emphasis is placed
upon understanding and satistyn the upon understanding and satasying the
restrictions placed upon the most commony
used statistical procedures, both descintive as as


\section*{ 499: Job Stress and the Criminal Justion}
421. Contemporary Issues in Law Enforcement (3) F,S
Policy and procedure in specialized situation
labor-management disputes; minority relations; rrowd, public gatheseing, mob and riot
 in licensing, inspeetions, animal regulation ambulance serice and other specially assignect
police activies. Integration of public safety s. Problems of organized crime 422. Comparative Crimina

Sunvey of nationwide and worrawide crimina Iustice philiosophy and technique. Evaluation of
current maior hypotheses; review of recent developments and contributions by agen cies and
academic institutions; review of current literature in the field
423. Supervising Criminal

Prerequistes: Senior Standing. Open to Criminal
Justice mairos only. Techniues utilied ind Justice maiors only. Technicuuses utilized in the
 superisory investig
pepromance ratings.
424. Mana Resources in Criminal Justice (3)

425. Criminal Justice Resource. 425. Criminal Justice Resour
Management and Budgeting (3) \(\mathrm{F}, \mathrm{S}\)

Prerequivistes: Senior standing. Open to Criminal allccation, muiorsotingy. And study of resource inal |ustice manager:
431. Industrial Security
Administration (3) S

Prerequisites: CRIM 331 or consent of instructor.
Study of management and organizational theory
applied to securty environments. Impact of

ecurity
Security (3) S
Prerequiste: CRIM 331 or consent of instructor. Review and application of principles of physical
security to the protection of tacilites, personnel. couments and products in select environments. 437. Contemporary Issues in ecurity Systems (3) F
and the impact of contemporaray social trends on An solution. An anayysis of conflicting
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
468. Correctional System \\
(3) F,S
\end{tabular} & 485. The Role of Police in Socie (3) S & for a \\
\hline \multirow[t]{6}{*}{Historical, sociological and philosophical development of societal reactions to law violators Theories of punishment, traditional and innovative be examined. Attention will also be focused on the correctional institution as a complex organization and on issues relevant to administrative problems. Not available to students with credit in CRIM 340 or CRIM 365.} & & te Divisio \\
\hline & & 512. Problems in Urban Criminal \\
\hline & & Justice (3) S \\
\hline & & \\
\hline & 487. Juvenile Justice Systems (3) & \\
\hline & & is of FS \\
\hline \begin{tabular}{l}
*470. Alternatives to Incarceration \\
(3) F
\end{tabular} & & \\
\hline & 490. Independent Study (1-3) F,S
Prerequiste: & porary society and security. \\
\hline \multirow[t]{3}{*}{theories behind diversion from the criminal justice system; the legal framework; critical appraisal of impact of alternative community treatment programs; analysis and evaluation upon the correctional process.} & roved by major profe & \\
\hline & May be repeated for credit not to exceed a to of 3 units. &  \\
\hline & & \\
\hline \multirow[t]{6}{*}{\begin{tabular}{l}
475. Contemporary Issues in Corrections (3) S \\
Prerequisite: CRIM 468 . Issues relating to recent changes in correctional theory and practices which affect convicted offenders and correctional staff will be discussed. These include violence in
prisons, prison gangs, rape in prison, prisons, prison gangs, rape in prison,
homosexuality, special problems of women and minorities in prison, concerns of parolees and probationers, as well as correctional staff. Special problems such as child abuse and spouse beating will be discussed.
\end{tabular}} & & \\
\hline & & \\
\hline &  &  \\
\hline &  & \\
\hline & & \\
\hline & 492. Crimina & \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
477. Correctional Counseling \\
(3) F,S \\
Theories and techniques of counseling useful to the corrections counselor. Includes abnormal reactions with appropriate responses, crisis intervention, community mental heath and the use of mental heath reports. Not available to students with credit in CRIM 383.
\end{tabular}} & to Domestic Violence (3) F,S Prerequisites: CRIM 301 or consent & role of the U.S. Constitution. State and court systems will be explored. \\
\hline & system. Spouse abuse, child abuse and & 581. Theories of Crime Causati and Prevention (3) F,S \\
\hline & personnel handling these cases are stressed Not available to students with credit in CRIM 499C Domestic Violence. & Relationship and interaction between social structure and crime. Imvestigation into the classical and behavioral theories of crime and \\
\hline \multirow[b]{2}{*}{\begin{tabular}{l}
Methods in Criminal Justice \\
(3) F,S
\end{tabular}} & 493. Computer Applications & \\
\hline & Criminal Justice (3) F,S
Preerequistes: CRim
(1) or
and & Advanced Statistics for minal Justice Research (3) \\
\hline Prerequisite: Any basic course in statistics. Introduction to basic techniques in criminal justice research including library research, report writing, research design models, sampling techniques, questionnaire construction, interview techniques and participant observation. & technology and its application to criminal justice Use of data processing in training, research, field operations, supervision, and administration Federal, state, local and private application programs. Civil liberties, data bank security and & Prerequisites: one undergraduate statistics course. Statistical inference in normally distributed populations. Regression and multivariate analysis of research data. Utilization of non-parametric statistics. (Lecture 3 hours) Traditional grading only. \\
\hline \multirow[t]{2}{*}{481. Community Relations in Criminal Justice (3) F,S Individual and group study of relationships between criminal justice agencies and the public. Exploration of areas of conflict and cooperation.} & & 583. Research Meth \\
\hline & \begin{tabular}{l}
*495. Internship (3) F,S \\
Prerequisite: Consent of instructor. S
\end{tabular} & equisites: One undergraduate research se. Scientific method of research; variations search design and methodology; application \\
\hline *482. Crime, Criminal Justice Systems and the Political Process (3) F & immediate area. May be repeated for a maxim of six units. (Not open to employed crimin justice officials.) & of research findings to problem solution. Not available to students with credit in CRIM 696. Traditional grading only. \\
\hline \multirow[t]{3}{*}{Crimino-political power; relationships between specific organized crimes and poltical entities; political functions of criminal groups; the police as a political instrumentality.} & 496. Internship (6) F,S & \\
\hline & quisite: Consent of ins & Consent of instructor. Individual \\
\hline & & \\
\hline 483. Enforcement Systems (3) F,S & 495.) & advisor. May be repeated for credt not to exc a total of three units. \\
\hline \multirow[t]{2}{*}{A study of the foundations of police development and present organizational philosophy, environment, and community interaction. The role of the police, organization and personnel in a democratic society, crime control, and community participation will be examined.} & 499. Special Topics in Crimin Justice (1-3) F,S & 599. Special Topics Justice (3) F,S \\
\hline & Prerequisite: Consent of instructor. Topics of current interest in the field of criminal justice selected for intensive development. Topics are announced in the Schedule of Classes. May be & Group investigation of selected topics in crimina justice. Topics to be announced in the Schedule of Classes. May be repeated for a maximum of six units. \\
\hline
\end{tabular}
21. Seminar in Criminal Justice Criminal stration (3) S development and
 heoeriese; examination
changes taking place
622. Seminar in Administration of
riminal Justice Information
ystems (3) S
seecial study and original research in automatio
data processing applications in the the daministration of coimineal uastici; technological
and other developments;
equipment and and other developmentsis. equipment
623. Seminar in Comparative

Criminal Justice Administration (3)
Advance
Advanced study of the theories, philiosophies and Lechniques of criminal fustice worldwide and

\section*{24. Seminar in Criminal Justice}

\section*{624. Seminar in
Problems (3) \(S\)}

Itensive study and individual research of the problem areas in the broad spectrum of orimina
630. Seminar on Organized Crime 3) S

Historical development of organized crime: tho criminology; various techiquues usesd against nd detailed considieration of the polticaal, social vailable to students with credit in CRIM 599 or
640. Seminar in Police

Theories, conceopts and issues related to the admininstrationce. rgantization and managemenent of the polico function. Reseaa
modification taking place
641. Seminar in Correctional

Administration (3) S
Theories, concoepts and issues related to the
administration, organization and management o probation, parcloe and insont tituonal progerame
Research into changes and modifoations taking Research
place.
650. Seminar in Juvenile Justice
(3) F
stury of fivenile justice programs administered by the police, court and correctional agencien
analysis of theories of delinquency causation and prevention; current issues.
691. Professional Literature (3) F Prerequuistes:A Advancememt to Candidacy
Cititcal analysies and comparative review of professional liteature in criminal lustice practice theory and research. Required for studen
taking compretensive examination; may be taken concurrenty with CRIM 699. (Seminar 3 hours) Traditional grading only.
694. Design and Implementation
of Criminal Justice Field Research (3) S

Prerequuisites: CRIM 582 and CRIM 583
denentifition of unique problems Identification of unique problems facing field

 Tradtional grading only.
695. Thesis I (2) F,S Prerequisites: CRIM 582 and CRIM 583 and advancement to candidacy. Comprehensive
review of the liferature on thesisis topic must be completed. Student acts under diriect facauly
supenision to develop appororiate research supenision to develop appropriate research
methodology for the thesis project. Not avaliable to students in comprehenensive examination option (Supenisision 2 hours.) Traditional grading only. Extensive independent research on assigne Extensive independent research on assigned
topics addressing theoretioal oriminology and synthesis of itierature on current issues in criminal justice. Work produced in CRIM 697 wild
presented in CRIM 699 . Not available to students in thesis option. Tradtional grading only.
698. Thesis II (4) F,S

Prerequisites: Advancement to candidacy and
CRiM 695. Student conducts fieid research to complete thesis propect; data is as anaryed and comploted thesis prepared. Student must raally
defend thesis. Students in thesis option must defend thesis. Studentit in thesis option must
complete 4 units of
CRIM 698 . CRim 698
not aveilable to stucents in comprehensivio
examination option. Traditional grading only.
699. Integrated Analysis of
Criminal Justice (3) \(F\)

Integration and synthesis of key concepts and
issues related to the administration of criminal issues related to the administration of criminal
justice. Project tis required. Not avaliable to justice. Pragicet is reaquired. Not avalable to
students in thesis option. Traditional grading
only. studer
only.

\section*{Gerontology \\ College of Health and Human Services}

olitical Science, Psychology, Rocreation,
The Certificate in Gerontology may be earned in conjunction with a accalaureate or awarded subsequent to earning a bachelor's ertificate may be the same ones used to satisty, where applicable, major, minor, or credential
equirements
Requirements for the Certificate In Gerontology
degree
(2) 24 units distributed as GERN 4001 AP 401 PSY ( 125 units) HDEV 357i, GERN 464:
(3) A minimum of six units chosen a list of supporting courses (4) Independent study on a topic (5) Approntology (three units) adult service setting (three units): (6) Consultation and approva he program with the Director of Gerontology.
Certification of successfur Completion of the Certificate in by the director.
Interested students should apply to Dr. Dorothy L. Fornia, Home
Economics 128, \(985-4056\).

Courses (GERN) 4001. Perspectives on
Gerontology (3) F,S Prerequisites: ENGL 100 or its equivalent and
upper division status.
Mutidisciplinaran upper drision status. Muntidiciciplinary
pesesentation of the scientificand in aging. (A) bibophysial, (B) posycholotical
perspectives. and (C) scoidogoical oconcepts. 420./520. Personal Finance for the Aging (3) F
Preferauistes: 40 -隹el course in Consume Affairs or consent of instructor. Pronsides an
understanding of finances asding of the operations of personal

Topics indude public and pitvate sources of
income, Ilving expense, public and private sourress of assistance, personal budgei
systems, financial planning, legal tights of the
aged affecting their aged affecting their perssonal finances, and
financial counseling for the agin. Same financial counseling tor the aging. SSam
course as H EC 420 and H EC 520 (Leeture-dicocussion 3 hours.)
*424. Independent Living for the Disabled and Elderly (3) S Herequiste: HECE 32 or consent of instructor
physically dioment conceptst as related to the physically diasbled and the elderty in the near
environment. Pehabilitation procedures envirenment. henabilitation procodures for indeependent \(i\) ining. Emphasis on research
findings in regard to functioning in the home and family, (Leecture-discussion 3 hours.) 425. Gerokineslatrics (3) F,S Prerequistes: AP 202, 207, GERN 4001, or
consent of instructor. The reationale organization and conduct of exercibe program
for the older adult. (Lecture-laboratory:) *439. Nutrition and Aging (3) F Prerequistes: H EC 232 or 331 or AP 401 PNereaulistes: H EC 23 or 331 or AP 4 4in changes that occur during aging. Factors thal
influence food intake and nutritional status of influence food intake and nutritional status o
the elderly. Diet adaptation for chronic diseases commonly found in older people sion 3 hours
464. Sociology of Aging (3) S Preerequistes: SOC 100 and completion of at
least
one
upperadivision
 course. Sociological perspective on the aging
processs from the middle years through old age. Sunvey of theoretical perspectives, issues,
institutions and ersearch fnidgas institutions and research findings on aging Focus on rote and status changes. with aging in
the United States. Cross-acultural and aging
difterencees all be differences will be explored. Social analysis o
 Traditional grading only.
*482. Physical Assessment and Aging (3) \(F\), Prerequisite: Upper division standing. The
Physical, emotional and social changes which accompany aging. Theory and practice in the assessment of these factors. Clurse is
designed to prepare the average lay person
and thoces in the peping potesing designed to prepare the average lay person
and thoses in the helpong protessions to work
with the aged and d deal with own aging. *485. Aging ind Mexn aging. (3) \(F, S\) Aging and Mental Health Intervention

\({ }^{*}\) 486. Communication Problems Prerequisiste: Communication Problems of Aging: the physial, physiological
environmental and emotional factors of aging which affect the hearing and speaking
processes: the administration and practice of problem of rehabilitation.
*499. Special Studies (1-3) F,S Group investigation of topics of current interest in gerontology. Topics to be announced in the
Scheduie of Classes. May be repeated for Soherdite of Classes. May be repeated for a
maximum of s six units of credit with change of topic.
520./420. Personal Finance for e Aging (3) Prerequisties: \(400-\) Fevel course in Consumer
Affairs or consent of instuctor. Provides an understanding of the operations of personal
finance as applied to the aging population financos as applifed to the aging population.
Topicies indudude public and private sources o income, living expense, publice and privati sources, of assistance,
systems, inancial palaning, leal rights of the
aged atfecting their personal financos, and ageen affecting their personal financoes, an
financial counseling for the aging. Same financial counseling for the aging. Same
course as \(H E 520\) and \(H E C 420\). (Leecture
dieae course asi H EC Lirs.)
526. Economics of Aging (3) S

Prerequisite: GERNH EC \(420 / 520\) or consent
of instuctor.
Concepts
speefifio economic consequencose of an aging
population and the economic status of the poonumiaion and the economic status of the
aged along with aternative policy choices and aged along with aternative policy choices and
their consequences. (Seminar, 3 hours) Traditional grading only
\({ }^{550 .}\)
Preerauisite: GERN \(464 / 50 C 464\) or equivalent. Maior legisation and policies
affecting administration of health and social gerentolology programs for the aging,
examination and analysis of policy making and examitination and anakyis of poity,y makng and impleamentation of programe. (Seminar
hours.) Traditional grading only. hours.) Traditional grading only
563. Evaluation in Gerontology (3) S

Prerequistes: GERN 696 , upper division
tataisics statistics course. Princioplies. deofign, and
methocs of ovevaluation for use by professional gerorontologists. Selection and developement of
 interpretation, methods. of reporting for
purposes of accountability. (Seminar 3 hours.) purposes of accountablity. (Seminar h hours.)
Traditional grading only. Same course as H EC
S53 563.
592.
Int
(3) F,S (3) F,S Prerequiste: GERN 550 and GERN 600 ,
consent of Diector of Gerontology Progam Administrative internship in an approved
agency or organization sening older aduts. May be repeoted toa a maximum of six units to the degree. Traditional grading onls. 600. Administration and
Management of Programs for Managemelt (3) S Prerequisite: Six (6) units of gerontology
gracuate courses. Conccepts and theories of administration and managegement of proerarams
for the older adutit Sominar 3 hours. tor the older aduit
Tradtional grading onl.
605. Seminar in Current Issues
and Trends in Gerontology (3) F nd Trends in Gerontology (3) F Prerequisite: Investigation of ourrent issuus,
trends, and researh in administation
management of older adults and programs management of of older aduts and
tom a mutti- outurual perspective.
tours) Traditonal
696. Research Methods (3) F,S Prerequisite: Upper division statisticis (may be laken concurrenty.) Methodologicial peroachosesy; to contemporary problems in (sesearch; cititical eveluation of research 997 Direted Tesearch (3) FS Frerequiste: Adrainent to candiden GERN 500 level courses in area of study , and lesearch problems under the diriection of a fesearth pember
tacauty member
grading only.
698. Thesis (4) F,S

Preerequiste: GERN 697: Advancoment to candidacy. Planning, preparation and
completion of a thesis under superision of a aculy member. Approval of thesis committee. (acury member. Approval of onss.

\section*{Health Care Administration Program}

College of Health and Human Services
Col

Department Chai
Alan C. Henderson
Program Director
Harold R. Hunter
Department Office: Applied Arts
(AS 2), Room 215
Telephone:985-4057
Faculty: Professors: Harold R.
Hunter, Robert E Tumelty Associate Professor: Adela de la orre; James H. Swan. Advisory Council: Sam Envin,
CEO and President, The SCAN Foundation; Jonathan Fuchs, Adjunct Faculty, CSULB; Richard
Tarrell, CEO ADMAR: Tarrell, CEO ADMAR; Carmen Ness, Vice-President, Pacificare
HMO: David Jones, Director of Human Resources Services, McDonnell-Douglas Corporation; Dan Heslin, Director of Employee
Benefits, Rockwell International; Jacque Sokolov M.D. Vice-President for Medical Affairs, Southern California Edicson; Director, Los Alamitos Medical Center; Robert Nelson, Executive Director, Harriman Jones Medical CEO Community Hospital, Long Beach; Mary Piccione, Administrator, UC IVvine Medica enter; Michael Rotts, Director range County Building Trades
Council AFL-CIO; Feri Kidane, CEO John Douglas French Center, lilhaven Corporation; Marik County Medical Association; Dean Stordahl, Medical Center Director, Veteran's Administration Hospital dministrator, St Mary's Medica Administrator, St. Mary's Medic Director of Planning, AMI Hospital, enior Vice President Memorial Medical Center; Tom Uram Director, Health Care Agency of range County; Peter Pellerito, Manager, Southern California Kaiser-Permanente MCP.

The Progran
The Health Care Administration program has four major objective elated experience in order to prepare administrators, skilled in the application of organizational and managerial techniques, for the ontinuing education for health dministrators in practice as well as thers in administratve and administration of the delivery of ealth services; ( 3 ) to consult and to participate in community service instructional and research functions of the faculty and provide ppropriate learning experiences for in the administration and operation of the health care delivery system which will contribute to development f faculty teaching abilities and
verall professional growth.
The program is designed for the professional administrator or those who wish to become administrators
within organizations which deliver personal heath care services. Thre patterns of preparation are offered: (1) Bachelor of Science in Health Care Administration
(2) Master of Science in Health
(3) Certificate in Heath Car

The schedule of graduate and undergraduate courses offerings is in the regular Schedule of Classes. Certificate in Health Care The Certificate Program in Health to a minor of 18 semester units and with prerequisite course work, may require a maximum of 21 semester of the program include the forms of organization and operation of health care systems, administration and management of these systems management: Personnel leadership and developmen
finacial manaement and marketing. The Certificate may be combined with major programs from
a variety of fields including, but not limited to, behavioral and natural sciences, humanities, health professions, business and public
administration, and social work. Health care administrators are usually prepared at the masters' degree level for job entry into upper increased emphasis to prepare health care professionals to function as managers at the technical and
baccalaureate levels as well baccalaureate levels as well.
Increasingly, physicians are seeking preparation in the elements of management. These diverse groups use management skills in the The health departments, health maintenance organizations, heath
planning and cord planning and coordination agencies companies, group medical practices, and health insurance organizations.
Requirements for completion of Administration:
degree;
(2) Consultation with the Director
of the program of the program
(3) A minimum of eighteen units
are required and include: are required and include
a. Forms of Organization
b. Administration
anagement: HCA 312,314 \(341^{*}, 353^{+}, 410\).
+ Perequaiste: ACCT 210,3 units.
\(+{ }^{\text {Pererequites: }}\) EON 201 and 202. Course substitutions may be mad Bachelor of Science in Health Care Administration
Prerequisites:
All students must complete a minimum of 33 semesters units, or the equivalent, in prerequisite preparatory courses for the major:
ACCT 201, \(\mathrm{ECON} 201, \mathrm{ECON} 202\) ACC 100, EOC 135 (or SOC 100),

H/SC 400, Q S 310 (or other acceptable course in sta
ANTH 353 or SOC 462 .
An overall GPA of 2.0 or higher is required for entrance to the program. A GPA of 2.0 is reg Requirements for the Bachelor of Science in Health Care
Administration (code 3-1205):
1. Complete the requirements for ducation;

\section*{2. Com}
3. , requirempentet: HCA \(312,314,320\)
\(340,341,342,353,402 / 502,410\) 340, \(341,342,353,40 / 502,410\)
\(416,445,450,465,48\), and 495 4. Complete electives, as semester units (a minimum of 40 units in the upper division), 30 units must be earned in residence, of upper-division course work;
5. Successfully complete the

University Writing Proficiency
Examination;
6. Each major course must be better. A course in which a grade ower than " \(C\) " is received must be taken and successsily completed which it is a prerequisite. A student eceiving a grade lower than a ' \(C\) ' may proceed with other courses with proval of the Program Director. Master of Scien Administration
The goal of the M.S. in Health Care Administration program is to epare men and women to enter and ambulatory, long-term care, and mental health seetings as well as in nulti-institutional system centra fices, governmental health gencies, and other health related the M.S. in Heath Care
Administration will achieve the
ollowing objectives: (I)
heath care system and fundamenta
sues affecting the administration of ealth care services, (2)
Demonstrate organizational and
managerial knowledge and skills
essential to administrative positions
in health care sevices, (3)
ndil in in
functional areas in health care administration, including financial management, marketing, job
analysis, compensation
management, or public polic analysis, (4) Use ethical principles within administrative positions of responsibility in health care service
and (5) Demonstrate the ability to conduct studies in the organization financing, administration, and operation of heath care delivery
systems in operational settings. The program is designed for persons with a variety of undergraduate experiences who give evidence of interest and pol geal success research.
Master of Science in Health Care
Administration (code 6-1205) Admission Requirements Each applicant should request that a copy of all college course work anduate adviser, Health Care Administration Program, in addition to the copies required by the Office of Admissions and Records. In sent to the Program. Admission Criteria:
(1) Baccalaureate degree from an accredited institution with a major in health care administration business or public administration; or
(2) Baccalaureate degree with a minimum of 18 units of course work to include: accounting, financial management, economics,
information systems, statistics, and health care systems;
(3) An applicant must have an overall undergraduate grade point average of 3.0 or better. Those with acceptable evidence of rofessional potential show rough recent academic background, may be admitted by special action of the Program Graduate Committee
(4) Interview with member of culty or preceptor
(5) A current and complete
resume including references.
(6) Submission of scores recent Graduate Management dmission Test (GMAT)
(These courses or equivalent) 1) HCA \(402 / 502\)
(3) ECON 201 or 300
(4) C/ST 200, and
(5) QS 310

Students should contact the Program director for a detern
of deficiencies and required remediation.
Requirements for the Master of Science in Health Care 1. Completion of graduate leve course work in Health Care Administration: \(505,506,508,510\),
\(515,524,530,535,685,695,698\), and HCA 451 .
2. Completion of any one of the
courses in site specialization: 536 . courses in site specialization: 536 537, or 538
3. Completion of two approved
courses within one of the functional specializations. 4. Completion of an Advancement to Candidacy Students will be instructed to
apply for advancement to candidacy after: (1) completion of 6 units of course work that applies to the degree with an average grade of " \(B\) " or better, (2) passing the Witing
Proficiency Examination and submit evidence of same to Department Office, and (3) approval of Program Director.

Courses (HCA)
001. Continuation of Residency - External Degree (1) F,S This course is required for students who eniol exclusively in cocirses staugh onty thruugh
Etended Education in the External Healt Care Extendod Education in the
Administration program.)
Upper Division
312. Health Personne
Management (3) S

The management of human resources in heath care setings. Content includeses principipes and
methods of personnel work such methods of personnel work such as employee
recurument. selection.
retention, training recruitment, selection, retention, training,
evaluation, wage and salay admintation,
and labor-management telations. (Lecture)


*410. Health Management and
Concepts of organizing activities to achieve the
goals of health care institutions. Effects of environment, tecchnology, and hut hum. Effects of on organizational deesign. Managerie influencosing, and controlling required to toakeration and change heath carce organization and chang
416. Management and
information Systems (3) F
Prerequiste: CST 200 Evaluation of concepts,
analysis and doesign of management
intorition analysis and design of manacement
information systems management docilion
models, strategies for implementing system models, strategies for
changes. (Lecture)
422. Global lssues in Health Services Administration (3) F,S Prerequisistes: ENSL 100 and upper division
standing standing. Contemporary problemes in heaeth
serices developed as an interfelated system. Rurat heath problems, ismues of the elderly rising costs and new tecchnology presented with
reference to
industrialize
 Notht America, Atricia, and L.E.EUnirope, Ameria)
Geographic, political, economic. historicial and
 administration probbemsectsand of heath
analyes.
Tradtional
grading will be
only. analyzed Tradit
(Discussion,
h hours)
445. Health Planning (3) F,W

Contemporary opproaches ity the
administration of communty-mide planning (macto) and the admuministration of
in-house facility heath in-house facility heath planning (micro) to
include the development of the institutional plan.
450./550. Quality Assurance of

Designed for the heath care professional of

 state-0.the-art, voluturtar and goverinningental
eflot and propoed means to qualty effort and proposed means to quality
assurance. Tradtional grading only. *451. Economics of Health (3) S

Prereauisites: Economics 201 or 300 . Analysis
of heath as an economic good. of heath as an ecconomic good. Analysis
senices as scarce resources. Use of toolts of sericees as scarce rescurces. Use of tools of
economic theory in study of special problems
of healt
 programs and Medicar.. Procedures stroses
indwival studies and reports. Not open to
students with credid in ECON 345 or ECON 445 465. Analysis and Evaluation of Health Care Services (3) F Preerequistes: Introductory course in statistics,
consent of instuctor. Techniques of analysis
and evalution and evaluation applied tochicuases of analysis respect to organizing, staffifig, finanaing and
vtirazion. Empheis on the anatic ppocess.
program evaluation and report of find ings.
480. Internship in Health Care Administration (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) Prerequisites: HCA 402/502, or consent of
instructor. A supervied intership in an approved health oerve organizationship of related
agency under the ioint supenision of agency undier the joint supenision of univeraty
and institutitional personnel May pe repeated
once to a maximum of six untit. once to a maximum of six units.
490. Special Topics in Health
Care Administration (1-3) F,S Topics of special interest in heath car Topics of special interest in heath care
administation selected for intensive stury.
Topics will be announced in the Schedue of Topics will be announced in the schehodure of
Classes. May be repeated with different topics Classes. May be repeated
to a maximum of \(s\) six unts.
495. Integrative Seminar (3) F Prereauisite: Completion of all other required
maior coursee. Intecrative experience major courses. Integrative experience focusing
on the student's ability to apply the concepts of on the student's ability to apply the conceepts of
health core administration as demonstrated by
the develoment the developomment and defensem of a rateeeary by
paper. Tradtional grading only. (Seminar) 499. Directed Studies (1-3) F, Prerequisite: Consent of instructor.
Independent study of special topics under supenision of a a faculty member. May be
repeatied to a maximum of four units. In excepptional cases, max be repeated to a
meximu of six units when approved by the maximum of six units when appoved by the
Director of Health Care Administration Program.
Graduate Division
500. Administrative Behavior and 500. Administrative Behavior and Leadership in the Health Care
System (3) F,S
Prereaquistes: The goal of this course is to
develop skills in analyzing administrative develop skills in analyzing addrinisistative
problems. T This
includes problems. This includes evaluation and
improvement of organization management in
health care institu heath care institutions with special emphasis on concepts of leadership, group dynamics,
communications technicues and processes, motivation, and
techniques. 502./402. A 502./402. Administrative Behavior and Leadership in the
Health Care System (3) F,S The course focuses on the contemporary health
care system to include its historical beegning care system to include its historical beginnings
and the underlying social and biological forces
 financing and manoower tequiriomentst; ;ssumses
and concerns molding tis future such as the and concerns molding tits future such as the reguiation and control of the system. . LLecture) 505. Organization and Systems
of Health Care (3) FS he (3) F,S
The analysis of operational acturities and
managerial functions essential to the heath
care delien managerial functions essential to the heath
carar delifer system will
discuseed. Sxamined and
special emphasis will be placed on discussed. Special emphasis will be placaed on
the manager's role in develping and maintaining an efffective in devereloping and porving
heatth care sericee. The organizational health care serices. The organizitional
aspects and managerial approaches of
delivering headth care seericeso
506. Epidemiology for Managers Analysis of patterns of heath and disease and
how these impact on heath dolivery in the U.S. how these impact on heath delivery in the U.S. and abroad. Planning heathth senices based
on cistribition of accute and chrorio disease in populations. (Seminar 1 hour.) Traditiona
508 Ethics in Health \(C\)

\section*{508. Ethics in
Delivery (1) \(F\)}

Prerequisites: None. A review of ethical issues in businesses, mencioine and heath carar deliven
with emphasis on the role of the manager With emphasis on the role of the manage
 miximum of 1 unit with differenent topicic. Traditional grading only for majiors. 510. Human Resources
Management in Health Care (3) S

\section*{(3) \(\mathbf{S}\)}
sementem of human resources in the health plannisg sytem and includining tuman resourure development, performance appraiaal, job
design and analysis, and compensation. 515. Advanced Financial Management In Health Car (3) \(F\)

Prerequisites: HCA 341,342 . Examination of the princioples and practices of managing financial
resources in heath instututions. Evauation ends in the financoning of heath care and the decisions of health care administrato aditional grading only for Malors.
524. Advanced Legal Aspects
Health Administration (3) F

Examination of the federal and Examination of the federal and state
reaulations of heath care facilities and thel
personnel. personnel, patients, and programs
Identification of the legal ights, privieges, and duties of the heath care pacility to to mployees and the patients. There will special emphasis on mappractioe, government
 eppoting and the hearth practitioner as an \(s\) appropriate.
530. Strategic Planning and
Marketing in Health Care (3) Marketing in Health Care (3) S of strategio planning and marketing concepts and methods applicable to the organization and delivery of heath care senvices. It is
expected that students will gain an
appreciation of
manaesment
planning the \(\begin{gathered}\text { strategy-orientied } \\ \text { process, achieve }\end{gathered}\) knowiedge of basic appposaches and
methodologies empleyed in stategio planning methodoologies employed in strategic planning
and theath care marketing, and become sensitive to those economic and political forces
which give form and hape to the heath care which give for
marketplace.
535. Quantitative Methods fo

Prerequistes: Statico Prerequisites: Statistics. Identify and apply
appropiate
opearitative
and
 setting. Students will receive intensive
oexposure to docision theory and control
systems, and have practical experience soling systems, and have practical exxperience sooving probiems in resource allocation, procedural
sechediceasting
decisions, measurement, and cybernetic control. 536. Hospital Management
(3) F,SS (3) F,SS Prerequisites: HCA 505 . The goal of thic course
is to develop familiarity with the internal
 solutions of hospital operational problems.
Hospitals will be anayzzed by broad function Hosprital will be anayzed by broad function
and by becific departments.
simulations and vistas may be ued. simulations and wists may be used. (Seminar
hours.) Traditional grading only for Maiors. 537. Alternative Health Delivery Systems Management (3) S Prerequisites: HCA 402 or 502 The purpose of
this course is to prepare peoole to enter the this course is to prepare people to enter the
managed care field and to ocient managers to the organization and administration of Heattio Maintenance Organizations, Preterred Provide
Organizations and relited enterpises. Bot Organizations and related entierpisises. Bot
reationships to the health care maketplace
and and operational aspects of managed heatt
systems will be covered. Guest lecturers tro managed care ocganications will particicated in the courre and students will be expected tion
develop an operational plan based on a real world situation. (Seminar 3 hours). Traditional grading only for Maiors.
538. Long Term Care
Management (3)

Managem: HCA 402or 50
ailitios, offering seanices to the the teged care diaabled, pose unique problems tor manage America, emergence of debilitating illinessees Amenica, emmergence of debiliating ilnesses as a major health policy issue, managess in this
sector of health must assume leadership roles in planning and adapting to this cynamic and axpanding environment. This survey course w analyze the forcess infuencing the development
of long term care in the U.S. and address

\section*{specific organizational aspects that affect
outcomen of senicas propided in long term
care setings. Traditional grading only for care setitin
Maiors.}
550./450. Quality Assurance of lealth Care (3) S
Designed for the heath care professional or
administrator who is involved in or concerned administrator who is invoved in or concerned
abourtatasurace of quality in heath care.
Course incluces historical beginnings, Course indudes historical begiminings,
stateo-t.theart voluntay and govermental
oftort and state-o-the-art, voluntary and governmental.
offot and proposed means to quality
assurance. Tradtionel grading only. 599. Speial Topics by Dire

\section*{599. Special Top
Study (1-3) F,S}

Directed study of a special topicic to be taken Directed stury of a special topic to be taken
under supenised independent study. May be
repeated for a maximum of 9 unita, but the repeated for a maximum of
topic must not be repeated.
685. Internship (3) F,S,SS

Prerequisistes: All 500 -level courses and consesent
of instructor. The purpose of the course is of instructor. The purroseo of the coursenses to
provide candidates for the master' degree an opportunity to obsenere and pasterticipategee an operations of a heath cara insptitution. The
student will also stucy indepth the
 and personnel I lelationships of the institution,
under the guidanee of an approved on-site
695. Integrative Seminar: Critical Analysis of the Healt Care System (3) F,S
Prereauistes: HCA 685 , 69 . The heath care
syytem will be criticaly analyzed within its system will be critically analyzed within tion
organizational, financial, and personnel componentst to include the socioocconomic and
political forcees which bind the system. A political forces which bind the system. A
systemat, ecological appoach will be
employed with emphasis on an advanced and employed with emphasis on an advarced and
citical analssis of the u. system. Special consideration will be given to the public policy development of the system and 698. Project (3) FS,SS Prerequistes: All 500 -level courses, and
consent of instructor. The student will
will investigate what is considered a major problem
to the heath care institution idenififed in the to tudent's residency, research it in acocordanc
with an accepted methedog conside the With an accepted methodology, consider the
characteristsc of the organization, and chearacientistcs of potential courses of action for the
recmmand
orgaization to taxe organization to take. Course may be repeated
for a maximum of 6 units. CreoditNo Credin grading only.

\section*{Health Science}
college of Health and Human Service

as well as help improve the well-being of people in organizations,
such as schools and businesses, and communities. Health education raining focuses on the environ-
mental influences which include t mental influences which include the
cultural and societal context in which heath behavior occurs as well as the processes for developing and hanging individual attitudes and
Thav soward heath
The focus of health education is
upon planned change. Individuals are encouraged to take responsi-
bility for their own health and to
assume responsibility for the health
of their families and communities.
As our society continues to change and heath problems are redefined, it is increasingly apparent
that future health advancy come from new technology. Rather, oositive difference will occur
primarily as the result of community, group, and individual actions related and the organization and delivery of ealth service
An Undergraduate Handbook and a Graduate Handbook are describing the Undergraduate program, Credential program and he Master's program in Health Sciente are also avaiable at the
Health Science Department office. Courses are designed to satisty
Health Science requirements for ( 1 ) eneral education, (2) the baccalauate degree major, (3) Single Subiect Credential in Health Science
4) Master of Science Degree with a Major in Health Science, and (5) aster of Public Heatth Degree in munity Health Education (code 3-1212)
The Radiation Therapy Option is designed for those individuals who wish to pursue a professional
preparation program leading membership in the health care utilizing ionizing radiation in the treatment of malignant disease. The program is competency based and
integrates didactic courses and clinical experience to prepare entry level radiation therapists to become
integral partners in the heath care team and contributing members of registered radiation therapist is involved in
1. Operating sophisticated radio-
therapeutic equipment to deliver therapeutic equipment to deliver
prescribed doses of prescribed doses of ionizing radia
tion for treatment of malignant disease.
2. Providing psychological and emotional support to patients who are dealing with the stress of thei \({ }_{3}\) and recoerving patients' progress which require physician attention. 4. Assisting with the planning of of simulation and computer assisted computations.
5. Constructing devices to aid in treatment positioning, bear modification, and treatment planning Successful completion of Option
requirements qualifies the student to sit for the examinations for licensure at the state and national levels to practice as a registered radiatio herapist.
This program is accredited by the Committee on Allied Heath Edyca tion and Accreditation of the Medical Association in cooperation with the
Joint Review Con tion in Radiologic Tece on Education in Radiologic Technology as well
as the State of California, Department of Heath Services, Radiologic Health Branch
All Health Science majors and requirements specified in the University Bulletin. Students ar encouraged to sign up with a faculty advisor by contacting the Gradual
or Undergraduate Advisor. The faculty advisors will discuss and review the students' academic
programs with programs with them. Students wh programs should contact their advisors. Students alsoct heve the responsibility of keeping track of unit
totals required for graduation and totals required for graduation and
insuring that these unit requirements
are met.

\section*{Bachelo
Science \\ ience}

The basic requirements for graduation with a B.S. Degree
Health Science consist of (1) completion of General Education equirements, (2) completion of degree major requirements, (3) nits, at least 40 units of which must e upper division. Upper division ourses are numbered 300 to 4 Major Core Requirements: Al complete the required core. The core of the Health Science program contains five areas of competencies tatistics, Program Development, and Health Promotion. All majors nust complete at least one course rom each competency area Courses must be selected in
onsultation with an Advisor.
Requirements for the Bachelor of Requiree

Required Core: 15 units.
(A) Statistics: \(H / S C\) or 403 or \(P\).
(A)
(B) Program Development: H/SC

H/SC 301
5 P1 Peessionalism. HSC 301
(D) Health Organization: H/SC

401, 4201 or 450
Promotion: H/SC 435

\section*{Requirements for the Option in
Radiation Therapy (code 3-1212)}

Preprofessional
During the preprofessional
component of the Radiation Therapy the general education requirements
the general education requireme
following prerequisite courses: AP
202, 207, PHYS 100A, B, MATH 112 , 202, 207, PHYS 100A,B, MATH PSY 100, ENGL 200, BIOL 200,
C/ST 200. H/SC 200; one course selected from the following PSY 150 ANTH 150, SOC 135. The student will also schedule an appointment Therapy Career Advisement Committee the semester before entry into the professional

\section*{preparation pro}

Professional
The professional component is
designed so that students enter in designed so that students enter in
the spring semester each year and in a lock-step manner complete th remaining didactic and clinical
professional preparation compone of the Option, students must
the following requirements:
1. Obtain personal malpractice insurance.
2. Maintain full-time student program.
3. Complete one designated session ( 6 weeks), each summer the clinical setting
4. Complete all of the following Upper Division courses in sequence \(150,321,320,330,340,403,415\), \(429,435,445 \mathrm{~A}, 445 \mathrm{~B}, 450,451\), \(460,470 \mathrm{~A}, 470 \mathrm{~B}, 475,475 \mathrm{~L}, 480\) 92A, 492B

\section*{Option in Community Hea
Education (code 3-1213)}

The Community Health Education option is designed for persons whose occupational objective serve as a community health corporate health agency. Lower Division: AP 107, BIO 200, CHEM 200; MICR 100, 101; SPAN 101 A or language equivalent
approved by Department adviso HSC advi 40 Upper Division: H/SC 301, 400,
401, 402, 403, 405, 421, 430, 435, 440, 485: Three courses selected om the following: H/SC 409, 4201 HEC 232 or 430; one course selected from the following: PSY 35 or SOC 335; one course selected om the tollowing. 462 elected from the following: SPCH selected from th.
\(332,334,335\).
Option in School Health
ducation (code 3-1215)
The School Health option is
designed for persons who desire to pursue a professional preparation program leading to qualification as ealth education teacher in the secondary schools.
Lower Division: AP 107 or 342 ; 100 or BIO 350; MICR 101; PSY 100; SPAN 101A or language equivalent approved by Departmen

Upper Disision: H/SC 301, 401.
\(403.405421,422423,425 \mid, 427\). 403, 405, 421, 422, 423, 4251, 427,
\(430,435,440 ; \mathrm{HEC} 232\) or 430 ; PSY 351 or SOC 335: SPCH or 430 ; PS SOC 336 .

Requirements for the Option The (code 3-1216) designed for those individuals who have received certification and/or license from an approved allied health health care program and
desire a Bachelor of Science degree. The focus of this option is upon the development o
professional skills for people whose major goal is: (a) providing service,
or (b) instructing in the health care setting.
Requirements for Admission to ealth Care Program:
Once admitted to the University following prior to acceptance into the Health Care Option:
(1) Obtain certification and/or license from an allied health/health care program from an institution that
has been accredited by either a Committee on Post-secondary Accreditation (COPA) approv accreditation agency or the
Committee on Allied Health Education and Accreditation (CAHEA). Those individuals who do not have appropriate certification will
be counseled by the Department of Health Science regarding where to obtain an appropriate accredited program, and, when possible, utilized
(2) Earn a minimum GPA of 2.0

Lower Division: Completion of general education requirements. to include: ENGL 100; one of the following: ANTH 120, SOC 100 or
PSY 100 ; and a minimum of 12 units in Natural Sciences approved by department advisor equivalent to BIOL 107, Human Body-Structure
and Function: BIOL 200, General Biology: CHEM 200, Introduction to eneral and Organic Chemistry; MICR 100, Microbic
Upper Division: ( 39 units): Upper Division: ( 39 units):
Required Core: 15 units (one course rom each area); courses must be selected in consultation with an option advisor: (a) Statistics: H/S
403, ED P 419; (b) Program Development: H/SC 430, 460; (c) Professionalism: H/SC H/1, 451; (d) Health Organization: H/SC 401, 409,
201, 450; (e) Health Promotion: H/SC 435; additional coursework: H/SC 411, 440. H/SC 425; one of the
following; ANTH 353, HEC 430,

H/SC 40D, or SOC 462; one of the POllowing: C/ST 200, JOUR 270 , or ECON 300; An
emphasis in either (a) Providing
Service (12 units): HCA 41D, 465, ED P 434 or NRSG 202.202L, and
ne of the following: ANTH 319 GERN 482 following: ANTH 319,
ons 253, or NRSG 482; or (b) Instructing in Health Care
Setting (12 units): POSC 331, HISC Setting (12 units): POSC 331, H/SC 492, and one of the following ED P
434, NRSG 202, 202L, M M 300, 301.
Minor in Health Science
(code 0-1211)
Twenty-four units as follows:
H/SC 301, 401, 430, 435, 440, and three courses from: H/SC 400, 409,
Single Subject Credential in
School Health
The Single Subject Credential in at the secondary level. Requirements include a Bachelor of Scienc egree in Health Science (School Heath option) plus the required professional education courses. Se
the School Health/ Credential Coordinator Advisor.
Graduate Program in Heath Education Accredited by the Counc Education for Public Health Master of Science in He
Science (code 6-1211) The Master of Science program is designed to provide students with
1) intensive study of health educa(1) intensive study of heath educaion concepts, theories and pro-
cesses; and (2) research methoo ology appropriate to the solution of specific individual and community health problems. The graduate is a school or community setting and for admission to doctoral programs at other colleges and universities. eed of counseling should
Graduate Advisor.
Each applicant should request a
copy of the official transcript(s) of all copy of the official transcript(s) of all visor in the Health Science ment in addition to the copies required by the Office of Admissions and Records.

\section*{Prerequisites}
(1) A bachelor's degree with a major in Health Science from an (2) A bachelor's degree with minimum of 24 units of upper division courses comparable to
hose required of a Heath Science (3) Students deficient in
ndergraduate preparation must ake courses to remove these deficiencies at the discretion of the epartment Graduate Advisor, (4) An overall undergraduate
grade point average of 3.0 . Advancement to Candidacy: (1) Satisty the general University candidacy;
(a) Pass the Writing Proficiency same to Department Olfice;
(b) Have at least a 3.0 average
for all course work attempted as a
graduate student:
graduate study at in thast 6 units of (2) Approval of the departmen Graduate Advisor and the Associate ean, College of Health and Human
equire
Science:
(1) A minimum of 31 units of
approved upper division and graduate courses
(2) A minimum of 22 units of nits must include H/SC 508,570 581 and 696 ; and at least two of the
following: H/SC \(501,516,525,528\), following: H/SC
624 and 626 ;
(3) A thesis H/SC 698, and an Master of Public Health: Optio in Community Health Educatio (code 7-1213
The Master of Public Health prion in Community Health Educ students to specialize in community heath education, to quality for membership in professional organisubject matter relevant to community subject matter relevant to community serving in various health agencies, prepare for teaching at the colleg
and university levels and for administrative positions in public and private health agencies.
Each applicant must request that
copy of the official transciot(s) for a copy of the official transcript(s) for all prior college course work be se
to the Graduate Advisor in the Department of Health Science in addition to the copies required by
the Office of Admissions and
Records.
Prerequisites:
(1) A bachelor's degree with a
maior in health education which articulates with the course requirements for the same degree at California State University, Long
Beach; or a bachelor's degree in Beach; or a bachelor's degree in a
related discipline with a minimum of 24 units of upper division course work comparable to those required
of the Heath Science major at this of the Heath Science major at this
University; or a bachelor's degree in University; or a bachelor's degree in to make up any deficiencies in prerequisite Health Science courses; (2) An overall undergraduate GPA
of at least 3.0 . Students with less than a 3.0 GPA on the last 60 units of undergraduate units attempted, but who show promise in all other consideration after petitioning for consideration atter petitioning for
conditional admission into the program through the Department
Graduate Advisor: (3) At least one year's full-time (or ence in Community Health Education or a closely related health role. Preference will be given to those
with greater experience and ability,
wih greater experience and ability; tion from persons with whom the candidate has worked and who have direct knowledge of the person's qualifications and potential
as a community health educator; (5) Prerequisites for all courses carrying graduate credit must have been completed within seven years of taking the graduate courses. If be repeated or credit obtained by (1) written examination on the subject matter or (2) providing
documented evidence of currency in the subject area;
(6) Acceptance by the University as a student with graduate standing Advancement to Candidacy: (1) Satisfy the general University requirements for advancement to
(a) Pas
(a) Pass the Writing Proficiency Oxamination and submit evidence (b) Have at least a 3.0 average for all course work attempted as a graduate student;
(c) Complete at least six units o graduat
major;
(2) Approval of the Department Graduate Advisor and the Associate ean, Colleg the than ervices.
Requirements for the Master of Public Health in C
Health Education:
(1) Completion of 34 units o
graduate-level courses including
(a) Core: HCA 500 , BIOL 565 , MICR 429, and H/SC 528;
(b) H/SC 585, a supervised feldwork experience, 6 units, (c) At least 12 additional units of Science including H/SC 501, 525 S70, 624, 696;
(2) Successful completion of a

\section*{Courses ( \(\mathrm{H} / \mathrm{SC}\) )}

Lower Division
50. Medical Terminology (1) S Development of a medical vocabulary
emphaszing the building of terms utilizing prefixes, combibing forms and suffixes. noludes symptomatio, therapeutio, tiagnosic therperetation of medical records as needed in Radiation Therapy. LLect
Traditional grading only.
200. Orientation to Radiation

\section*{herapy (3) F}
drientation to the Option in Radiation Therapy. profesesional organizations, carerer
opportunties, department structure, patient management, record keeping, and profesional
athics. An overiew of the role of radiation herapy in the treatment of cancect and the adiation Therapist in the field of Raciology.
hours of of cinical fieldwork requited. (Labootaroy 6 hours.) Tradtional grading only. 210. Contemporary Health problems (3) F,S
Developoment of modern heath knowledge,
aetitudes and behavior; includes family lifeseex ducation, drug use and abuse, mental health, mediall quackery and health frauds, common
dideases such saxualy tranemitited diseases, such as sexually
diseases, heart disease and cancer.
Upper Division Science (3) F,S
Overiew of the philosophy of the Heath
 requirements, career opportuntitie, and the education as a profeem
to HSC 401 and 430 .
205. Computer Methods for Health and Human Services (3) F,S Prevequisite: Upper division standing.
Overiew of sources and uses of administrative proyram evaluuation and und of adminishrtatite. Introduction to the logic and application of
computer functions through anayzzing data trom specifio sourcese (e.g. school and communtiy hearth, health senvices).
Variely of application software
utilized Variety of application. sotware evtilized
Tradtional grading only. (Leeture 2 hours 220. Radiologic Techniques and 320. Radiologic Techniques
Imaging Modalities (3) S

Prerequisites: Admission to Radiation Therapy Option Protessional Preparation or conesent of instructor.
procedures,
Introcuction to
equipment. development, equipment maintenance as well
as dakikcom equipment, operation and film processing. An examination of the variou modalities of radiologio diagnostic imaging. (Leoture). Tradisulional grading only.
321. Introduction to

Radiographic Physics and
Protection (3) S
Prerequisites: PHYS 100A,B, Admision to Raaliation Therapy Option Protesesional
Preparation or consent of instructor. A stucy of efundamentals of radiation and radiologic
 Legulations. (herture-discussion 2 hour hatory hour) Tradtional grading only. 330.
SS

Prerequistes: AP 202, 207, Admission to Rearequitistes Therapy Opotion Protessional
Preparation oor consent of instuctor Feparation of corsient of instruction eflects of positioning on externa landmarks, internal anatomic crtical structures and methods of avoiding of lowering raciaia fims and other diagnostio fims is included. Leecture dioc rading onl
340. Clinical Radiation Therapy

Prerequistes: HIS 200, 320, Admission to
 Preparation or consent of instructor. alationalo immobilization devicees, contours, bolus, and positioning aids. Examination of simulation
procedures, contrast media, film, treatment poostioning, beam modifiers, patient monitooing, and radiotherapeticic machine operation.
(Leecturedisuusion 2 2 hours, Laboratory 2 (Leecture-disocussion 2 heurs,
hours) Traditional grading only. 400./500. Principles of
Epidemiology (3) F,S

Epidemiology (3) \(\mathbf{F , S}\)
Prerequistes: HSC 301 and HSC 403. Prerequibiste: HSC 301 and HSC 403. Application of epididemiolocicip prococures to the
environmental health hazards, accidents, and *401. Community Health ducation: (3) F,S
Preerequiste: H/SC 301 and H/SC 430 .
Concepts of community heath education with Concopts of community heath education with
emphasis on tomminty \(\begin{aligned} & \text { organzzation: } \\ & \text { application of these concepts to theath }\end{aligned}\) application of these concepts to health
education actitites of of official, voluntary and proteation actional heathe agencies. *402. Applied Concepts of

\section*{(3) F,S} Preerequisites: HSC 301. HSC 430, HSC 435.
Identiciction and appliaction of concopps
dnique to communiy heath education; unique to community heath education;
includes examination of theoretical foundations, marketing and promotion tecthiquues, and the application of health education strate
*403. Community He
Statistics (3) F,S

\section*{Statistics (3) F,S}

Prerequistes: SOC 250 or PSY 210 of equivialent. Anaysis and interpetation of computers. Stataistical tools inclucde analysis of variance, analysisical of col covarianco, multitile logistio
logion,
regreassion. \(\begin{gathered}\text { Leoture } 2 \\ 2\end{gathered}\) hours Laboratory 2 hours.)
405. Health Education Program Evaluation and Measurement (3) F,S Prerequiste: HSC 403 or equivalent. Design,
use of standardied colleciton, analyysio, and measorting anersts, used to to develop evaluation skills to facilitate program management. Impact of activities aimed al
producing behavior change in communties organizations, groups and individuals will be
examined. (Discussion 3 hours)
411A. Health Science
411A. Health Science for
Elementary Teachers (3) F,S
Prereauisite: Upper division students only.
Contemporary teaching of heath education in Contemporary teaching of hearth education in
elementary schools; emphasizes druguse and abuse, human seexuality, community and human ecology (meets state credential requirement for health education). N
Heath Science majors or minors.
411B. Health Science for Secondary Teachers (3) F,S Prerequisise: Upper division students only contemporary teaching of heath education ind abuse, human sexuality. community and (equarement tor heath ecducation). Not copen to Heathemenstience majorts or mincors.
415. Radiation Biology (2) Prerequisites: AP 207, Admission to Radiation
Therapy Opion Protessional Preparation consent of instructor. An examination of: the effectas of raciation at the cellulara, tissue and Energy
Transter.
(LED). Radiobiological Effectiveness, (RBE), radiation sensitizers and Iadiation as well as the developing embryo; the
radiobiological basis for raciation therapy
teatments and tractiontion disoussion 2 hours.) Tradtional grading only. 420I. International Health (3) F,S Preerequistes: ENGL 100 and upper division
status. Analysis of current heath problems in the world; examination of contributing social poychotogical, physical, legal and cultural
actors: international programs for the tactors; international programs for the
mproment of word heath; struture and
functions of wordd heath agencies and ganizations.
421. Health Behavior (3) F,S A survey of contempocary research on the emphasis is given to current issues. of health
behavior, decisiso-making in contemporary society, values clarification and contemporary
theoories of behavior change e.9., heath belief
22. Environmental Health (3) \(\mathrm{F}, \mathrm{S}\)

An examination of the reciprocal relationship with the emphasis directed toward the hearth
elated consequencos of man's actions in the environment. Not open to students with credit it
HISC 3 22. H25 322.
23. Consumer Health (3) F,S Effective selection of health information
product and sericess mexical quackery and
fraudulent health peat
 protecting the consumer; heath care delivery socierens. Not open to sturdents with creatit in society. Not
HISC 321 .
424./524. Princliples of Asian
Health Sciences (3) F,S,SS,W

Prerequiste: Upper division standing.
Presents the philosophical, historical, clinical Presenss the phiusoophical, historical, clinical to promote heath, prevent dioease and treat
illness. Comparisons are made with selected Aness. Comparisons are made with selected
Asdind wand westen heatth care systems and
indivual heath practices. Traditional grading only. Same courree as AST ART G24/524. (Discussion, 3 hours)

\section*{Education (3) F,S}

Prerequistes: ENGL 100 and upper division
statu. fecommended: PSY 100 . Biomedical sociological, and poychological aspects of
hummen sexuality, the communication of sexual
information, the implementatation, content and information, the implementation, content and
evavuatio of tamily life and sex education in
the schools
427. Drugs and Health (3) F,S Study of paychoactive drugs with primary
attention to alicolol
nicotine. acafteine, drugs; examination of trends, philisosphical lisuers and behehivioral practices associated with
 treatment-rehabilitation a poltiticies and parpectis
and drag abuse prevention eduction open to students with credit in HISC 327

\section*{429. Stress Reduction (3) F,S} Recogngition of stress and its causes. Phyyical
and mental sympomm of stres.
which reduen or os create which rental symptome of of streates. stress; methinoncos of \({ }^{\text {copping. }}\). 430 .

\section*{*(3) F,S}
rerequitite: HSO 20 .
 Philosophy, organization and legal aspects of
the seheos heath progam includes school and
community oordination for a team approach community
to neaty
individual. 435./535. Health Promotion and Reduction (3) F,S Prereauibites: \(\left.\begin{array}{l}\text { HSC } 421 \text { or consent of } \\ \text { instructor. } \\ \text { Health } \\ \text { promotiontisk reduction }\end{array}\right)\) program content, development and
implementation for use in corporate, hospital implementation for use in corporate, hospital
and public setings. Intended pimaniy for
Health Sciencem majors. (Discussion 3 hours) 439. Health Sclence in the Work Place (3) S
A survey of the range of roles and work setingso
filled by community heath educuators in Lo
 site vistations, observations of community
heathn evicacors in the work setring and
extensive discussion with heath edy heath educatros in the work setting and
extensive disussion with heath educatro who
fill a wide range of roles in ithe community. fill a wide range of olese in the commun
*440. Applied Concepts of Science (4) F,S Prereaguisite: Heath Science 430. Identification
application of the concepts and modes inquiry unique to concepts and modeses of
science: science: development of appropriate
curriculum based upon an analysis individual, schosol and communty needs and
interestat. (Lecture 3 hours; labooton 3 hours) intereststs. LLecture 3 hours
Traditional grading only.
445A. Oncologic Pathology I (3) Prerequisites: AP 202, 207, HSC 150, Admission to Raciation Therapy Protessional
Preparation a consent Examination of onnologgic of instrogy with emphasis on malignant neoplasia; specitifo
attention is given to epidemiology, etiology attention is given to epidemiology, etiology,
detection, diaranosis, staging. histopathology metastatio pataer, treatment oppitins and
pitiniples of radiation therapy treatmonts principles of radiation therapy treatments.
Examines cancoers of the head and neck, lung.


\section*{(3) S}

Prerequistes: HSC 445A, Admission the
Rediation Preparation or consent of int intertuctoral Preparation of consent of instructor.
Continuation of 445 A with specific antention
givento cancers of the reproduction ent givento cancors of the reppoductite sestitem,
central nervous system, eye, skin, endocrine

 Traditional grading only.
*450. The Health Care
(3) F (3) \(F\)

Iddentifcation of the role and function of the
heatth cara
 quality of health carc, problems trom
consumers' consumers' viewpointsis, culturual influencees heath care; exvaminemation of hearth carte in the *451. Ethics Professionallism in Health Care (3) S
Examination of profeesionalism and bioethics,
and the process of making moral decisions and the process of making moral decisions;
ethicac issueves; professional oaths and codes of ethicss heath care ethics and the law. *452. Research Design for the
Health Care Professional (3) Aerin Analyees of current research designs
applicable for the heath care professional including experimental and non-experimental
 *460. Health Care Program Development (3) F
Examination of the process of heath care,
prooram
development,
identification of contemporary heath care philiosophy, needs,
legal aspects, objectives and community legal aspects, objectives and community
invovement as related to
 470A.
470A. Clinical Radiation Physics Prerequist
 Professional Preparation of ocssent of
instuctor. Nature and description of the
Istuctere ond structuru. of maturere and endenegy: interacactions of Photons and gamma rafiation: instrumentataion and measurement of lintizing radiation, beam
quality, and dosoe. percrentage depth dosee
tisue air ratios, treatent
 hours). Tradtional grading only,
\({ }^{470 B}\) (3) S Clinical Radiation Physics i1 (3) S

 continuation of HSCC 470A with emphasis on
electron beam characteristics and use in liactron beam charactesistics and use in
ladiation therapy, brachyytherapy, radioactive sources, implantation methods and doosimetry. An verview of hyperthermia, particle radiation Anc radiation protection. Lecturediliocusision 2
hours, Labootatory 2 hours.) Tradditional grading
ony. only.
475.
Dosim
475. Treatment Planning

 paration or consent of instructor. Examines the
effects of treatment distance, field weighting.
beam modifiers, irregular fiflds, tissue
inhomogeneneties and tissue compensation dooe. Dose calculations for externat photon and electron beams. (Lecture475L. Treatment Planning Prerequisistes: Conourrent enrollment in HSC 475, Admimision to Radiation Therapy Option instructor. Practical experience with dilinieal situations in regards to calculation of treatmen rotational and arc treatments. Use of isodose curves for hand dose summaitions and Leatment planning computer for complex fiel
(Laboratory
hars traditional grading only.
480. Advanced Radiation Therapy (2) F
Pereauisites: Must be in final sememester of Raciaitan Therapy option Protessione
reparation. ysnthesis of previous didacti and clinical intormation; an in depth bsues, technological adrancess and ethics:
 2hours.) Traditional grading only.
*485. Field Experience in Comm
F,

Preequuisites: HSC 401 and consent of astuctor. Superised obseevation and fiel
experience in communnty heath education as
onducted by official, voluntary and dessional heath organizations.
490. Independent Studies
Health Science \((1-3) \mathrm{F}, \mathrm{S}\)
rerequisite: Consent of instructor. Students will conduct independent library or laboratory
research under the supenision of a faculty member and wite a report of the oinvertiagtion
May be erepated tor a maximum of six untit.
\(* 492 \mathrm{~A}, \mathrm{~B}\). Internship in Health *are ( \(1-3\) ) \(F, S\)
Prerequisites: consent of instructor. Supervised
 eeath and medical facilities. Student responsible for succoestul completion of dininicu
obiectives applicable to area of bosenation.
499. Speclal Studies (1-3) F,S

Group investigation of selected topicics. Topics
to be announcod in the Schedule of Classes. May be repeated for credit to a maximum of May be repeated for coodit to
nine units with change of topic. Graduate Division
\(500 . / 400\). Principles of
Epidemiology (3) F,S
 undertanding ot the coccurrenco and contuol of environmental heath h hazaras, acciden
501. Public Health Organization (3) \(F\) Prerequistre: Undergraduate maior in Heath Science or related field. Andyysis of the
components of public heath trom a historical, organizational and addininistrative perspocective.
Topicis to inducle organization of healt care delivery, financing heatht care, heath care planning, evaluation of heatht care systems
and d analysis of contemporary publico health issues.
503. Advanced Community
Health Statistics (3) FS

Health Statistics (3) F,S
Prerequisite HSC 403 or equivalent. Analysis
and interpetataion of quantitative health educationppublicion health datanantitative hepicis inculud expanded disoussion of parametric techniquee
(0.9., hypothesis testing, confidence interna estimation, power functions, small sample
sezs). Other topics include mutivariate
 analysis. Use of computers required.
Traditional grading only. (Discussion, 3 hours.) 508. Administrative Relationships in Health Education Programs
erequisist: Undergraduate malior in Heall
 addinisistrative theory; investigation
adminintrative responsibilitioe and function
ind implicit in schood he
education programs.

\section*{16. Health Promotion In}

\section*{Organizational Settings (3) F,S}

Prerequiste: HSC 570. Exploration of heath promotion programs in workste settings, heatt sericices, businesss and industry. Assessment of
the organizational llimate for health promotion the organizational alimate for hearh promotion and vitality. Strategies for developing and settingssing Treatith promot gradion programs ins in these 524./424. Principles of Asian
Health Sciences (3) F,S,SS,W Prerequiste: Upper dinision standing. Presents the philiosophical hisistorical, colinical nd scholary quallites of Acian health sciencee
promote health, prevent disease and treat 1illenss. Comparisons are mado with selected
Asian and western healt care systems and ndividual heath practicess.)
528. Advanced Environmental Health (3) F,S
Prereaquiste: HSC 422 or consent of instructor.
Organization and methocts for Organization and methods for promoting
human heath by controlling environmental human
tactors.
535./435. Health Promotion and Risk Reduction (3) F,S
Prerequibites: HSC 421 or consent of program content, dementomenent and
implementation for use in corporate, hospital implementation for use in corporate, hospital
and public setings.
Intended primarity for and pubbic setinge. Intenced pimany for
Heath Science mairos. (Discussion 3 hours)
570. Theoretical Concepts and issues in Health Science (3) F philosophies and issues in heath science. 581. Curriculum Development Heain Her HSC 430, Prerequiuites: ASC 430, 440. Principles of
curriculum
development;
selection and eviriculum of ovelocopmentent materialsistion theory and
practice in measurument in health education. practice in measurement in hearth educatio 585. Practicum in Commun
Health Education (6) F,S

Prerequisiste: Consent of instructor. Extended
fifeldwork experience under guidance of faculty fifldcoork experiencee under guidance of faculty
and foeld superisors in an aproved and field superisors in an approved
community heath education program of an
official or or voluntary heath agency. (12 official o voluntary heatrh
consecutive weeks: 480 hours.)

\section*{590. Independent Study}
(1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Independent revearch conducted under the supenision of a full-time facully member
resulting in withen (Independent Study.) Tradtionel grading only Repeatable to
different topics.
624. Seminar in Community Analysis and Program Planning

Prerequistes. HSC 625 or consent instructor. Progress and techniques
community analysis and program planning. 625. Advanced Community
Health Education (3) F,S

Prerequisites: HSC 401 and 485; or consent of
instuctor. Advanced study of educational and instructor. Advanced study of oducational and
related theory applicable to the conduct and related theory applicable to the conduct
heath education programs in community an other settings. Methods of promoting change role as program as
evaluation techiques.
626. Integrative Seminar in Public Health (3) F,S
Prevequisites: HSC 570 , advancoment to
candidacy. Summative critical analysis candidicy. Summatyo cenical analysis current methoodologifes, research, and pracicices
in publio heeath and health education in
in panticular. Syintheal ol coursework, internship and other relevenant experiencess in
progam. Tradtional grading only.
696. Research Methods (3) F,S

Prevequiates: Undergraduate maior in Heatr
Science or related fiedd, undergraduate courso in statistice: Introduction to research
 697. Directed Studies (1-3) F,S Prerequishe: Advancement to candidacy ndependent investigation of research problem heath education.
Frerequistes: HSC 696, advancement


Home Economics

Department Chair: Carol Kellett epartment Office: Home Telephone: \(985-4484\) Faculty: Professors: Frank, Joan T. Hoff-Templeton Mary Jacob, Carol Kellett, James E
Koval, Ramses B. Toma; Assoclate Professors: \(M\) Fayek, Niliufer Medora, Lydia E. Sondhi, Richard V. Tuveson; Golddstein, Helen Lee, Jacquelin Lee, Sue Stanley, Kay Zimka. Emeritus Faculty: Dorothy W. Baker, Zelpha Bates, William E. Arlene A. Hamilton, Talma B. Hupfield, Maxine K. Keenan, Mary
F. Kefgen, Mable S. Moore, Bonnie J. Rafger, Mable Mildred S. Moore, Bonn
J. Muez, Merna A. Samples, Marilyn Vanderwarf, Marion A. Wharton. Graduate Advisor:
Department Secretary:
Audrey F. Green
The Department
The faculty of the Department of Eme Economics seeks to prepare both women and men at underenter professions concerned with enhancing the quality of individual and family life in the context of the near environment. The following
objectives have been articulated
To prepare men and women to he highest standards for professions in home economics and related fields requiring a bachelor's
and master's degree.
To prepare students to function
within the diversity of human elations while enhancing their own physical, psychological and
emotional development through the lifespan.

To provide continuing education and post-master's study in pro-
fessional fields of Home Economics To provide information to a community about current sendices and career opportunities as well as he potential for emerging profes-

To employ the most effective methodology and useful resources surrounding communities. Provide the best quality program within the structure of the CSU system. To continue creative and scholarly
research for the future growth of the research for the future growth of the profession
To apply knowledge gained from needs identified in the university and surrounding community
Accreditation
The Department of Home
Economics is accredited by the American Home Economics Association (AHEA). The Interiors: Environmental Factors program is Interior Design Education Resear (FIDER). The Didactic program in Dietetics is Plan V program approved by the American Dietetic sociation (ADA)
Economics offers programs of study leading to the bachelor of arts, bachelor of science, master of arts, and master of science degrees. a liberal education through study in the social and natural sciences, the humanities and the arts and to offer specialized instruction based on these disciplines which will lead to
professional careers in home professional careers in home
economics and related fields. Programs of study cover various
aspects of the field-Child aspects of the field - Child Interiors: Environmental Factors: Consumer Affairs; Food and Nutrition; Textilles, Clothing, Fashion Merchandising; and Home
Economics Communication
Requirements for the teaching credential, eligibility for membership in the American Dietetic Associatio and American Society of interior home economics cooperative extension service, business and home economics in community service may be met.
The department serves the needs
other fields who find that certain aspects of home economics al important to their professional
objectives or personal interest Students may prepare for careers in business, human services, cooperative extension, education and community service aspects of
home economics. Listed below ar home economics. Listed below are Consumer Affairs:
consumer credit counselor, consumer education consultant. energy conservation specialist,
financial counselor, financial counselor,
merchandising manager marketing consultant, sales representative
Child Development and Family
Studies: Studies
hospital/child life specialist, marriage and family counselor,
maternal and child health director, maternal and child heath di citizens specialist

\section*{Dietetics and Food
Administration:}
clinical diettitian; consultant; community nutritionist loodservice systems manager in
hospitals, schools, universities airlines, and business; researcher in food industry and nutrition
Interiors: Environmental Factors: interior designer, commercial and
residential designer, kitch residential designer, kitchen designer, manuraclare, space planner, color sentatite, space planner,
consultant, store planner
Textlles, Clothing and Fashion Merchandising:
buyer-retailing, manufacturer's representative, product designer manager, stylist-fashion director, textiles (testing and evaluation) specialis
Home Economics Communication adult and child care education, business, industry's communica tion sevices, cooperative exten
sion service, government and community agency services

\section*{Education:}
teacher in junior and senior high school; education programs in coopram specialist in business, industry and government; teacher in adult or vocational education; teacher in California community colleges.

\section*{Bachelor of
Economics}

Requirements for all majors Requirements for al majors
include a minimum of 124 units for the bachelor of arts degree. In
addition to general education aduirements, a minimum of 40 units in home economics must be ompleted, 24 of which must be pper division. Students transferring receive transfer credit in required courses if the course is equivalent to he course at this University. In be considered for transfer in the area of Interiors, a portfolio must be esented to an Interior faculty
dvisor for review.
Requirements for the Bachelor of 2-1020)
Students shall select a program
of study in consultation with a faculy f study in consultation with a faculty advisor and with departmental approval. Advisement materials are available in the Home Economics Department office. Programs of uy and course requira Fam Child Des
tudies:
AP 107 or 207: PSY 100: SOC O0 or ANTH 120; H EC 111, 111L, 11,412 , 413 or \(314,312,32\) 497 or approved alternative, 499 , plus 9 units of advisor approved electives. The student must select with an advisor's approval 15 units om HEC 319, 323, 342, 410, courses not taken above.
Home Economics Communication: Home Economics
Communication prepares students for careers in teaching, b
CHEM 100; ECON 201 and 202
CHEM 100; ECON 201 and 202
or 300; ENGL 100;
ENGL 101 or 300 or 317; PSY 100; SOC 100 or ANTH 120; SPCH 210 and 210 W ; HEC
111 and \(1111,141,232,235,241\),
\(251,254,312,321,323,327,333\),
\(342,353,412\) or \(413,433,486,492\) or 314 or advisor approved or 314 or advisor approved
alternate, 499; plus a minor in supporting area to meet career
goals. Candidates for the Ryan Single Subject Credential must take
professional education requirements. Consumer Aftairs:
ECON 201 and 202 or 300 ; ENGL
100 ; ENGL 101 or 300 or 317 ; PSY 100; CHEM 100 or 111A or 200;
ACCT 201; HEC 232, 223, 326, 420
252 or \(253,312,427,429,486,492\) or
\(422,425,426,427\) 497, 499; MKTG 300, 490, plus 9 units of advisor approved elective
Students must achieve a \({ }^{\text {C' }}\) ' or better in each course of the Consumer Affairs program to progress in the sequence Fashion Merchandising:
CHEM 100 or 111 A or 200 CHEM 100 or 111 A or 200; 101 or 300 or 317 ; HIST 111 or 13 PSY 100; SOC 2100 or ANTH 120 ; H EC 143, 232, 251, 252 or 254,253,
\(255,312,321,353,450\) or \(453 ; 455\), \(255,312,321,353,450\) or \(435 ; 455\),
\(456,457,459,486,492\) or 497,\(499 ;\) ACCT 201; IS 240; MKTG 300; plus 9 units of advisor approved - C' or better grade in each course of the Fashion Merchandising program to progress in the sequence of study. pod Industries:
ACCT 201; HEC 232, 235, 241.
51, 323, 332, 333, 432: MKTG 300;
MICR 210 ; plus approved electives.
M Interiors: Environmental Factors:
(Program accredited by the
(Program accreditied by the Education and Research (FIDER)). \(241,321,340,342,344 \mathrm{~A}, 344 \mathrm{~B}\), \(53,441 \mathrm{~A}, 441 \mathrm{~B}, 443,446,447\)
92, 499; TED 247, 347; CHEM 100 plus 9 units of advisor approved or better in each course of the Interiors program to progress in the equence of study. Transfer credit or courses completed at another n a porttolio review.
Textiles and Clothing:
AP 107 or A/P 207; CHEM 100 or 11A or 200; ECON 201 and 202 or 11 or 131; PSY 100; SOC 100 or ANTH 120; HEC 232, 251, 253, \(254,255,312,321,353,357,450\) o
\(457,452,453,454,456,459,486\). 492 or 497,499 ; MKTG 300; plus 9
nits of advisor approved electives. Student must achieve 'C' or better and Clothing program to progress in and Clothing program the sequence of study

\section*{achelor of Science in Dietetics}
and Food Administration
Students must complete a
minimum of 128 units to receive the Bachelor of Science degree in
Dietetics and Food Administration. In addition to fufililing general education requirements, a minimum of 40 units in Home Economics is division. The courses which will provide these units are determined by the emphasis of study chosen by
the student. The three emphases of study are Nutrition and Dietetics Systems Management. The Nutrition and Dietetics emphasis with appropriate elective ete Amsocican Dietetiction (ADA) academic requirements for eligibility to apply for qualifying experiences required
Registered Dietitian.
Requirements for the Bachelor of Science in Dietetics and Food Administration (3-1018): Home Economics courses
required of all students in each of the three emphases include: HEC the three emphases include: HEC
\(232,234,235,312,321,331 \mathrm{~A}, 332\) 336 and 499 .
Supporting professional courses for all emphases include ENGL 100,
SOC 100, MICR 210, AP 207 or 209 or 342 and 342 L: BIOL 260 or EDP 419 or C/ST 210 or IS 310 or HSC 403.

Students may enroll in the CSULB Master of Science degree in
Nutritional Science to further enhance their knowledge and competencies. Refer to the ADA
Approval Pre-Professional Practice Approval Pre-Professional Practice
Program (AP4) description which Program
follows.

Courses required to complete the selected emp
listed below.
Nutrition and Diettics Empas
Minum Coure Requiresens ddition to the common Home Economics and supporting
Lower Division: CHEM 111A, NGL 101 or 317 PSY 100 , and IS 240.

Upper Division: CHEM 327, 448
and 449, HRM 361 or PSY \(381, \mathrm{H}\) C 331B, \(333,436,436 \mathrm{~L}, 438,461\), 492 or 497. Additionally, a minimum of 6 units of electives is selected in
consultation with a faculty advisor
If a stronger foundation in
If a stronger foundation in
chemistry is desired, CHEM 321 A
and 32111 may be selected instead of CHEM 327. If a stronger foundation in biochemistry is
desired, CHEM 441 A and 441 B may desired, CHEM 441A and 441B may
be selected instead of CHEM 448 . The American Dietetic Association Didactic Program:
The ADA Didactic (academic) Program in Dietetics is designed to of knowledge and skills in dietetics that will enable them to perform successfully in a dietetic internship r pre-professional practice program. The didactic program is
currenty granted approval status b he American Dietetic Association Council on Education, Division of specialized accrediting body ecognized by the Council on Postsecondary Accreditation and he United States Department of
Education. It is the responsibility o the student to consult with the ADA Plan V Didactic Program Director to verify current ADA requirements to
Students who choose to meet
ADA academic requirements must
select 335 and H EC 337 as ect HEC 335 and
in their major.
their major.
Students must receive a grade of in Dietetics courses to receive erification of completion of the ADA approved program. Approval of a program by the CSULB Didactic rogram Director requires that the 436 L and 438 at CSULB
Food Science Emphasi
Minimum Course Requirements in addition to the common Home conomics and supporting professional courses):
Lower Division: CHEM 111 A and
\(11 \mathrm{~B}, \mathrm{PSY} 100\) and 230, MATH \(15 S^{\circ}\) or 120, PHYS 100A and a speech elective selected by

Upper Division: CHEM 327 and
448 or equivalent, MICC 4 433 , MKTG 464, a minimum of three units, 464, 492, a minimum of three units of H 97 and three units selected by dvisement from HEC or CHE IT departments.
Foodsenice Systems Management mphasis
Minimum Course Requirements
addition to the common Home conomics and supporting Hom rofessional courses):
Lower Division: CHEM 200, 100 and IS 240 .
Upper Division: CHEM 300, HRM 361 , or PSY 381, ECON 300 (or ECON 201 and 202), ACCT 310 or 335, 337, 486, and three units of H C 492 or 497 .
Additionally, a minimum of 8 units
be selected from the foll be selected from the following in consultation with a faculty adviso
HEC \(334,434,437,464\), and additional units in HEC 492. Foodservice Systems Administration Certificate code 1-1070)
The Cerificate program in
oodservice Systems Administ designed to provide those udents pursuing the bachelor egree in Dietetics and Food Administration, and other related elds with additional background in oodservice management, increasing their expertise at the
management entry level. The program is appropriate for a variety applications, including oodservice in restaurants, catering, oodservice, hotels and motels arrines, and in governmental egulatory agencies
The Certificate may be earned in degree or awarded subsequent to obtaining the degree at CSULB. ourses taken to meet the quirements of the Certificate ma major, minor or General Education requirements, or the degree equirements of the participating requirements
departments.

Requirements for the Certificate in Foodservice Systems (A) A bachelor's degree in dietetics/food administration,
business administration, or othe business administration, or other
related fields; (B) Satisfactory completion of the following courses:
(1) Nutrition: HEC 232;
(2) Food Preparation and

Service: H EC 235,333;
(3) Foodservice Management:
HEC \(334,335,337,434,492\);
4) Business Administration:

ACCT 201, HRM 361, 362, 440,
GGMT 300, MKTG 300, IS 240
(5) Related Fields: CHEM 200
and 300 ECON 300 and 300 , ECON 300 . courses of the program and overall: (D) Consultation with and certification of successful completion by the Director of the Program in the
Department of Home Economics Courses taken under the Credit/No Credit grading option may not be applied to this Certificate program. Child Development Certificate de 1-1040
Child Development in the Home academic and partment provides an academic and protessional children and families. It offers an interdisciplinary foundation in several areas that influence the life and education of children and families
Field-work opportunities where Field-work opportunities where
students have direct experiences with children and families in the community are provided. Specifically, the program qualifies
the students to apply tor the the students to apply for the from the State of California which is required for teaching in and directing
child development programs such child development programs as nursery schools, day care
centers, Head Start and preschool programs-campus child pres development centers and other
children's programs in public and children's program
private agencies.
The Certificate in Child Development may be earned in conjunction with the baccalaureate degree or teaching credential in
home economics or related field. Courses offered for the certificate
may be the same ones used to satisty, where applicable, majo minor, credential, or gene
education requirements.

\section*{Requirements for the Certificate:}

\section*{(1) Bachelor's Degree in Home} (1) Bachelor's Degree in
Economics or related field;
(2) 36 units distributed as follows: Lower division (12 units): HEC 111, 111L, 211, \(214,232\). Upper Division (24 units): HEC
311 or \(314,312,411,413,414\) or 311 or 314,312,
\(415,416 \mathrm{~A}, 418\).
Certification of successful
completion of the Certificate in Child Development will be recommended by the Certificate Program Director.
Interested students should apply
Child Development Certificate Program Director, Home Economics. Gerontology Certificate code 1-1080)
A Certificate in Gerontology ( 24 nitis) may be earned in conjunction degree. The purpose of this multidisciplinary program is to
repare specialists to work in the
ld of aging. Specific requirements
re listed under Gerontology

\section*{Economics}

Each applicant should request hat a copy of the official transcript all college course work be sent to in the Home Economics Departmen haddition to the copies required by e Office of Admissions and lecords.

\section*{Prerequisites:}
(1) A bachelor's degree with
(2) A bachelor's degree with minimum of 24 units of upper-division courses in home economics:
(3) An undergraduate overall GP of at least 3.0 . Students with les
than a 3.0 GPA on the last 60 undergraduate units attempted, bu who show promise in all other aspects, may be given special
consideration after petitioning for admission into the program through he Coordinator of Graduate Studies (4) Prerequisites for all courses
carying graduate credit must have een completed within seven years of taking the graduate courses. It the prerequisite is outdated, the
rerequisite(s) may be repeated credit obtained by examina
(5) Students deficient in (5) Students deficient in
undergraduate preparation must take courses to remove these deficiencies at the discretion of faculty in the specified subject matter area and the
Graduate Studies.
Advancement to Candidacy: (1) Satisfy the general University requirements for advancement to candidacy:
(2) Completed 9 units of graduate course
696 ;
Wrting Successful completion of
Writing Proficiency Examination; (4) Approval of the Coordinator of Graduate Studies, and Associate
Dean of Graduate Studies and Dean of Graduate Studies and
Research, College of Health and Research, Coliege
Human Sevices.

\section*{Requirements for the Master of} Arts in Home Economics (code 5-1020)

Thesis/Creative Project Students: 30 (1) Completion of a minimum of and graduate courses with a minimum of 21 units in Hom Economics:
(2) At least 18 units of
\(500 / 600\)-level courses in conomics including H EC 696. H EC 599 is also required for Interior nvironmental Factors stude
(3) An
statistics;
(4) A thesis or creative project. H EC 698, plus oral the
Comprehensive Examinatio Students:
(1) Completion of a minimum 36 nits of approved upper-division and 21 units in Home Economics;
(2) At least 18 units of \(500 / 600\)-level courses in Home
Economics including HEC 696 . H C 599 is also required for Interiors: EC 599 is also required for interio: (atistics:
(4) A mini-research project, HEC 97, and a comprehensive examination.

Master of Science in N cience (code 6-1019)
The Master of Science Degree in opportunity for students to:
(1) Specialize in food science, oodservice systems administration clinical dietetics, and community education;
(2) Complete a master's degree and the academic requirement qualify for membership in the concurrently;
(3) Increase competence in food and nutrition subject matter in preparation for college teaching, esearch, graduate study administrative positions in public and private agencies.
Each applicant must request that all college course work be sent to the Coordinator of Graduate Studies in the Department of Home Economics in addition to the copies and Records.

\section*{Prerequisites:}
(1) A bachelor's degree with a minimum of 24 units of upper-division courses in Home Economics and the natural sciences, to biochemistry, chemistry, computer science, food science, physiology, and statistics: physiology, and staistics, (2) An undergraduate overall GPA of at least 3. . Students with less undergraduate units attempted, but
who show promise in all other who show promise in al other
aspects, may be given special consideration atter pettioning for admission into the program through
the Coordinator of Graduate Studies; (3) Prerequisites for all courses carrying graduate credit must have been completed within seven years of taking the graduate courses. It the prerequisite is outdated, the prerequiste(s) may be repeated or
credit obtained by examination; (4) Students deficient in undergraduate preparation must take courses to remove these deficiencies at the discretion of the
faculty in the specified subject matter area and the Coordinator of Graduate Studies

Advancement to Candidacy: (1) Satisty the general University requirement
candidacy:
(2) Completed 9 units of raduate (2) Completed 9 units of gradual
courses, including H EC 696; (3) Successful completion of
Writing Proficiency Examination; (4) Approval of the Coordinator of Gean of Graduate Studies, Dean of Graduate Studies,
Research, and Faculy Affairs College of Health and Humar Services.
Requirements for the Master of
(1) Completion of minimum 30 units of approved upper-division and graduate courses;
(2) At least 18 units of 500/600 evel courses in Home Economics, including H
(3) Professional requirements to
meet career goals by advisement: (4) A thesis, H EC 698 and oral hesis presentation; or HEC 697 a a comprehensive examination. A student desiring to become a
Registered Dietitian must complete an American Dietetic Association approved, supervised field experience in addition to completin requirements.
American Dietetic Association ADA) Approved Prerofessional Practice Program
(AP4) (code 6-1019) AP4) (code 6-1019)
The Department of Home Econ-
omics offers a combined Master of Science in Nutritional Science and AP4 field experience program. This ield experience fulfills the registraAmerican Dietetic Association (ADA) o become a registered dietitian. pon successful completion of AP4 de student will be eligible to write Dietitians.
The AP4 requires 1280 hours, 1187 hours of practice divivided into three components: clinical dietetics
oodservice systems management and community nutrition. The Seminar in Dietetic Practice constiAtes the remaining 93 hours of the ducted off campus at a variety of xcellent facilities. Opportunities
are sites, as well as in teaching. esearch, community and govern-
mental agencies. Students will therefore receive training in general dietetics with experiences that expose them to various specialty area ssion Requirements: Didactic academiomic requirements as stipulated by ADA;
2) Earned baccalaureate degree; 3) GPA \(3.0 / 4.0\) scale required on he last 60 units of courses ompleted
4) Related volunteer or work experience in he United States, CSULB Master of Science, Nutritional Science progran 6) Completion of the four core
raduate courses, HEC 531,533, 534,562 or equivalent with a grade of ' \(A\) ' or ' \(B\) ";
7 Application materials to AP4 commendation three letters of terview with Program Direnal Program Requirements Upon satisfactory completion of
ietetics, pe able to meet the performance equirements for entry-level diettians as specified by the ADA. The 12 units of core graduate
courses and a total of 2 units of \(H\) C 591 B are apolicable 2 units of \(H\) M.S. degree in Nutritional Science. Completion of the M.S. degree is not requirement for completion of the AP4 Director for complete details on his program.
Courses (HEC)
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M Home Economics

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\section*{Upper Division}
*486. Teaching-Learning (3) F,S Utilize the principles and concepts of each area of home economics in developing a variety of teaching-learning experiences appropriate to
individuals or groups in a community setting indinduals or groups
(Laboraton 6 hours.)
*488. Developing Occupationa (3)

Prerequiste: EDSS 300 H or teaching Pereraquiste: EDSS 300 H or teaching
experince or consent of instructor. Utilizing
knowedge and skill derived from the field knowedgege and solills derived trum the fifiel of
home economics as a basis for offlering home economics as a basis for offering
cocupational opportunities for youth and adul
 *490. Special Topics
(1-3) F,S,SS
Group investigation of selected topica. Topics
will be announced in the Schedul of Classes. May be repeeted for creodit to a maximum of
units. (Seminar 1 is hours) 492. Internship in Economics (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) Prerequistes: Student must be a Home
Economics malor, have senior tanding, a 2.5 Economics maior, have serior standing, a 2.5
GPA overall or a 3.0 GPA in the miar and GPA overall or a 3.0 GPA in the maior and
approval of a faculty member.
chid Development and Family memberies students:
EC 414 ort 415 and 412 or 413
 and 326; Fashion Merchandising students: :
EC 353; 450 or 457 and \(455 \%\) Food Science
Students: H EC 3311, 332 and 333: Focdsenico Systems Management students: EC 331B, 332, 333, and 335; Gerontology
Students: GERN 400, GERN 464/SOC 464, PSY S65 of HDEV 357, and AP 401: Interiors Ennironme
and 344 B : Nutrtion and Dietetics students:
EC EC 331A, 331B, 332 and 333; Texties and Clothing students: \(\mathrm{HECC} 357,453\) and \(454 . \mathrm{A}\)
students must have a \({ }^{\circ} \mathrm{C}\) or better in maior students must have
courses to be eligible.
Course Description: Field experience of 120
hours in which the studet hours in which the student assumes
self-directed, responsible role in an agena business or other community setting with
professional supervision, consultation and proteasional superivision, consultation and
evaluation. Placemment must be approved by the instanctor. The coursem may be pepeoveted tor
a maximum of six units. (Seminar 3 houra.)
497. Directed Studies
497. Directed

Prerequistes: Upper class standing, consent of
 supenision of a facculty member. Exploration
and experience in areas which are not a part of any regular course. May be repeated for a
maximum of six. maximum of six units with consent of of
department chairperson. (Supenised activites.) 499. Perspectives in Home
Economics (3) F,S,SS

Preerequistes: HEC 321 and 12 units of upper
division coursework in Home Economics division courrework in Home Econompics
integrative overiew of Home Eoonomics as Integrative overiew of Home Economics as a international perspectives. Empmhosiar on पuality
of fife for individualis and families, contemporary of life tor individuals and families, sontemporary and leadership, public policy and marketing

\section*{Child Development
Family Studies}

\section*{Lower Division}
111. The Preschool Child (2) F,S ferequisites: PSY 100, SOC 100 or 142 a equivalent 120 (may be laken concurrenti) or equivalent. Behavior and development
arty childhood, with emphasis on the interaction of parents, children and teachee eoture 2 hours.) (111+111L CAN H EC 14) 111L Observation
Children (1) \(\mathrm{F}, \mathrm{S}\)
Prerequisite or concurrent registration in HEC 1erequiste or concourrent registataion in H EC
113. Conceppts underying behavior and development in early chilithood are applied an urs.) (111 + 111 L CAN H EC 14
211. Guiding Young Children (3)

F,S
Trerequilites: PSY 100 or SOC 100 of
equivalent. Proceeses, techniques, models,
 and community settings. Development of ersonal approach to guidance based Surrent scientific research and theory
concoerning child development. (Seminar hours)
14. Environments for Young hildren (3) F,S
Prerequilites: HEC E11 and 111L; or HDEV
3071 or equivalent. Introduction to designing protessional care emvironments for intants sociersial, emotional, physicial-motor, cognitive on social, etotional. physical-motor, cogntitive Upmunity sivetingson

\section*{IT. Prenatal Development and}
infancy (3) S
Preerauistes: Upper-division standing, AP 107

 various aspects of development and the onvironmental social factors essential for
human growh. (Lecturedisoussion 3 hours.)
3121. Family and Personal

Prevequibites: PSY 100, SOC 100 of 142 or
ANTH 120: ENGL 100 and upperdinision tatus. Interdiscoipinaray introduction to the concepts underlying contemporary American
tamily life and the influence of social and cultural conditions on human
(lecture-discussion 3 hours.)
314. The OIder Child (3) F

Preerquibites: HEC 111 and 111L, of ED P 301 or PSY 361 or HDEV 307 oo consent of
and late chilichood and adolescence, with emphasis on individual and co
319. Family Stress and Coping

Prerequisises: HEEC 3121 or consent of
instructor. Examination of theories and
 family functioning throughout the ificecycte.
Considideation given to both nomente
tranations and non-notmative stressorse. transitions and non-normative stressors,
Emphasis on strategies to asosist fatilies on

(Lecture-disocusion 3 hours.)
358. Fathers and Fathering (3) S Prerequisites: PSY 100 and SOC 100 or H EC
111. An overiew of the socilogical and psychological literature on parenting with emphasis on fathers and fathering in the U.S.
Focus on current liferature and research Focus on current literature and research
regarding the perciceved and changing roles of tathers. Disoussion of fathers trom variou
ethric groups in an effort to diminish etthic groups in an efrot to diminibl
stereotypes. Same course as PSY 366 (Lecture diccussion 3 hours.)

\section*{410. International Families:
Families in Cross-Cultural}

Perspectives ( 3 ) S
Prerequibites: PSY 100 or SOC 100 or ANTH 120, or consent of instructor. Designed to understanding of cross withural an inversities in
 exicoerting similiartioses and difterencoes whic customs, family structures and family forms trom selected drosescuitural tamilies will be
considered. Tradtional grading only. considered. Traditional
*411. Individual Child Study and Guidance (3) F,S
Prerequiste: Upper-division standing. HEC 311
or 314, or ED P 30 or HDEV 307 or consent of instructor. Analysis and interpretation of theory researah, trends and technicuese for the study
and guidance of the indriviual child in tamily and guidance of the indididual child in family
and community settings. (Leeture diocussion hours)
412. Family Interaction (3) F,S Prerequistes: Upper-division standing, HEC
112, or consent of instructor. Dynamics of 12. of consent of instructor. Dinnamics of relationships throughout the family iffecycl skils in small group settings. (Lecture
*413. The Family in the
Community (i) Frequisines: Upperdivision standing. HEC
Perequisises: Upper.division standing. H H EC
121, or consent of instuctor. Study of cuturural varieties and the needs of the contemporat American family in an urban community anaysis) of current isusues and probiemi esources and agencies. (Leeture discussion resentical
heourse)
hen
414. Fieldwork with Preschool Children (3) F,S Prerequiustes: HEC 111 and 214 or consent of Prerequictites. Supenvised teaching \(i\) Nearning
instructer.
experience experience with preschool children including
development of skills for observation and aevelopment of skilis ior observation and
ascesment as well as curricium plamning,
mplementation, and evaluation. May be mplementation, and evaluation. May be
fepeated for up to 6 units with assignmentis repeated for up to 6 units with assignmen
refeecting incoeasing levelis of difficulty. (Lect
1hour, laboratory 6 hours.) 415. Fieldwork with Infants/ 415. Fieldwork with
Toddlers (3) F,S

Prerequistes: H EC 111 and HEC 214 or Prevequisites: H EC Mill and \(H E C 214\) or

 implementation, and evaluation. May be
repoeated for up to 6 units with assignments repeated for up to 6 units with assignments
reffecting increasing levelse o diffifuity. (Lecture 1 hour, laboratory 6 hours.)
416A. Introduction to Adminis-
tration and Supervision of Child tration and Supervision of Child
Development Programs (3) F Preereauisite: \({ }^{H} E C\) EC 414. Minimum and recommended standards and laws pertaining to housing. equipment, play spacee, aduitchich
ratio, health supervision and meal sevice toy
chlidrents ratio heath supenvision and meal sericer
children's programs. Selection and superision
ond of personnel, program plannin
(Lecture discussion 3 hours.)
416B. Applications of Administration and Supervision of Child Development Programs (3) S Prereauiste: HEC 416 A. Decicion theory and
its application, communication strategies, planning, operating and evaluating programs
for young chidren. (Leture disoussion 3 Plannig, youn
fours
hour
417. Premarital Intervention (3) F Prereauistes: H EC 3121 or consent of
instructor. Review of research on dating relationships and intervention programs designed for individuals or couples prior to marriage Consideration of shynese, doting
arxiety, intimacy, sexual
docision-making. resolution. Emphasis on applying fesearch io the development of ppograms to assice premarital individuals ennich
(Leeturediscussion 3 hours.)
*418. Parent Education (3) S Prerequistes: H EC EC 413 and consent of
instrutor. Pinipieses and techniques for
ior working with parents in community and school
programe. Assessment of needs and
 mily Life Education (2-3) F
Prerequistes: HEC 412 and 413 or consent of interaction with special emphasis on leadersh interaction with special emphasis on leadersh opportunities for protese
(Leeture discussion 3 hours.)
\begin{tabular}{|c|}
\hline Interiors: Environmental \\
Factors \\
\hline
\end{tabular}

\section*{Lower Division}
141. Techniques in Applied Arts
(3) F,S
(3) \(\mathrm{F}, \mathrm{S}\)
Basic concepts and techiniques of applied art
indududing use of media and at equipment,
 142. Beginninig Space Planning
and Design Development (3) F,S
Preerequisites: HEC 141, 241, and TED 247 or
consent of instuctor. TED 247 may be taken consent of instructor. TED 247 may be taken
concurrently. Functional and aesthetic factors of space planning and design development for 143. Color: Theory and Essential theories of color perception. Applifid Losential theories of color perception. Applied
probolems dealing with color interation
phenomena, effects and functions. (Discuasion phenomena.
3 hours.)
241. Contemporary Housing and

Interiors (3) F,S
Analysis of the factors in design of human


242. Techniques of Applied Art II 3) F

Prerequilites: HEC 141 and 142. Advanced
concepts and technicues of applied art conceptse and tecchiiques of applied art
including organization of design program
intormation into schedulud information into scheduled production of
3-dimensional project, relataing abstract concepts of orthographic drawing to a 3-dimensiona form, presentation of project in a
variety of media,
Traditional
grading only variey of media. Traditional grading only.
Same course as TED 242. (Laboratory 6 hours.) Upper Division
340.1
S

Study of the history of furniture and the use of materials and accessories, floor, wall and
window treatments.
(Leeture-discussion nours).
341. Interior and Exterior

Materials and Resources (3) F
 Creative applications of proceoses and materials. (Disicussion 3 hours). Housing and Communities (3) F,S
Traces the factors which have infuenced urban environments in the United States and their
effecot upon man now and in the future.

Sociological, payyhological, architectura, boisistive economic and tocennologicical factoo are investigated. Their influenco upon sheteter.
architecture, ubban envirumens and man ere
explered (leeture disicususion 3 h hours) 343. The Science and Art of Light and Color (3) S
The nature and properties of light and color
with scientific and creative applications to
interiors. (Lecture 3 hours).
344A. Interiors (4) F,S,SS
44A. Interiors (4) F,S,SS Preerequisites: \(\mathrm{HEC} 142,143,348,446\), TED 347
and consent of instructor. HEC 446 may be laken concurrenty. Design principles as applied to interioss. Analysis of materials and elementis used in enenironmental planning with
emphasis on residctian doseign. (Oiscususion 3 hours, laboratory 3 hours.)
344B. Interiors (4) F,S,SS Prerequivites: HEC 344 A . Commercial interior
design. Studio problems with emphasis on design. Studio problems with emphasis on
open and closed office space planning.
Exploration of archiectural Exploration of architectural and intetifir
commercial systems. (Discussion 3 hours, commercial systems.
laboratory hyurrs).
348. Perspective in Architecture and Interiors (2) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) Prerequisites: ART 100 or 181 , TED 247 o HEC
142
Perspective drawing of archiectural 142. Perspective drawing of architectural
interiors and exterics. Includues various
persective perspective approaches: shades, shadows, Ten and pencil techniques. Sen
*440. Environmental Factors and the Urban Family (3) F
Prerequiste: HEC E 342 or consent of instructor
Citical
analysis of of
of Citicical analysis of the urban tamily
environment including aspects of shelter, onvirnment including aspocts of shelter,
community and the city. (Lecture-discussion 3
ours.)
441A. Advanced Interiors (44) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

Prerequisites: HEC EC \(340,344 \mathrm{~A}, 344 \mathrm{~B}, 348,353\),
446. Research, development and aspects inesparch, development and design environments. (Discussion 3 hours, laboratory
hours). 441B. Advanced Interiors (4) F,S,SS

Prerequisites: HEC E441A. Individual solutions
or planning major commercial interial to planning
menvior commercial interior
mionments.
(Discususion 3 hours, labocatory 3 hours.
443. Business Principles and ractices for Interior Designers (rganization
 instalations, compensoation and fieos, mammerting
and publico relation in the interice and and pubbic relations in the interion and
donvires.
business. ecture-discussion 3 hours.) 445. Computer Graphics for Principles and methods of computer graphic
applications. Specification witing, drating.
grappic illustrations, space planning, and perspective are indududed. Students will become
proficient with ploters, proarams and
 3-dimensional planninn
Laboratory 3 hours.)
*446. Presentation Techniques Architecture and Interiors (3) F,S,SS
Prerequistes: TED 348 or H EC 348 and
consent of instructor. Techniques in perarin Consent of instructor. Techniques in preparing
two and three dimensional architectural and Interior renderings and preseentations. Sami Course as TED 446. (Laboratory 6 h Architecture and Interiors Presentations (2) F,S,SS
Prerequistes: HEC EC 446 or TED 446 and
consent of instructor. Methods of visual consent of instructor. Methods of visual
communication used in architecture and literio presentation with emphasis on develolopment of profersoional formats using ansbrtaction, fluidifiy
and rapid tecchicues. Same as TED 447 . (Laboratory 4 hours.)

Consumer Affairs

\section*{Upper Division}
3091. Consumer Survival in the nvironment: Selected Topics (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

Preerequisites: ENGL 100 and upper division
status. \(A\) general consumer sunvial course status. A general consumer sunvival course the consumer as buyer of goods and senvices. the consumer as an investor, and the consum in personal partnerships. Same course a
ECON 3091 and FIN 309. (Leocurea-ativity hours.)
321. Family Resource

Management (3) F,S,SS
Prerequiste: Opper-division standing
Examination of basic principles of family management. Application of perinciples to to
personal
tond
setings 323. Personal and Family Financial Management
(3) F,S,S

Trerequisite: Upper-division standing. functional approach to personal financi,
nlluding budget systems, consumer credit hsurance, debt collection sysumem, statu| abigation, accumulating reseeves. Applicable
personal
and ecture-discuassion 3 hours.)
326. Consumer Problems (3) F Prerequiste: Upper-division standing. A Astudy
of consumer problems, their effiective consumer problems, their effoctiv business, and privite organizations with a vien Loward personal and profoessing
Leeturediscususion 3 hours.)
327. Household Equipment Prerequisite: Upper-division standing Pinnoiples and consumer information needed
for the selection, care and opperation equipment for the home environment
Application of basio physical science Application of basio physical scienco
pincoiples. (Discussion 2 hours, laboratory

\section*{20./520. Personal Finance fo} the Aging ( 3 ) \(F\)
\(\qquad\) Affair or consent of instruutor. Provides an nance as applied to the aging population hcome, llining expense, public and pirval sources of asisitance, personal budget
syytems, finanaicial lpanning ligeal inhts of the
 financial counseling for the aging. Sam
course as GERN \(420 / 520\). (Leoturedisoussion churs.)
*422. Housing Policies: Public and Private (3) S
Prereauisite: Upper division standing, Federal
tatae, and loceal poolicies, programs and
 development. Anaymisis ot the ho hosing indusuatry
and its influencoe on the consumer make. and its influence on
Discussion 3 hours.)
*424. Independent Llving for the Disabled and Elderly (3) S
Prerequisite: H EC 321 or consent of ingtructo
Home management concoppts as related to the physically disaabled and the eldefty in the neal onviroment. Rehabilitation procedures for ndependen inning. Emphasis on researche and family. (Discussion 3 hours.)
*425. Personal Financia
lanning Analysis (3)
Prerequisiste: HEC E 323 or consent of ingtuctor. Analyels and protection of personal and tami
fesources; planning and forecasting goal evelopment of financial strategies utilizin insurance, investments., tax managemen
426. Family Financial Problems
(3) \(\mathbf{S}\)

Theoquiustite: H EC C 323 or consent of instructor Inancial crises; selecting ateennative solutions constucucting practical methods for the
mevention of family
financial problemi Drivecusiosion 2 hours, laboratory 3 hours.). *427. Contemporary Issue
Consumer Affairs (3) \(\mathbf{S}\)
Prerequiste: HEC 326 . Explofation of issues and topics in consumer aftars including tate and tederal regulatory agencies, crea
ating and avenues of consumer redres rating and avenues
(Discususion, 3 hours.)

\section*{*(3) S .}

Prerequisit:: 400 -evel upper division standing Theries and solutions of family housing in urban and rural communition
429./529. Consumer Protection (3) F Prerequibites: Upper Division course in
consumer affars or consent of instuctor consumer affairs or consent of instuctor.
Concopts of consumer protection with nalysis of a myriad of rescurces avalabole for
indoviduals and tamiles with consumer individuals and families
problems. (Seminara 3 hours.)

\section*{Food and Nutrition}

\section*{Lower Division}
232. Nutrition and You (3) F,S Essential nutrients, their physiological tunctions and human needs during the ifie cycle, food
sourcess as applied to selection of an adoquate diet; problems encountered in providing food to
meet nutritional needs; food additives and consummer protection. (Lecture-diccussion
hours) (CAN HEC 2)
234. Orientation to Dietetics an 234. Orientation to Dietetics
Food Administration (2) \(F\) Role of the professional in dietetics and food
administatation:
orientation to
 oppoctunities in Food, Nutrition and
Foodsenice Systems Management; personne and physical facilities, includuing equipmentrt in heath care and mass feeding programs.
(Leecture diculusion 1 hour, activity 2 hours.) 235. Principles of Food
Preparation (3) F,S Preerequiste: CHEM 111 A or 200. Application of scientific principles in the preparation of selected 10 and prosucts, with emphasis on the
physical and chemical properies of food
methods and techicueses of tood preparation methods and techniques of tood preparation
factors that contribute to qualry of tood
 products;
(Cezture 2
EC 8 )
Upper
Upper Division
301. College Dining Services (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisise: Permission of instructo Academice and experiential learning in the managemente of college dining senticesp and
bookstore. An internship for student employee
 of work exp
331A. Fundamentals of Human Nutrition (3) \(F\)
Prerequisites: \({ }^{\text {H EC 232 }}\) 23: AP 207 or 2009
CHEM 300 or 327 or equivalent. Nutiona CHEM 300 or 327 or equivalent. Nutitional
CHeeds with the emphasis on the physiological
and chemical foundation for these
needs;
neators
needs. (Lecturediscussion, 3 hours.)
331B. Fundamentals of Human 331B. Fundame
Nutrition (3) s
Prerequisites: HEC 331A. Nutritional needs with emphasis on changes through the lifi
cycle, introcuution to dietery modificians in
various pathologicical conditions. Intifocuuction to various pathological conditions. Introduction to
nutrition assessment and nutrition education techniques. (Leeture-discussion, 3 hours.) 332. Food Science (3) F,S Prerequisiates: CHEM 300 or \(327, \mathrm{HEC} 235\), of
equivalents. Composition and structure of foods; chemical changes in foods that affect their colorem, flaver, textures, aroma and nutritite queirlitior, fuavor, texture, aroma and nutritive
echniques poressing and prope preparation:
formion. hoursa). discussion 2 hours, laboratory 333. Food Production Systems
(3) F,S Prerequistes: H EC 232, 235, , 321 . Factors
which infuenee family meal plans; food management of time, enercry and money. manaduemion to commercial practices. litroduct
(Leevtura-
hours.)
334. Fundamentals of Food Service Sanitation and Safety (3) \(F\)

Basic biological intormation undorlying good
saatiary practices. Food-borne and watertoone sanitary practices. Food-borne and watertborme
diseases. Procecures for sanitation in the loodsenice facility: sanitation-conscious
employees; receiving and storage; food employees; receving and storage: food
preparation and senving; proper dishwashing:

 335. Food Production Systems II (3) F,S

Prerequilistes: HEC 333. Facilitios of various
types of large quantiy ton types of large quantity food operations are
tutized to provide students with procuction and utiver of to poovide studients with provuction and
operational experiences. menu planning. costing, standardizing recipes, sening and
merchandising. Will be able to obtain
 National Restaurart
experiencos incociation. Five hiel
hospiali, restaurants,
 in-fight feedings and senior progtams.
(Leeture-dicussion 2 nours, laboratory 3
336. Cultural Aspects of Fo and Nutrition (3) S
Prerequistes: PSY 100 or 50 CO 100 of ANTH 120 or equivalent; \(H\) HEC 232. Croses-cultural
stucy of food and nutition. Factors such
as relifion, tood supply and socioceconomic
staus are considered as they influence status are considered as they influence
nututional status and food intake in various
populations throughout the wartd. (Lecture 3
\begin{tabular}{|c|c|c|}
\hline 337. Foodservice Syste Management (3) S & & \begin{tabular}{l}
464./564.
Foods (3) \\
Foods (3)
\end{tabular} \\
\hline  & 332 or consent nd research findings & \[
\begin{aligned}
& \text { Prerequisites: H EC } 332 ; \text { BIOL } 260 \text { or } \\
& \text { equivalent statisticsi; consent of instructor. } \\
& \text { Principles and methods of analysis of sensory } \\
& \text { attributes. Applications, advantages and }
\end{aligned}
\] \\
\hline 338. Introduction to Food Processing (3) F,S,SS,W & nal, physical, and organoleptic qu ation of chemical additives. & mer panels. Computer use of alysis and plotting. Statistical interetation and compariso \\
\hline \multirow[t]{3}{*}{Prerequisites: H EC 332. Study of industrial concepts of food processing and technology. Discussion of processing raw agricultural commodities through the production phases to a final product acceptable to consumers. (The course may include limited visitations to food preparation sites.) (Lecture-discussion 3 hours.)} & grading only. (Lecture-discussion 2 aboratory 3 hours.) & \[
\begin{aligned}
& \text { sititeratur } \\
& \text { hours.) }
\end{aligned}
\] \\
\hline & *436. Advanced Nutrition (3) F & \\
\hline & Prerequistes: H EC 331B; CHEM 448, may be taken concurentry). Metabolism proteins,
vitamins;
interrelationship of ores & Tex \\
\hline \begin{tabular}{l}
339. Metabolic Functions of Nutrients \\
(1) \(\mathrm{F}, \mathrm{S}\)
\end{tabular} &  & Lower Division \\
\hline \multirow[t]{2}{*}{Prerequisites: CHEM 300, AP 209, and consent of instructor. Metabolic role of nutrients in the human body; practical application of nutrition to patient care. Open to Nursing Majors only. (Activity 2 hours.)} & & Selection (3) F,S \\
\hline & Prerequisites: H EC 436 (may be taken concurrently), CHEM 449. Designed to provide & Apparel selection for the individual and family based on design guidelines, oultural and fashion influences. Wardrobe analysis and co- \\
\hline 430. Nutrition and Health (3) & & \\
\hline \multirow[t]{3}{*}{Prerequisite: Upper-division standing. Intensive study of nutrition including evaluation of current trends in food and nutrition. Designed for students in health education, elementary and elective students. Not open to home economics majors. (Lecture-discussion 3 hours.)} &  & \\
\hline & dietetic practice. Inclu hods for collection & 252. Analysis, Evaluation and Comparison of Ready-to-Wear (3) F,S \\
\hline & & \\
\hline *432. Food Analysis & & \\
\hline \multirow[t]{3}{*}{Preerequisites: CHEM 300 , or 327, H EC 332 , or equivalent. Application of scientific methods of food analysis, consideration of the manner in which such variables as ingredients, proportions, and techniques in food preparation alter the quality of the products. Experimental Laboratory Problems. (Seminar 2 hours, laboratory 3 hours.)} & \begin{tabular}{l}
(3) F \\
Prerequisites: H EC 335 , H EC 337 , senior
\end{tabular} & ing, concepts of sizing, principles buying and selling. (Lectureours.) \\
\hline & & 253. Survey of Textiles for the Contemporary Individual (3) F,S \\
\hline & & A consumer oriented approach to textile \\
\hline \begin{tabular}{l}
433. Nutrition in the Life Cycle \\
(3) S
\end{tabular} & o demonstrate and observe oper principles. (Lecture-discussion 3 hours.) & apparel, interior, and industrial textile products. (Lecture 3 hours.) (CAN H EC 6) \\
\hline \multirow[t]{3}{*}{Prerequisite: H EC 232 or 331 or equivalent. Nutrition throughout the life cycle. Interaction of physical, biological, cultural and psychological
factors involved in assessing and maintaining optimal nutritional heath. Community nutrition programs introduced. (Lecture-discussion 3 hours.)} & *438. Diet Therapy (3) S & 254. Fundamentals \\
\hline & C 436, 436L (may & Production and Design (3) F,S \\
\hline & changes in specific pathological conditions; dietary modifications used for treatment. (Lecture-discussion 3 hours.) & zalysis of the interrelationship of garment and appare constriton. Application ment constuction. Traditional grading only \\
\hline \multirow[t]{2}{*}{*434. Cost Control in Food Service Operations (3) F} & 9. Nutrition and Aging (3) F & \\
\hline & & \\
\hline \multirow[t]{5}{*}{} & & () \\
\hline & influence tood intake and nor chronic diseases commonty found in
(Lecture-discussion 3 hours.) & Organization, structure and interrelationship of industries and services that comprise the business of fashion; terminology, designers, \\
\hline & *461. Community Nutrition (3) \(F\) & Professional opportunities explored. (Lect discussion 3 hours). \\
\hline & & Upper Division \\
\hline & & 353. Textiles (3) F,S \\
\hline & implementation, management and evaluatio (Lecture-discussion 3 hours.) & Prerequisites: CHEM 100 or 111 A or 200 consent of instructor. Interrelationship of yarn structure, fabric geometry and fini
treatments to the textile's appearance, co \\
\hline
\end{tabular}
durability and maintenance. (Lecture
discususion 2 hours, laboraton 3 hours) 354. Apparel Design: Analysis of Garment Design, Tailoring and
Production Processes (3) \(F\),S \begin{tabular}{l} 
Prereauisites: \(\begin{array}{l}\mathrm{H} \text { EC } 254 \text { or consent of } \\
\text { instructor: } \\
\text { Anaysis of tractional and }\end{array}\) \\
\hline
\end{tabular} Prerequistres. Analysis of traditional and
instrutor.
contemporary processes in the design and contemporary processes in the design and
procuuction of tailored apparel. Application to apparel design and procuction procesoses for
couture, ready-t-wear and individually couture, ready-t-wear and indwidually
ppocuced garments. (Discoussion, 2 hours,
laboratory 3 hours.) plobucced garmenti.
laboratory 3 hours.)
355. Fashion Merchandising
Planning and Control (3) F,S,SS lanning and Control (3) F,S,SS Prerequistes: ELM passage; Acct 201; IS 240
or CIST 200; H EC 251, 255. Concepts,
 calculations and computer applications as they
relate to apparel retail proft: Includes inventory methods, operating statements, and purchase plan procedures. (Discussion 3 hours.)
357. Apparel Design: Flat Pattern
(3) S

Prerequaisit: HEC 254 or equivalent.
Explocation of the total design concept as it applies top opattorn manipuestion. (Discussion
hưrs, laboratry 3 hours.)
450./550. Cultural Bases of Textiles and Apparel Design (3) S

Prerequistes: \(\mathrm{HEC} 251,2252\) or 254, 353 , ANTH
120 or SOC 100 or SOC 142 or consent 120 or 50 COC 100 or SOC 142 or consent of
instructor. Factors influencing design an techniques of texiile and apparel procuution in societies that create and use them. Symbolism
of indigenous and adapted textile and clothing designs as a communicative device to expresesing social and cultural values. Imparc
of other cultures on Western fashion. Course may be repeated tor up too 6 units with
assignments of increasing levels of difficuity. assignments of increr
(Seminar 3 hours.)
*452. Apparel Design: Draping (3) F

Prerequisites: HEC 254 and 357 or consent of
instructor. Exploration of the total design Instructor. Exploration of the total desion
concept as it applies to tabric manipulation. concept as it applies to tabric manirutation
(Discussion 2 hours, Laboratory 3 hours.)
*453. Advanced Textiles (3) S Prereauisites: H EC 353 . Chemical and
physical structure of fibers and finishes and physical structure of fibers and finishes and
physical structure of yarns and tabiciss in physical structure of yanns and fabicics in
relation to serviceability. (Discoussion 2 hours Laboratory 3 hours.)
\({ }^{*}\) 454. Experimental Clothing
\[
\begin{aligned}
& \text { consent of instructor. Solving doloting } \\
& \text { construction problems trioug the } \\
& \text { experimental process. Evaluation of equipment }
\end{aligned}
\] experimental process. Evaluation of ecuipmentint acycling; individual investigation of a creativ design processi
challenging fabics. \(\begin{gathered}\text { techiquess or or uing } \\ \text { (Discussion } 2 \\ 2\end{gathered}\) hours, challenging fabicics
Laboratory 3 hours.)

Prereququistes: H EC 251,252 or 254,255 and
353 or consent of 353 or consent of instructor. Application of
merchandiding concepts for budgeting. Melaning. buying, promotion and selling of
fashion goods and apait fashion goods and apparel in retail
organizations.
Traditional grading only. (Discusasion 3 hours.)
456. Historic Perspectives of
Fashion (3) F,S

Fashion (3) F,S
Prereaquistes: HEC E251. HIST 111 or 131 or
consent of instructo.
Social , political, economic, and religious forcees which affect styies of clonthing from antiguity to the present
day. Emphasis on the relationshio of histric day. Emphasis on the relationship of historic
styjes to current fashion. Primary focus on the tashion infuences of the western world
(Semina r h hurrs).
457. Internation
Apparel (3) F,S Prereaguistes: ECON 201 and 202 or 300, HEC
253,355 or consent of instructor. Intemational, political and economic issues reievant to the
texile and apparel industry. Emphasis or undorstanding interational aspects of the
texile and apparel industry in the United textile and appoarel Industry in the United
State. Traditional grading only. (Seminar 3
heur hours.)
*458. Theories and Issues in Textiles and Clothing ( \(1-3\) ) F,S Prerequistres. Sx cupper.division unts in textioe
and dolothing or consent of instructor. Topics of current interest in extiles and clotrining selected
for intensive develoment. May berepeated to for intensive development. May be repeated to
maximum of six unita. Topics will bo
 (Discussion 1.3 hours
*459. Apparel Behavior (3) F,S Preregulistes: ECON 300, PSY 100 and SOC
100. Psychological, sociological and economic 100. Pyychologogica, sociogogica and economio
infuencoses on the selection of indridual and
tamily tamily clothing. (Seminar 3
Graduate Division
511. Family Theories (3) S Preseruiste: HEC 412 or 413 oc consent of
ingatuctor. Theorefical approaches to the study of the family, anayyspos of the procosess of
intaction beemeen the individual, the tamity interaction between the individual, the family and society with em
(Seminar 3 hours.)
515. Perspectives in Human

Development (3) F
Prerequivite: HEC 411 or consent of instructor
Theory, trends and research toward maximum Theory, trends and research toward maximum
development of human potential as it applies to deveviopment of human potential as tapplies to
children in the tamily and community. SSemina
3hours) 520./420. Personal Finance for the Aging (3) \(F\)
Preerequisites: 400 -lvel course in Consumer Afrars of consent of instructor. Provides an finances as applied to the aging population
 course as
3 hours.)
521. Decision Making in Home
Management (3) F,S Management (3) F,S Preerequisites: 400 -evel course in home
manaement or family financei PSYY 351 or
Soc Soc 335 . In-depth course in the science of mecisen making as it can be applied to
management in the home and in home
economics. (Seminar 3hours.) 529./429. Consumer Protection (3) \(F\) Prerequisistes: Upper Division course in
consumer affairs or consent of instuctor.
Conoen consumer affars or consent of instructor.
Concepts of consumer rotection with analysis of a myriad of resources available for indididuys and faenilies with consumer
problems. (Seminar 3 hours.) 530A. Carbohydrates, Lipids and Proteins (3) F
Prerequisites: H EC 436, 436L, BIO 260.
Nutritional, metabolic and clinical aspects of Nutrtional, metabolic and clinical aspects of
cartohydrates, lipids and proteins. Current
 macronutrients and assessment of needs.
Tradtional grading only. (Seminar 3 hours.) 530B. Vitamins and Minerals (3) S

Prerequisistes: H EC 436, 436L, BIOL 260 . Nutrtional, metabolic and clinical aspects of
vitamins and minerals. Current knowedge of
 macro-nutients. Principles of nutritional status
ascessment and determination of of needs. aseessenent and determination of needs.
Tradtional grading only. (Seminar 3 hours.) 531. Nutrition Programs For
School and Community (3) Prerequiste: HEC 436 and 436 Lor 566 ; 486 or EDSS 450 H . Program development, resources
and
end
evaluation whith
mith and eveluation with emphasis on
interdisciplinan invovement and techniques for
motivation and communication in the field of motration and communication
nutrition. (Seminara 3 hours.)
532. Advanced Food Sensory Evaluation (3) S
Prerequisises: BIOL 280, CHEM 251, H EC 432 or equivelent. Application of analyical
chemistry, food bicchemistry, and sensory chemistry. food biochemistry, and sensory
evaluation tecchniques ato advanced food
research - sensory and physical-chemical research - sensoory and ahysical-chemical
assesment of food qualily and product
 533. Recent Advances in Food Science (3) S
Prerequisites: H EC 432 or consent of
instructor. New developments in food
 chemical adoditives. Food and water sanitation. Mevaluation of quality. Retention of nutritive value, flavor, appearance, ans
(Lecture- discussion 3 hours.)

\section*{665. Seminar in Hom}

Prerequisites: HEC 696, consent of instructor

 economilis. Explotation of possibie furume
directions for home eoonomies as a discipline directions sor home economics as a discipline
and a profession. Focus is on the mission of comtemporary home ceonomimes programs to
improve the quality of life for individuals and tramilies. Actvitites and assignments integrate concopts and theories in child developmen
and tamily studies, consummer aftairs, food an and \(n\) nutrition, gerorototocogy, interior descign and textiles, clathing,
(Seminar 3 hours.)
696. Research Methods (3) F,S

Prerequuiste: Upper-division course in statisicics
(may be taken concurrenty). Problems in home (may be taken concururentit). Problems in home
economics with emphasis on the methods research and use of the library. Requiried of al master's. degree candidates in hom

\section*{697 Directed Research}

\section*{\({ }_{(1-3)}^{697}\) F,S,SS}

Prerequisites: Acvancement to candidacy
Home Economics 500 level course in area o

698. Thesis (1-4) F,S

Prerequisites: Advancement to candidacy approval of department graduate commitiee
Planning. preparation and completion of Planning, preparation and completion of
thesis \(\begin{aligned} & \text { elated to to the home economics field. } \\ & \text { (Thesis.) }\end{aligned}\) thesis.)

\section*{Military Science}

Army Reserve Officers Training Corps
College of Health and Human Services

Program Director
TCC Andrew M. Peterson Program Office: Industria
Technology Bldg. 213 Faculty: Assistant Pro Facuity: Assistant Professors:
MAJ Ron Kelley, MAJ Leonard Gomberg, CPT Christine Dye, CPT Darren Wilcox; Instructors: MSG
Larito Soson, SGT William Kolar. Staff: Ms. Sandy Matthews Purpose
Army Reserve Officers Training
Corps (Army ROTC) program offers Corps (Army ROTC) program offers eadership and management training
to CSULB students which consist of courses taught by active duty Army Personnel. This dynamic four-year program of instruction develops the
mental and physical qualfications of graduates in preparation for oositions of leadership with the military and civilian communitie academic elective credit withou incurring any military service obligation. The complete curriculum
includes both military leadership and management courses; courses which provide an awareness of the heritage of the U.S. Military: the
Armed Forces' role in national defense strategy: professional miltary subjects; and military ethics. The program is oriented towards
preparing the student for a military preparing the student for a military
career. Students desiring to attain a highly sought-atter commission as a Second Lieutenant in the U.S. Army must meet eligibility requirements andience/Army ROTC (Reserve Officer Training Corps) Advanced Course. To be eligible for participation in the Commissioning
Program, a student must be enrolled full time (12 units) at CSULB, have at least two years remaining as a university student, be physically course and graduate prior to cearse and graduate prior to Financial Assistance
Many opportunities for financial assistance are available to student. Three areas of opportunities are:
ROTC cadets who sign a contract for Advanced Phase, students who earn an ROTC scholarship, and
cadets who train with Reserve or
National Guard units. All ROTC cadets sign a contract to participate Advanced Course of RO nlowance a \(\$ 100\) a month Wee- and four-year POTC hree-, and four-year ROTC
scholarships are available. The scholarship provides payment of ful uition, books, supplies, and the \(\$ 100\) a month allowance for Students interested in scholarsh competition should contact the Military Science Program at the time Reserve or National Guard tra provides two additional sources of inancial assistance: approximately and approximately \(\$ 145\) a month and approximately \(\$ 145\) a month Reserve or National Guard 'New Gl Bill' benefits.
Equipment and Uniforms
All necessary equipment,
niforms and textbooks for participation in the Military Science/ROTC program are furnished to the student by the charge. Title to this property, other than expendable items, remains with the government. Students entering
into active commissioned service after graduation are granted a atter graduation are granted a
Four-Year Program
The four-year program elective military science curriculum is divide primarily for freshmen and sophomores, and the advance course is for junior and senior level students. In special cases the advanced course is avalable to
students working towards graduate degrees.

\section*{Basic Course}

The Basic Course is a two-year invigorating period where students may, without obligation, investigate
the ROTC Program and the miltary as a full- or part-time career. Students may enter and leave this
course during any semester. The course during any semester. The
isted below and offers challenging pportunities for all students. To ourse requires the student be egistered for a Military Science class, completion of an ROTC enrollment form (obtained at the ndustrial Technology, Room 213), and an interview with the ROTC Enrollment Officer. Because this ROTC Program without obligation, articipation in ROTC activities is ccouraged but not mandatory. Advanced Course is accomplished either by successfully completing the Basic Course classes, completing
ROTC Summer Basic Camp or ompleting any military basic training program.
ROTC Summer Basic Camp Advanced Course is to successfully omplete the challenging six-week Students normally attend Basic Camp between their second and hird academic years. It is importan plan to participate in the two-year ROTC program make their intentions known directly to the Military Science
rogram no later than March 1 of the year they plan to register at the year they plan to register at the
university even though this date may precede the date of their final
The government will provide a Basic Camp and pay at the rate of one-half of a Second Lieutenant's basic pay. All equipment, uniforms, furnished free while at camp. No miltary obligation is incurred as a esult of attendance. It is commended though that the career in the military either in a active or reserve capacity

\section*{Basic Training}

Outstanding students who have successtully served on active duty
regardless of the branch of service are qualified to enter the Advanced Course because they have
completed basic training for their particular branch of service. Also
students who have been, or are members of Reserve or National Guard units and have completed
basic training are qualfied for the Advanced Course. Students may be required to take certain low division classes even after Advanced Course
The Advanced Course is a
two-year period where ROTC cadets receive advanced leadership and management training. The cadets receive many hours of hands-on,
practical leadership experiences to prepare them for a military career or a management position in the
civilian sector. To become a cad civilian sector. To become a cadet
in the Advanced Course a student must complete the Basic Course or ROTC Summer Basic Camp o Basic Training. The cadet must also required training activities and sign a contract to accept a commission in the United States Army. In return for the student's commitment, the
Military Science Department will provide \(\$ 100\) a month, classroom instruction, real leadership feedback on each cadet's leadership progress. A six-week summer training camp, between the two years of the Advanced Cou developing each cadet's leadership abilities. All equipment, uniforms, room, board, and medical care are The cadets will also receive approximately \(\$ 600\) during the six
weeks. Upon successful completion weeks. Upon successtul completion raduation from the university, the cadet will be eligible to be commissioned as a Second

\section*{}

\section*{Required Related \(G\)
Education Subjects}
- Written Communications
- Human Behavior. (Category D)

HIST 162 A or 162 B or POS
100
- Computer Literacy. TED 283
- Mathematical Reasoning
(Category B) MATH 103 or

Courses (M S)

\section*{101. U.S. Defense Estabishmen} (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

Examines the military senvicos, government
agancices and private defense industries which agenciese and privite deffense industries which

 AROTC cadets only.) 103. Mi

A compretensive study of military map reading
skills, using: topographic and standard miliary
 map symbols; UTM grid cocordinates and
mitiary map overays: map pistances: grid and magnotio aximuths; map mistancesection, mand map
resection, or modified map resestion methods: resection, or modified map resestion methods;
and terain asocialiton daylight or night conditions, with a lennatic compass, of field
expedient means. (1 Hour Lecture- Disususion) expeocient means. (1 Hour LLectura-Discussion)
(2 Hour Laboratory reauired of AROTC Cadets
and only.) Traditional grading only. 211. Introduction to Military
Operations and Basic Tactics Operations
(1) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Fundamentals of operations and tactics Fundamentals. of operations and tactics
employed in the U.S. Amyy: fre and manewver.
operations orders, patroling: offensube and operations orders. patsolling: oftensive and
defensive operations. (Lecture. Discussion.) defensine operations. (Lectura-Discussion.).
(Cabocratory required of all AROTC Cadets only,
212. Basic Principles of Small
Unit Leadership (1) F,S,SS
 commurication, indinyividual motivation and
deveriopment, human needs, power and

 Upper Division
301. Military Leadership and
Management I (3) F, S, SS

Examines current teaderhip theocies and Examines current leaderthip theories and
models and their applicability for funior military
officers officiors. Emphasize specific inter inessonan
skills.
counseling.
oral skills, ucunseling. orial and witien
communications, supervision, and preparation
and conduct of training. Traditional grading aboratory required of AROTC Cadets only.) 302. Leadership and
Management II (3) F,S,SS

Examines current leadershtip theories and modeles and their applicability for junior military
 counseling, oral, and witten
communications Trational grading only
(Lecture-Discususion.) (Labooratory reauired of (Lecture-Disucusion.). (Laboratory required of
AROTC Students only.) 401. Staff Operations (1) F,S,SS Examines the organizational structure,
functions and operating procedures of the miltary staff. Focus is on the role of the
 commander's deecisions.
Lecturt-Diacusasiong
Traditional grading only. 411. U.S.

Suney course in American militayy history from Sunvey course in American miliary history from
the origin of the U.S. Amy to present.
principites of war and their applicitation in U.S.
 equired of AROTCT Cadets only
412. Officership and

Examines the role of UUnitid States Army
Officers and their responsibitry tosociery. The
course focus is on miltary ethics, Uniformed
 Code of Military Justice System, the logistics,
supply and intelligence systems, poost and instalation support, and the transition to the
Officers Corpe. (3 Hour Lecture- Disuusion) (3) Hoficers Corpse. (3 Hour Lecture. Discussion.) (3)
Hour Laboatory reauied of AROTC Cadets
ony.) Traditional rading onty only) Traditional grading only.
497. Independent Studies
(1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) (1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Preerquisites: Program Director must grant
pemmision and student mut obtain prior
approval of topic. Indididual pormission and student must obtain prior
Appoval of topi. Individual studies with faculty supenision in an area of Miltary
science specializatio. Limed to maximum
of ofience speciaization. Limited to a maximum
of sunits pee semester. May bereaeter do a
total of six units. Traditional grading only. (Disal of sixix units.

\section*{Nursing}
oll Health and Human Services


The purpose of the bachelor of science program in nursing is to prepare graduates to function as a care role in a variety of settings. Graduates are expected to have acquired foundations for continuing professional developmen The curriculum is formulated to understanding of self and Intellectual curiosity and ability to work with colleagues to identify and ndividuals and families in a changing society. The professional hurse, while able to assess and exist, is committed to the role of maintaining health and preventing illness in self and others
Admission Requirements for the asic Studen
Students must apply for
admission to the University as udmission to the University as an The number of applicants to nursing exceeds the number that can be
accepted. For this reason nursing applicants are subject to criteria in addition to those required for admission to the University. The or transfer student. After the student is accepted in NRSG 200 the department submits a change of major to nursing for the studen.
To be accepted as a nursing
major, basic students are required to do the following:
(1) Earn a " C " grade or better
and a GPA of 2.5 or better in all prerequisite courses
(2) Complete a test that assesses their ability tor logical thinking and
problem solving prior to filing an application with the departmen (3) Earn a passing score on the
Writing Proficiency Examination prior Writing Proficiency Examination prior to filing an ap
department;
(4) Have a personal scheduled interview with a designated nursing faculty member; (5) Submit transcripts of any
previous college work to the Nursing

Department as well as to the Admissions Office; (6) NOTE: California residents are given priority
(7) All lower division general ducation requirements must be completed prior to the semester for Further information regarding available at group counseing
NOTE: A one-time lab fee is charged for student supplies used throughout the pre-licensu
(sophomore-junior years).
Requirements for the Bachelor o Science - Basic (code 3-1072) Required Prerequisite Courses: CHEM 200, 300; AP 208, 209; IICR 210; PSY 100; and SOC' 100

Required Support
206,305 ; HEC 339 .
Required Nursing Courses: Required Nursing Courses:
NRSG 200, 200L, 202, 202L, 250 ,
250L, 253, 253L, 300, 300L 250L, 253, 253L, 300, 300L, 302,
307, 350, 350L, 351, 352, 357, 400, \(307,350,350 \mathrm{~L}, 351,352,357,400\),
\(400 \mathrm{~L}, 402,402 \mathrm{~L}, 450,450 \mathrm{~L}, 452\), 452L.
Admission Requirements for the Registered Nurse Student:
Registered Nurse applicants are
required to apply for admission to required to apply for admission to
the University and do the following: (1) Hold a aurrent license to (1) Hold a current license to
practice nursing in California;
(2) Have 56 transferable units;
(3) Obtain malpractice insurance
(4) Have completed the following courses: Psychology, Sociology,
Chemistry, Microbiology, Anatomy Chemistry, Microbiolology, Anatomy,
Physiology with a
' \(C^{\prime}\) '
rade or bette in each and a 2.0 GPA in these prerequisite courses;
(5) Attend a group counseling session for R.N. students and (6) Submit unofficial transcripts (6) Submit unofficial transcripts Nursing Department.
(7) Earn a passing score on the Writing Proficiency Examination

Further information regarding admission to nursing courses is
available from faculty members who are registered nurse advisors. Graduates of diploma Scho nursing are urged to seek community college that offers the opportunity to earn credit for ploma nursing program.
All courses offered by the Nursing Department are letter graded unless
therwise specified in the Schedule of Classes
Requirements for the Bachelor of Rence - R.N. (code 3-1073) One course in each of the following: APP, Microbiology, Introductory Chemistry, Psychology, and
Sociology. Sociology
Required Support Courses
CHEM 300, AP 305 .
Required Nursing Courses: NUR Required \(307,355,355 \mathrm{~L}, 356\),
\(355 \mathrm{~L}, 305 \mathrm{~L}, 3,400,400 \mathrm{~L}, 402,402 \mathrm{~L}\), 450, 450L, 452, 452L

\section*{Course of Study:}

A specific combination of general elective courses totaling 132 units are required for graduation. All courses in the nursing program must number assigned to each nursing course indicates where it occurs in he sequence. Admission to the first course is by application which attainment of the criteria listed above. The last date to file course be available in the Nursing Department. Progress in the nursing major requires that students maintain a curuulative 2.0 GPA on nits attempted and attain a the nursing courses as well as al equired support courses. The (f C" must repeat that course prior to being admitted to the next course in sequence. A nursing course may be repeated one time. The nursing sequence of courses requires a
minimum of six semesters for the "basic student" and four semesters
for the "R.N. student." A break in the or the "R.N. student." A break in the sequence of courses necessitates readmis
basis.

Accelerated RN to Masters of Science In Nursing Program

This program is designed for drienty licensed Registered Nurses who intend to pursue studies leading to the Masters Degree in areas: Adult/Geriatric, Psychiatric/Mental Health, or Critica Care. Students entering this requirements for both the Registered Nurse Student and Masters Degree in Nursing Programs, and complete an Indep
course.
Accelerated Option
Option A - Thesis
- Term 1 NRSG 305, 305L, 355
- Term 2 NRSG 400, 400L, 402
- Term 3 NRSG 452, 452L, 696,
- Term 3 NRSG 452, 452L, 696
- Term 4 NRSG 680A, 680AL
- Term 5 NASG 680B, 680BL
- Term 5 NF
- Term 6 NRSG 680C, 680CL,
- Comprehensive

Examination
- Term 1 NRSG 305, 305L, 355

NRSG \(400,400 \mathrm{~L}, 402\)
- Term 2 NRSG 400, 400L, 402
- Term 3 NRSG 452, 452L. 696

660A
- Term 4 NRSG 680A, 680L
- Term 6 NRSG 695, 680C,
aster of Science in Nursing
Master of master of science degree The master of science degree is
available to qualified students who desire advanced preparation in a
variety of clinical specialty areas.
The philosophy of graduate nurse
education is that the practice of nursing is constanty changing as heath needs and health delivery systems are altered. Integral to nursing is an ability to work other disciplines and community services to promote health.
The focal point in this curriculum is the nursing process with strong
knowledge complemented by knowledge complemented by
behavioral science concepts. Courses are interdependent and clinical depth in the area of student's choice
The graduate will have the knowledge and skill to function as hurse practitioner or clinical areas. Nursing research skills and the application of nursing theory to practice are major emphases of the
curriculum. Each applicant should request a copy of the official transcript of all college course work be sent to the department graduate advisor of nursing in addition to the Admissions and Records.

\section*{Prerequisites:}
(1) A bachelor's degree in nursing:
(2) Current license to practice as
(3) Ad (3) Admission to graduate
standing in nursing at the University or course in statistics:
(5) A physical assessment course which includes 60 hours of clinical practice;
(6) Upper division or gradua level course in Pathophysiology: (7) An upper division public health nursing course
(8) An overall GPA of 3.0 or Getter; an upper division nursing
GPA of 3.0 or better and a science GPA of 3.0 or better. Students who fall below these averages will be fall below these averages will be Advancement to Candidacy: (1) Satisfy the general University
requirements for advancement to requiremen:
candidacy;
(2) Completion of all
(3) Successful completion of the

Exulin Writin
(4) Approval of the department graduate advisor and Director of Graduate Studies and Research
College of Health and Human Services.
The M.S. in Nursing requires completion of the required course in one of the following specialy
areas: Adult/Geriatric, Family, Pediatric, Psychiatric/Mental Health or Women's Health Care Nurse

Practitioner; Critical Care, or Nurse Anesthetist. A Nurse P ractitioner
Certificate (code 1-1120) is awarded o students who complete the equired courses in one of the Nurse Practitioner specialty areas. A
School Nursing Credential option is offered only in conjunction with the degree program. Most of the degree program. Most of the through the 660 and 680 series of ourses.
Requirements for the Master of science in Nursing
(code 6-1072):
(1) Completion of a minimum of 36 units in upper division and graduate courses;
(2) Completion of NRSG 680 (at units), 660 (six units), 696 (3 units)
and 695 ( 3 units) or 698 (4 units):
(3) An overall GPA of 3.0 or better
in all courses;
(4) Completion of an approved
examination.
Courses (NRSG)
Lower Division
150. Explorations in Nursing (2) F,S

Trerequisite: Consent of instructor. Corequiste
VRSG \(150 L\) Disussion of current iscues nursing with the student's identification Personal learning eneeds and goals.
iviestigation of the evolution of unsining, raeas in which nursing is invorved. and the impact of
culture, ethnicity and society upon nursing
today. Evaluation on CreotivNo C.edit basis.
50L. Explorations Laboratory
(1) F,S

Corequisite: NRSG 150 . CreditiNo Creadit
grading only.
200. Basic Health Theory and

Nursing Skills (3) F,S
Preequishes: Sophomore standing. AP 208 ,
209, CHEM 200, 300 , MICR 210, one poychology ocourse and one osciology coourse
(sid unitit), consent of instructor. Corecuistes: (six units), consent of instructor. Corequisites: and self care. Introcucuction to physical and social science principles which provide the basais tol beginining level nursing theory and
practioe. Introduction to the unsing process practice. Introduction to the nursing process 200L. Health Skills Laboratory I ) \(F, S\)
Prerequisites: SAme as NASG 200
COrequiste: NSSG 200. 202.202. HEC 339 Guided utilization of beginning level theory and
based on the concepts of nursing process in
atient care delivery
cabobatory 9 hours. CreditiNo Credit grading only. Course feo: \(\$ 47\)
or materials to be used throughouit the for material to be used throughou
pre-lileensure program; not refundable. 202. Human Awareness in the
Health Professions (2) F,S Consent of instructor.
Prerequisitises:
Corequistes: AP 206 NRSG 200, 2000 , 2022. and HEC 339. Introduction to understanding he indivicual and the posycho-social and cultural factors which infiuncee his responses
0 his environment. Primary focus is on the
 professional-lient interaction. Tradtion
grading only. (Lecturediscussion 2 hours.) 202L. Human Awareness in th
Health Professions (1) \(\mathrm{F}, \mathrm{S}\)
Consent of instructor.
Corequiuistes: AP 206, NRSG 200, 200L, 202. and \(H E C\). 339 . Realito oriented, proujects in
simulated and direct client contacat provide mulated and direat client contact provic
 prosentere (Laboratory 3 hours.)
250. Intermediate Health Theory nd Nursing Skills (3) F,S Prerequisites: AP 200, NRSG 200, \(200 \mathrm{~L}, 202\)
202L, HEC 339 and consent of instuctor Corequistes: \(\operatorname{NRSGG}\) 2505, 253, 2533, and \(A P\) 305. Deveropment of intermediate level theo
 physical and social science piniicples and
current research findings to intermediate level ursing theery and sakills esesential to the actualization of the nursing proces
50L. Health Skills Laboratory II
) F
 S5. Guided laboratory experience to assist the thdent to synthesize interlemiate level theory hursing processas activies in simulation and
2) \(\mathrm{F}, \mathrm{S}\)
 Crequisites: NRSG 250, 250L, 253L and AP
Study of basic technicues of histon laking and physical assessiment which ree
used by the nurse in identifation of patient Physical Assessmen 1) \(\mathrm{F}, \mathrm{S}\) Preerequisites: Same as NRSG 2500 .
Corequistes:
NRSG 250, 2501,
253, and A/P Crequiuites: NRSG 250, 250L, 253, and AM history taking and physical examination which re used by the nurss in identification of patien problems. Incluces demonstration and
practice of physical asosesement meth hodology.
Traditional orading onl (laborator 3 hours). \(\begin{array}{ll}\text { 300. Nursing Process I } & \text { (2) } \mathrm{F}, \mathrm{S}\end{array}\) Peregulistes: NRSG 250, 250L, 253, 253, A
 environmental influencing factors relative to
wellnessilliness of indiviuals and famiy groups. Group interaction is directed toward
development of self awareness as well development of pro
processes 2 hours.)

\section*{300L. Nursing Process}

Prerequisites: Same as NRSG 300
Corequistes: \(\quad \begin{aligned} & \text { NRSG } 300,302,307,351,\end{aligned}\)

 moderate number of overt and covert variablea
which interfere with his adaptation on the which interfere with his adaptation on the
heath-illiess continum. The use of some
aternative nursing intevenentions will be aternative nursing inteventions will be
encouraged. Whatrawal fom NRSG 300
with requires withrtawal
(Laboratory 18 hours.).
302. Clinical Studies I (2) F,S
Preequical Studies I (2) F,S
 Group interaction concerned with synthesis of knowedge and experience comparing and
contrasting trends in nursing inteventions in a variety of situations and diricical settings.
Withdrawal tiom NRSG 302 requice with Withrawal trom NRSG 302 requires withdrawel
from NRSG 300 L . Clinical processes--h hours.) (2) F F

Preerequisites: Admission to the University as nursing maior and consent of instructor.
Corequisites: NRSG 305L, 307, CHEM 300 . Use of concopts and theory to structure asseossmen and intenention with emphasis on the
psycho-scoial modes of adpaptaion. Incude are selected concoepts of communicatio peycho-social assesesment, influencing factors therapeuticid relationships, nursing process and
expanded role of the nurse. (Leocure discussion 2 hours.)
305L. Nursing Assessment Laboratory I (2) F,S
nursing major and consent Uniersity as Corequiste: NRSG 305 , 307 . CHEM 3 intucto.
Guided Guidid assistance to help the student identify
and continue development of indiviual strengths and compotence in nursing practice
Emphasis is on communication skills both Emphasis is on communication skills botit
indindual and in groups and ppycho-social
ascessment. (Laboratory 6 hours) 307. Human Life Cycle I (3) F,S Prerequisites: Junior standing, consent of
instructor. Corequibte: NRSG 300 or 305 , instructor. Corequiste: NRSG 300 or 305 , of
R.N. admitted as a nursing major. Study of the Rhysiologitical, social, intellectual and emotional development of persosns as indindduals and al
family members trom concepption throug tamily members trim conception throug
adolescence. (Lecture-discususion 3 hours.) 350. Nursing Process II (2) F,S Prerequisites: NRSG \(300,300 \mathrm{~L}, 302,307,351\)
Consent of instuctoo \({ }_{350 L}\) Consent of instructor. 357 Corequisites: NRS knowledge and experiencercaction a ravariety of situations and clinicial settings. Content is
focused on the nursing process and induces
the decision making proceses, roup dynnamics
and leadership skills. (Cliricical processes

\section*{350L. Nursing Proces}
 of theor. to colirinal practice aspsiatisn
individuals of various cultura and age groups to manipulate multiple variables that interfere with basic physiologio and peycho-socia
needs. Anticipation of nussing problems reedss. Anticipation of nursing problems
assessment and
nursing dianosic assosesment and and evaluating nursing
inplementing ans, is the tramework for this
inter inteventions, is the tramework for this
laboratory. Emphasis
ts on studen responsibility for own learning and behavior
including dependent and interddependent
 Withdrawal from NRSG 352 requires withdraw
fiom NRSG 350 L . (Laboratoy 18 hours.)
351. Legal A
Care (2) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: Same as NRSG 300
 dutioe and responasibilities of nurses and dithe
proteessional heath care personnel in the delivery of heath services. Professionel
licensure regulations and scope of nursing practice are emphastzed. (Clinical proser 352. Clinical Studies II (2) \(F, S\) Prerequisites: Same as NRSG 350,
Crequisites: NRSG 350,350 , 357. Theon Corequisites: NASG 350, 350L, 357 . Theon on the wellnessilliness continuum by obiectit overt and covert bio-psycho-sccial variable The emphasis will be acute pathologica changes across various cultural and aie withdrawal from NRSG 352 . Lecture-dicoussion hours.)
355. Dimension
Nursing (2)
F,S

Prerequisites: NUR 305, NUR 305L, Junio standing. Current Califoria RN License and A study of the nursing protesesion, its evovution, scopee, function organiziation and structure The responsibiitite of the nursing protession as
a social force will be considerec. Profesional autonomy and legal ethical dilemmas as well opportunties for expanded roles, new nursing practice delivery modess, leaterish droblem 2 hours)
55L. Dimensions in
rofessional Nursing Lab (I) F,S Preerauisites: NUR 305, NUR 305L, Junion
 application of NUR 355 content is field stucy. There will be clinicale exploration and valication of
(Laboratory, 3 hours)
356. Professional Nursing Healnt Assessment (1) F,S Prerequisites: NUR 305 , NUR \(305 L\). CHEM 300 ,
Junior standing, ourrent Califoriaia RN Iicense and consent of instructor. Corequiste: NUR A5bL A study of protessional nursing
asesesment wint emphasis upon the
physical/physiological knowedge essential for

 explorod. Payyhosocial assesesment is integral
o hhistita approach. LLecture/activity, 1 hour.)
Tradional Traditional grading only 356L. Professional Nursing
Health Assessmant (2) \(\mathrm{F}, \mathrm{S}\)

Prerequibites: NUR 305, NUR 305L. CHEM 300,
 and consent. of instructor. Corecauite. NUR
356 . Guided leanning experiences to develop indrividual strengths and competence in phyyical peych-a-social and physiological
assesement. Included is demonstration in asoseament Inctuded is demonstration in
simulated laboratory and in selected clinical
practice setitgs with practice settings with pereeptor guvidance.
(Laboratior, 6 hours) Tracitional gracing only. 357. Human Life Cycle II (3) F,S Prerequistes: Junior standing, NRSG 307 , consent of instructor. Creaquibite: NRSG 350 or 335 or R.N. admitited as a nurring maior. Stucy
and application to nusing of the phybiological. anc application no nursing of the physuiologicial of persons as individuals and as tamily
members trom young aduthood through old members them young adurthod 400. Nursing Process III (2) F,S
 NASO, 350L, 352) and consent of instuctor. Corequisteses. Nursing 4000 , 402, 402 int Study
of the economics of heath sare and the heath of the economics of heath care and the heath
delinery systems with emphasis on the role of delivery systems withe emphasis on the rote of
nursin within these systems. Emphasis is
upon less well defined probilems and their upon less well dofined problems and their
causes, more original and creative nutsing
 cause/ffect and therapeutic ayents in patient
problems and care. (Clinical procoseses.2 hours.)
400L. Nursing Proces
Preerequistes: NRSG \(350,350 \mathrm{~L}, 352,357\)
Pretequisites: NRSG \(350,350 \mathrm{~L}, 352,357\)
(NRSG \(355,355 \mathrm{~L}\) to R.Ns in place of NRSC (NFSG 355, 355L tor R.NS in place of NSSG
350,3 and consent of instructor. Corequisites: NRSG \(400,402,4021\)
Experience in assisting individuas, families and Expermunntites to to make posttive adaptations to complex heath problems invoding muttiole variables and posing many possibil nursing
interventions. Emphasis on planning and implementing appropriate nuruing interventions,
evaluation of care, utiration of the healt care systems, and creating new approaches to solving heath problems. Traditional grading soling heath problems.
only ( (laboratory 3 hours)
402. Clinical Studies III (2) F,S Prerequistes: NRSG \(350,350 \mathrm{~L}, 352,357\)
NRSG 355 , 355 L for R.N.'s in place of NRSG \(50,355 L, 3522\) and consent of of instuctor
Coreauistes: NRSG \(400,400 \mathrm{~L}\), 402 L Groul

 non-acute instituitisn and community facilitioe
Emphasis on the vaiety of life styles and Emphatis on the variety of life styles and
diverasififed ethnic groups. (Clinical processes 2 402L. Clinical Studies Prerequisises: N(SGG 355,3 350L, 352, 357.
NRSG 355, 355L for R.N.s.s in place of NRSG
 Corequistes: \({ }^{\text {N }}\) NRSG \({ }^{400,} 400 \mathrm{~L}, 402\) problems (both temporary and permanenti) of Individuals, families and crimmunties
(epresenting a variety of life otylies with emphasis on care outside of acute care
nositutions. Experience will be ruvided to institutions. Experience will be provided to valuate indicated and creatrve nursing
inteventions in a variety of settings.
taboratory 12 hours.) Laboratory 12 hours.)
X420. Prepared Childbirth
F,S,SS
prerequisites: Must be RN, MD, RPT, or other
hearth porefosional with a bacheloris dogree
 prepare persons to educuate exxpectant parents
in the
chidbearing chidbearing most commonly refereded to as the
Lamaze' method of childbirth. Over a six Lamazez period, this intensine p program will cover: Childbith preparation incluving pregnancey, labor and dolvery as well as pain management
leaching strategies. In adorition to the 72 clasargoom hours ( 4 units). there are 135
laboratory hours which include a minimum of aboratory hours which incluye a minimum of
10 labor and delivery obserations and \(2-3\)
 studert teaching experience. Successfur
completion of the course makes the participant
sigitio for
 Sociefy for Poychoporophylaxis in Ab
(Register through University Exension.)
X430. Women's Health Care
Nurse Practitioner (6) F,S,SS Prerequisites: Valid RN License; Corequisite;
NRSG X430L This course presents the epidemiology, etiology, pathophysiology,
diagnosis, and management of women's health diagnosis, and managemento of women's health
caere, includuing indications for referral of selected heath problems. An emphasis is placed on preventive and maintenance aspects
lo each heaeth care condition presented.
leat prenatal assoessment and managemenent will be explored in tesms of etiology, pathophysilogyy. signs, symptoms, diagnosis, management, and
implicato
to
individual and tamily. mplicaton tor indindual and tamily.
Theocretical concents related to dinical
contraceptive management and reerrodictive contraceptive management and reproductive
heath will be presented. (hegister through heath will be preseen
Universisty Extension,

X430L Women's Health Care Nurse Pract
(6) F,S,SS
Preerequistres: Valid RN License; Coreaquiste:
NRSG X430: This course is designed to allow
 area of Women's Health Care. Emphasis is placed on socialization into the Nurse
Practitioner role and on developing sound Clinical judgment applied to heatth promotion heeath maintenance, diagnosis, contraceptive management, and prenatala care for women.
The supeniced clinical practicum focuese on
the application of absetric and the application of obstetric and gynecologic heath corcepts and therapeutio mod
(Register through University Extension.)
450. Nursing Process IV (2) F,S Prerequisitites: NRSG 400, 400L, 402, 402 consent of instructor. Coreaquiste:
\(450 \mathrm{~L}, 452\), 452 L . The relationshiv of the nusin 450L, 452, 452L. The relationship of the nursing
process using research methodology, teaching
 450 L. Nursing Proces 450L. Nursing Proces
Laboratory IV (1) \(\mathrm{F}, \mathrm{S}\) Prevequisites: NRSG \(400,400 \mathrm{~L}, 402,402\) L
consent of instuctor. Corequiste: 455, 452L Completion of a researach design in
 3 hours.)
452. Clinical Studies IV (2) F,S Prerequisites: NRSG 400,4000 , \(402,402 \mathrm{~L}\)
consent of instructor. Corequiste: NRSG 450 ,
 experimental material specific to an area of
concentration selected by the stucent. (Clinical concrantration selectece
proceesses 2 hours.)
452L. Clinical Studies
Laboratory IV (4) F,S
Laboralor (V) (4) F,
Prerequisites: NRSG \(400,400 \mathrm{~L}, 402,402 \mathrm{~L}\)
consent of the instructor. Corequibite: NRSG
 expertiose by using the nursing procoses in the
students arae of colinical concentration
(uboraton 12 hours) student's area of
(Laboratory 12 hours.)
4811. Parenting (3) F,S

Prereauisites: ENGL 100 and upper division
status. Effective parenting with emphasis on common parenting concerns and the
developmental tasks of parents and children. 482. Physical Assessment and
Aging (3) \(F\). Aging (3) \(F\)
Prerequisite: Upper division standing. Study of
the physical, emotional and social changes the physical, emotional and social changes
which acompany aging. Theory and practice
in the asessment of theo Which accompany aging. Theory and practice
in the assessment of these tactors. Cours is
designed to prepare the average lay person desisned to prepare the average lay person
and those in the helping professions to work
with the aged and deal with their own aging.
490. Independent Study (1-3) Demand Prerequisite: Consent of any nursing facuilty.
Students who have made prior arrangements suceorits who have made prior aranagements
with t taculty acvisor to apporopriat leanng
obiectives may eniol. May be repeated to obiectives may ennoll
maximum of six units.
499./599. Special Topics in

Nursing ( \(1-3\) ) Demand
Prerequiuite: Consent of instructor. Topicas
consistert with contemporary nursing or
 ach time a new topici is offer
Graduate Division
556A. Conditions of Learning and In A systematio study of theories of learning and A systematio study of theories of learning and
instuction as they student teaching-learning situationo. Content
covered includes conditions of learning. models
 modification, tecchniquev, variablere infutuaning
learning and instuction, and evaluation of learning and
instruction.
556B. Curriculum Development
in Nursing (3) in Nursing (3) F A critical appraisal of patterns of nursing
education as considered tom the standpoint of the changing order. A systematio stuydy of the changing orderf. A systematio study of
principles of curriculum develoment as they
apply to different types of nusing programs. apppy to dififerent typees of nursing programes.
Focuses on the reationship between Focuues on the relationship between
philisosphy, obiectives, the selection and
onden organization of leamin
556L. Theoretical Concepts Laboratory of Nursing Education
\((1-4) \mathrm{S}\) (1-4) S Instructional skills and the application of
theocies of learning and instruction to the theories of learning and instruction to the
practice and teaching of nursing within a
 Reference to ways teaching skills relate to
herader educaitonal issubs such as
teachingneaming theory. May be repeated for a teachinglearning the
maximum of 4 units.
557. Nursing Interaction with the Elderly (3) F
Prerequisites: Graduate standing, consent of
instructor. Study of instructor. Study of the psocycho-scoial
development, needs and probiems of the eidenty and related nursing intervention. 558. Advocacy and
Practitioner (3) S

Emphasis is upon the nurse acrocate's ability
to relate the maior social problems and the to relate the maior social problems and the
status of current/pending leoisatation to the

59. Nursing Administration (3) F,S
heories, issues and application of techniques petaining to manag
in the clinical seting
590. Independent Study (1-3)
, S
Prerequuiste: Consent of a nursing facuity
member Indopendent research under the
sumenisisind superision of a nursising faceaity member. 599./499. Special Topics in ursing ( \(1-3\) ) Demanc Prerequuiste: Consent of instructor. Topics
consistetent with contemporary nursing or consistent with contemporary nursing or
curricular trend will be announcod each
semester. Creditit may be earned for course semester. Credit may be earne.
each time a new topicis of offerc. 660A,B. Theoretical Base for Advanced Nursing Practice \((3,3)\) F,S
Prerequisites: Pathophysiology, Physical
Asesesment. Study of the relationship of Assesement. Study of the relationstio of
psycho-social theory to heath care with an
pmphasis on the application of theor omphasis on the application of theory to chinicical
practice. Various sections will fous on different practice. Various section
areas of clinical interest.
680A,B,C. Theories for Extended Nursing Practice \((3,3,3\) ) F,S
 305. Normal and pathocogicical condititions and The management theory base applicable for the role of nurse practitioner or clinical specialist in
olininal aleas of concentation. May be cilinical areas of concoentration. May
repeated for credit with change of topicic. \(\underset{(3,3,3)}{680 \mathrm{~L}, \mathrm{~S}}\) Clinical Studies in Nursing \(3,3,3\) ) F,S
Corequisite: NRSG 680 . A laboratory course
offering slinical experience in selected settings OHfering cirinial experiencs in selected settings
to preperes the student for advanced nursing
practice. May be repeated for credit tith practice. May be repeated for credit with
change of topic. A maximum of nine units for change of topit.
degree credit.
695. Professional Literature (3) F,S

Prerequisites: NRSG 696 , Consent of graduate and program acdisors, advancement to
candidacy. Critical anayyisis and synthesis by
 nursing practice, theory, and research. Not
open to studints taking Nusing 698 . open to students
raditional grading only.
696. Research Methods (3) F,S Prerequisiste: Upper drisision currss in statastics. The reseacreh procoess in nurusing including the
use of theory, study design, data collection,
data analysis and intercerataion of findings. 698. Thesis (1-4) F,S Prerequisistes: Advancement to candidacy,
NRSG 96 a and consent of department
graduate advisor. Planning, preparation and

\section*{Occupational Studies}

Chair: William V. Wittich Department Office: Industrial Telephone: 985-5633
Faculty: Professors: Leonard O Facuity: Professors: Leonara 0.
Albright, Paul A. Bott, Richard L. Resurreccion, William V. Wittich Lecturer: Lynn Safari Emeritus Faculty: Boyd A. Davis, Department Secretary: Robin Quirk
Credential Analyst:
Rosemary O'K
The Program
Students desiring information
should contact the department office for referral to one of the faculty advisors, Credential Analyst, Graduate Advisor, Undergraduate Advisor, Coordinator.
Occupational Studies is designed to enable persons to gain the competencies requisite for successful employment in secondary scho
community colleges and adult programs as teachers, coordinato and supervisors of vocational,
occupational, career preparation, and occupational, career preparation, and
related human resource development programs.
Designated Subjects Credential
\[
\text { Cooae } 300
\]

This program of instruction identifies and develogram on an indrividualized basis the teaching competencies requisite for successful employment
designated subjects programs, as required by the California Commission on Teacher Credentialing, It is offered in conjunctio
Education.
Bachelor of Science in Vocational Education (code 3-1027)
The Bachelor of Science in
Vocational Education is offered
Vocational Education is offered
primarily for persons who are currenty primarily for persons who are currently
serving in the work force in business, industry, labor and government. The primary goal of the program is to standards of persons involved in human resource development programs related to these areas. The program is distinct from the Bachelo
of Vocational Education (BVE), also offered here, which is directed
primarily toward public schoo vocational education. Admission Requirements: Those interested in pursuing the Bachelor of Science in Vocational
Education Degree must be admitted to the University in accorcance with For admission into the degree program the student must have veritied a competency, by education
and/or occupational experience, in a field normally considered to be within the purview of occupational education Requirements for the Bachelor of
Sclence in Vocational Education
132 units to include:
(1) 51 units of General Education course work a the lower and uppe sion levels;
(2) 39 units may be transferred from community college or another university. Nine upper divis
(3) A mininum of 24 units of

Academic Core as follows: OCST
4171, 418, 420, 485, 470, ET 300
ENG 317;
(4) 9 units of Training Techniques OCST 404, OCST 405;
(5) 33 units of Training \& Development Competency; \(A\) maximum of 9 units may be granted for prior learning; the remaining will be
earned through transferred or advised course work, plus guided observation and/or internship. The courses for this area sho
advisor.
(6) 15 units of electives

Bachelor of Vocational Education (code 4-1027)
The Bachelor of Vocational
Education (BVE) degree is designed
for teachers in employment-related foducational programs that meet the requirements of the State Education and 89223 . Specifically, candidates for the BVE degree must
1. Teach or have taught at least
1. 620 student contact hours in 1,620 student contact hours in \({ }^{\text {a }}\)
full-time position or 1,000 student full-time position or 1,000 studen
contact hours in a part-time position in an approved occupationa position in an approved
education
curriculum
2. Hold a teaching credential
2. Hold a teaching credential
authorizing service as a vocationa teacher (community college
instructors affected by AB 1725 are instructors affected by AB 1725 are
exempt from this requirement; exempt from they must demonstrate instructional competencies by completing prescribed teact
certification courses); and
3. Have worked at least seven years full-time or the equivalent in the field(s) named on the credentia
BVE candidates, upon completion consultation with their adviser, submit an application with documentation veritying occupational, manageria
teaching, and professional development experience. Up approval of the application, the for Vocational Teachers recommends for Vocational teachers secomme
advancement to BVE candidacy. Advancement to candidacy includes
the preparation of an individualize the preparation of an individualize program emphasizing three areas of
occupational studies: (1) the relation of education and work, (2) teaching learners with special needs, and (3)
The BVE degree requires 124 units The BVE degree requires 124 units
including: (1) 51 unitit of General Education, and (2) 40 units (minimum) in major.
Additional information concerning
the BVE degree may be obtained he BVE degree may be obtained adviser.
Master of Arts in Vocationa
Education (code 5 -1027)
The Master of Arts degree
Vocational Education is avee in qualified students preparing for professional careers in the fields of
career, occupational, and vocational education. A major thrust is the development of qualified leadership education programs in public and private education as well as related human resource development The graduate program in vocationa education consists of three parts. The first part is a 15 unit set of required or coursework in the following
areas:
History and foundations of
Occupational education
(OCST 501)
eadership development
Management skills (OCST 503)
Research and evaluation
OCST 505 and 696 ) OCST 505 and 696) specialization, which is serea ofected by specialzation, in consultation with an advisor. Examples of program
specialization areas follow: Administrative studies-for persons interested in administration of occupational education in public or rivate sectors.
Special populations-for persons
planning to work with learners who are culturaly different, handicapped,
and/or limited English proficient in and/or limited English proficient in Corporate training and development-for persons interested in development, implementation, and variuation of training programs variety of
settings.
Career guidance-for persons therested in counseling and guidance mployment settings.
Research and evaluation- for
persons planning to work in research private agencies or to pursue
advanced graduate studies
Curriculum and instruction- for
persons interested ind persons interested in developing programs in public and propriety sstitutions
The third program part is the decision to conduct a majior research
study (the thesis option) or to study (the thesis option) or to
complete a comprehensive examination near the end of the
\[
\begin{aligned}
& \text { Master's program. } \\
& \text { Fach aoolicant must submit ar }
\end{aligned}
\]
\[
\begin{aligned}
& \text { Each applicant must submit a copy } \\
& \text { of transcripts for all college work to }
\end{aligned}
\] fficial copies required by the Office

\section*{Prerequisites:}
(1) A bachelor's degree in vocational education, with a minimum
of 24 upper division units in of 24 upper division units in vocationa education comparable to cours
offered at this University; or
(2) A bachelor's degree with a
minimum of 24 upper division units comparable to courses offered at this degree was awarded.
Advancement to Candidacy:
(1) Satisfaction of the general advancement to candidac
(2) Completion of all core courses: (3) Maintenance of B average ( 3.0 graduate program;
(4) Approval of Occupational
Studies Graduate faculty and Direction Studies Graduate faculty and Directo
of Graduate Studies and Research, College of Heath and Human Services.
Requirements for the Master of (1) Completi
\(503,505,696\);
(2) Completion of 30 units of approved upper division and graduate courses and a thesis (OCS
698) and an oral presentation of the thesis approved by Department Graduate Committee; or 36 units of approved upper division and
graduate courses and a written comprehensive examination. Courses (OCST)
Upper Division
300. Orientation to Occupational Education (3) F,S,SS Prerequisites: Qualified for admission to the
Bachelor of Vocational Education (BVE) degree
 Philosophy and development of comprehensive
employment-telated educuation in present place and functions in the total system of

401A. The Vocational Legac

\section*{(1) \(\mathrm{F}, \mathrm{s}, \mathrm{s}\)}

Stucty of the social, philosophic, economic, and
political factors that have affected cocupation education from 11900 to the presesent. 401B. The Publics of Occupational (1) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

Identification and discussion of the
characteristics of the people semed by occupational efucation. Instropte setional strategegies
are designed tor dealing with each of the various are design
publics.
401C. Program Elements (1) F,S,SS

Study of the relationship of occupational
 deeign, of instructional facilities, legal implica-
tions, and the responsibibities of occoupational
teachers regarding safety in the classroom. *402A. Needs Assessmen (1) F,S,SS Techniiques of occupational and task analysis,
community surveys, and the use of community surveys, and the use of subie
matter adoisory commithese in in ucriciulum
development of cocurational education

02B. Identifying Curriculum Identification (1) F, F,S,SS development of specific units of instruction for occupational subbiects.
\(* 402\) \({ }^{*}\) 402C. Developing Training Identification and development of per
objectives for Ocoupational subiects. *404. Techniques of Occupational
and Adult Instruction (3) F,S,SS and Adult Instruction (3) F,S,SS The development of the skills and knowledge
neecesary to toach occupational subiots.
Emphasi is necoesary to teach occupational subiects.
Emphasis is placed on instructional technicues
specificio to occuupational education. *405. Instruction and Evaluation in *405. Instruction and Eval (3) F,S

Prerequisite: OCST 404. The emphasis in this
course is in two en dent growth and the effect of the coccu on stionteacher in the classroom. Classcoom laborotatory vists are a required part of the course. 4171. Work, Technology and Study of the dendo Study of the development of various elements
that comprise the values of work held by contemporary society and the effects thet these values have on individuals, society,schools, and
the workplace. (Lecturev-ciocussion 3 hour).
*418. The Marketplace for
Occupational Education (3) F,S Studies of public and private agencices that sevve
persons who have the need to identity, prepare persons who have the need to idientift, rrepare
for and use occupational education; where such tor and use occupational education; where such
persons are placod what they do, their
successes and failures, and tuture trends and successee
needs.
*420. Evaluation of Occupational
Education Programs (3) F
Analysis of evaluation approaches applicable to
vocational education progams and systems vocational education programs and syytems.
The maior phases and steps involved in organaizg, conducting and reporting an
evaluation will be examined. Students will be expoced to a variety of program evaluation systems currentry in opepation in vovacational
education and will design a tunctional evaluation eduaction and will design a functional evaluation
plan for a program in their respective professional plan for
fiedss.
*421. Research Design For Occupational Education (3) S Stucy of research designs applicable in
coccupational education. Calculation of basio statistics, development of research proposals,
use of minicomputers in occupational fesearch. *422. Grants and \(C\). *422. Grants and Contract Writing
in Occupational Education (3) F Study of processs of contract and grant propoosal wititing for public- and pivivate-funding pagencies.
including budget preparation, for occupational including bu
education
\({ }^{* 435 \text {. Principles of Adut }}\)
Instruction on the scope and function of adult
education including the local, state, and federal
levels levels. Principles and practices of adult
education, philosophical perspectives, and
rofesional issues are discussed. Tradit *456. Attitude Awareness for Occupational Education Teachers (3) F,S
htroduction to and application of the principles of communication, human relations, under-
 Contibutions of the behavioral sciences to more examineat and
460. Occupational Education for

Special Needs Learners (3) S ldentification, atsesesement and instructional
develoment statelies for handicapped and development strategies for handicapped an
disadvantaged students in cocupational ducation.
*461. Occupational Education for Disadvantaged and Cultura
 education. Emphasis on methods, motiv
counseling and instructional organization. *462. Occupational Education for Limited English Proficient Students (3) F,S
A convergenco of blingual and vocational understanding and application of stratogied suitable for teaching occupational skills to liminted eaching occupational skills in the learner's native language with Vccaional English-asy Second-Language (NESL).
desiable, but not required.
*470. Seminar in Occupational Education (3) F,S
Study of the maior problems and issues
contronting the educatatr and practioner. *480. Internship in Occupational Education (1-4) F,S
Internship in community or school employment
and training develomenton programs which
involve instruction, administration and research invevie instruction, administratation and
*483. Senior Thesis or Project
\((1-3)\) F,S (1-3) \(\mathrm{F}, \mathrm{S}\)
Identifiation of, planning. preparation and
completion of a projocet to soche or research
problems particular to a business, educational ar *485. Identifying Managemen 485. Identirying Ma

A lecture and diocussion course focusing on the doentification of competencies requisite for
offective management of coccupational education progrem. Theees compotencoupase are cadecociriod in thee domains, includining, , but not ilinited to: the people.
*490. Independent Study in Occupational Education (1-3) F,S Individual research and stucy under the direction of a faculty mamber in areas not an integral par
of any regular course.
intiten report is sequired repeated to a maximum of three unim. Education (1-6) \(F, S\) Action-cierinted organized learning directed
toward didentitying the major problems and issues
 suggesting practical solutions for the practitione. *499. Special Topics in Occ
tional Education (1-3) F.S
Topics of current Topici of current interest in occupational
eduation will
study, Topics will be beected tor intensive grour studyy. Topises will be announced in the Scheoduie
of Classes. May be repeated to a maximum of sii of Clas
units.
Graduate Division
501. Foundations of Occupational Education (3) F,S
Examination of history and development
cccupational education in the United State cocupational ectucation in the United Statee
Patricular attention is devicted to the mutipl Particular antenion principles of occupational
puruose and
education, key fiederal legisation and exucation, key yederem
502. Administrative Leadership in (3) F,S

Preerequistes: OCST 485 or equivalent. Conccepts and techniques of personal and profession
503. Management of Occupationa Education Programs (3) F,S Advancoe principles and procedures of
management emphasing local and county
operations, and evaluation operations, and ev
education programs.
504. The Environments of Interelationstional Education (3) F,S Interielatonships among coccupational eucuaid
businese, indututy, goverrment and society. 505. Critical Analysis of Issues Education (3) F,S
In-depth analysis of major research reports and
reviews of historical and contemporary isues reviews of historical and contemporary issues
and problems in occupational education Particular attention will be given to the various research methodologies
and problems in the fied.
506. Vocational ESL/ESP: Program Design and Instruction (3) F,S Preerequilites: Admission to TESL certificale program, or instructor's consent. An examinalion
of the integral iole of talloreded language instruction of the integral role of tailoerd language insturat
to the successe of not- and limited Englio speaking trainees and workers. This course
deal with vocational
English as a second


 texting in spocififed
tocurse as LING 570 .
508. Transition Services for Youth and Adults With Disabilities (3) F,SS
Examination of various models for and
approaches to providing elucation and approaches to providing education and
employment related services to disabled persons in transition trom schoorit to adutit life. Traditional 696. Research Methods

Occupational Education
(3) F,S,SS

Preerauisites: OCST 421 or equivalent and OCST
 problem solution.
697. Directed Studies in Occupational
(1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Preerequisite: Advancoment to candidacy. divection of a facuity member.
698. Thesis (1-4) F,S,SS Prerequisite: Advancement to candidacy. Planning preparation and completion of a thesis

\section*{Physical Education}

Department Chair:
Department Office: Applied Arts epartment Office:
and Sciences Building Telephone: \(985-4051\)
Faculty Professors: Daniel D.
Arnheim, Kenneth Bartlett, \(D\). Margaret Costa, James A. Davis,
Dorothy L. Fornia, John J. Garhammer, Dixie A. Grimm William S. Husak, M. Joan Lyon Joseph Mastropaoolo, Thomas D. Sandefur, Edward B. Souter, Dale P. Toohey, Robert W. Wuesthoff, David J. Wurzer; Associate Betty V. Edmondson, Janet M. Fisher, Barbara J. Franklin, John Gonsalves, Bary W. Lavay, Jo A. Aedmon, Clayre K. Petray, Guthrie, Michael Lacourse, Mary Ellen Leach, Ralph Rozenek, ouglas Young.
meritus Faculty: Warren Boring, Marguerite A. Clifton
tames L. Comer, Corinne J. Crogen, Walter Crowe, Dorothy Deatherage, Marcel J. DeLotto Ericson, Betty Rose Griffith, Lois E ohnson, Earl C. Kidd, Carl E. Kafs, Ruth Lindsey, John J. . Montgomery, William Patterson, Robert A. Pestolesi, Don F. Reed, C. Patricia Reid, Sarah A. Roya Schwartzkopf, L. LaVonne Stock. Department Secretary:
Donna Sundly
The Department
Students may contact the
Department Office for informa epartment Office for information aculty Advisor, Graduate Advising Coordinator, Student Teaching oordinator, Credential Advising Coordinator.
The Department of Physical ducation offers programs designed os satisty the professional needs of prospective physical educators for are offered which meet requirement of the following: (1) the Bachelor of

Arts degree with a major in Physical Education; (2) Physical Education major leading to a single-subject oncentration in Physical Education 4) Adapted Physical Education ingle Subject Emphasis Credential (5) Certificate Programs; (6) the Education
The department assumes the esponsibility for the psychologica peeds and interests of the college student through course offerings of physical acivities in sport, dance,
aquatics and fitness
Each new student enrolling in the at the Student Health Service a completed health history record. physical examination is no longer Students enrolling in physical education activity courses assume ne responsibility for satisfactory ealth status appropriate for clas activ

Students pursuing a degree in Physical Education must complete courses and proficiency pecific area or areas. In meeting erequirements of one major, the epartment offers 5 specialized acks for study which permit understanding related to human movement and to focus on preparation for one or more specific ducation major must show skill proficiency and knowledge in P ED 263 and the personal performance equirements of the CSULB Iower division program in the Physical Education Major Core for specific division courses may not be waived by substitution or examination without Department petition and approval.
Education ition to the Physical Education Degree requirements,
ALL Physical Education majors must
satisfy the following Departmenta policies at the time of Universily Graduation: (1) Departmental approval and clearance is required
for lower division courses and skill proficiencies. (2) Current certification in First Aid Standard, Advanced, or EMT and Cardiopulmonary

\section*{Requirements for the Bachelor} Arts in Physical Education Core Courses:
For all students in the Athletic Training and Fitness Track PED 215, 263, and eight physical
activity units distributed over a minimum of four activity categories: Aquatics: P ED 125, 240; Combative: PED 106, 149, 249 Individual/Dual Sports: PED 100 112, 171, 264, 265, 266, 267; Widerness Studies: PED 131, 242 ,
244, 246; Team Sports: P ED 250, 244,\(246 ;\) Team Sports: P ED 250,
253, 255, 257; All students must
have current Standard First Aid/CPB have current Standard First Aid/CPR Certification prior to all courses
involving field work or internship.
For all students in the Adapted, School Physical Education Tracks: PED 171, 215, 240, 260, 263, 265; Select two courses from P ED 250, 253, 255, 257; Select one
course from P ED 264, 266, 267 ; Select one course from P ED 149 249 (Note: Majors completing P ED 149 must select one additional course from P ED 100-199); Sele one adatitional course from \(P\) ED
\(250,253,255,257,264,266,267\) All students must have current Standard First Aid/CPR Certification prior to all courses
work or internship.
Upper-Division Core required o
all students: PED \(300,301,312\), all students.
\(315,3321,335\).
In addition to the Physical Education Degree requirements, satisty the following Departmental policies at the time of University
Graduation: (1) Departmental approval and clearance is required
for lower division courses and skill
proficiencies. (2) Current certification
in First Aid Standard, Advanced, or EMT and Cardiopulmonary Resuscitation CPR. (3) Receive a minimum grade of " \(C\) ' in eac physical education major and pre-requisite course required for graduation.

\section*{Proficienci}

Each major is required to demonstrate proficiency at a 3.5 overall average level ( \(1-5\) scale) in \(P\) ED 263 and the person according to the requirements in the Physical Education Major Core for
Specific Requirements of the
tracks
Select one of the following Tracks to com
Major:

Adapted Track: P ED З20, 322 70, 380, 387, 388; and select one course in
\(350-369\).
Athletic Training Track: PED
\(307,308,309,310,363,407\), HSC 427; EDP 434B; select one course m HEC 430 or HSC 210.
Elementary School Physical 70, 380, 477, 483; select one Applied Theory Course from P ED 350-369.
Fitness Track: P ED 210, 305
363, 405, 489D; select three courses from PED 307,309 or 320 , \(462 / 562,483\) (this course is a prerequisite to graduate statistic
\(465 / 565\), REC \(425, \mathrm{HEC} 430\).
Secondary School Physical
duction Track: P ED 320, 370, 80, 483; select eight units distributed over a minimum of three f the five Applied Theories categories: Combatitues: P ED 362 , categories: Comben 360: Fitness: P
364; Dance: P
ED 363: Individual/Dual Sports: \(P\) ED 363; IndividualDual Sports: \(P\) P
ED 365, 366, 369 ; Team Sports: \(P\) \begin{tabular}{l} 
ED 365, 366, 369; Team Sports.; \\
E 350, 353, 355, 356(P ED 307 \\
\hline
\end{tabular} may be substituted for one
dapted Physical Education
Adaptecialist Credential:
This program is designed for hose students interested in working
with the disabled. Completion of this credential authorizes the teaching of physical education to the disable
K-12. The Adapted Physical ducation Specialist Credential must be obtained concurrently or atter
completion of the Single Subject The requirements also include a Bachelor's Degree with a major in A minimum of 24 units as follows: Select two courses from CD 380 ,
EDP 405, \(451,561,563\). Minor in Physical Education Teaching (code 0-1201)
This minor is designed for those students who are striving for an
additional credential. With the completion of this minor and a successful score on the National Education, the University will recommend the additional credential in Physical Education. The Elementary and Coaching condentrations do not qualify as credential.
Requirements for the Minor in Physical Education - Teaching A minimum of 24 units as follows:
\(P E D 263,301,312,380,483\), EDSS 300P; Six physical activity units distributed over a minimum of two categories from: Aquatics: P PED
240; Combatives: P ED 149, 249: Dance: P ED 260; Individua/Dual PED 171, 264, 265, 266, 267 ;
Team: PED 250, 253, 255, 257 and Team: P ED 250, 253, 255, 257 and
select 4 units from P ED 350,353, select 4 units from P \(\mathrm{ED} 350,353\),
\(355,356,360,362,363,364,365\) 355,356,
366,369
In addition to the above, each student is required to demonstrate
skill proficiency at an average 3.5 skill proficiency at an average 3.5
point level on a 5 point scale in \(P\) ED 263 and the physical activity units distributed over a minimum of two activity categoties completed to Requirements for the Concentration in Physica Education- Elementary Teaching:
A minimum of 21 units as follows: 477.

Requirements for the Concentration in Physica Education - Coaching:
A minimum of 20 units as follows: PED 301, 307, 3321: a minimum of appropriate P ED Advisor from the following: PED 312, 350, 353, 355, 356, 363, 364, 365, 366, 369, 453, 458, 475, 489B.

Certificate Programs
The Department of Physical certificate programs each of which is elated to a special emphasis rovided in the curriculum. All certificate programs are open to
students enrolled in the University who meet general admiss equirements as follows: (1) Completion of 30 hours of ourse work
(2) A minimum 2.75 GPA in all approval by a faculty committee in he certificate program selected. Community Physical Fitnes Specific emphasis in this program Specific emphasis in this progra
s directed to the knowledge, understanding and application of principles designed to develop physical fitness. Course work is
designed to prepare the student to promote, conduct and/or direct community fitness programs in the \(Y\) ss industry commercial health letirement facilities and other public/private fitness, sport o aerobic centers Requirements for the Community (1) Curen cardiopulmonary resuscitation and standard first aid;
(2) Course work ( 35 units as
follows): P ED 301; 303 or A/P 202 . 207, and P ED 300; 305; 309; 363; 489D: HEC 232 or 430 in coordinator, select five courses from one of the following, three of
must be from a single area. Areal: ED P 434B HEC 433, 436, 436L, 461; PED 405, 425 441/541, 462/562, 499--Aerobic Danc/Tchrs, 499/699
REC 312, 421, 425.
Area II: ACCT 201 or 205: HRM 361 or MGMT 303 or 421: MRKT 300, 330, or JSUR 270; MIS 240 ,
242, 243; C/ST 200, 210, 280 . Area III: AP 342, 342L, 345, 400,
441, 443, 446, 545; BiOL 260. Recommendation: ED P 191 or 391 . ss Studies Certificate (code 1-1160)
develop leaders who can provide develop leaders who can provide
individuals seeking self-fulfiling experiences in wilderness nilironments. The program of study appropriate knowledge and skills, and to develop a personal
philosophy reflecting understanding
and concern for the protection of the environment and safety of participants in wilderness activities. Requirements of the Wilderness
Studies Certificate: Studies Certificate
(1) Certification in First Aid and
Cardiopulmonary Resuscitation Cardiopulimonary Resuscitation; Experiences;
(3) Course work ( \(31-33\) units as
follows): BIOL 100, P ED 346 , 447, 448, REC 490 with advisement. The in consultation with the advising coordinator: select four courses from P ED 131, 153, 242, 244, 246A
\(246 \mathrm{~B}, 247 \mathrm{~A}, 248 \mathrm{~A}\), 23 , 246B, 247A, 248A; select two \(243 \mathrm{C}, 245\), REC 430; select one course from PED 141, 246C, 247B 446, 497, 499; select one course
from BIOL 203, HEC 232. REC 317, from BIOL
Pre-Athletic Training Certificate code 1-1130)
This program is designed to assist the student in acquiring a
foundation of knowledge and skills necessary for providing prevention and care of athletic injuries, and the administration of athletic training scograms in public and private professional sport teams. Individuals who wish to pursue certification by Association must complete additional requirements. Information concerning specific requirements fo
admission to the NATA program
may be obtained from the
Requirements for the Pre-Athletic Training Certificate:
ardiopulimonary resuscitation and rst aid
(2) Course work: ( 31 units as ollows): P ED 300, 301, 307, 308,
\(309,363,483,489 \mathrm{C} ; \mathrm{HEC} 430\). Corrective Therapy Certificate code 1-1060)
This program is designed to repare the student to pass the Kinesiotherapy) Association

Certification (ACTA) Test. ACTA ertification will qualify the therapist provide therapeutic physical ncluding clinics, hospitals, schools, niversities, convalescent homes nd other private and public stututions or in private practice. The
student will complete the Corrective Therapy Track in the undergraduate curriculum plus 27 additional units. information concerning specific etention in the program may be btained from the Director of the Corrective Therapy Program in th
Physical Education Department. Requirements:
(1) Application and approval by

Director:
(2) Completion of Physical tack;
(3) Specialization (3) Specialization course work ACTA Certification:
ED 210, Course work (as follows): \(P\) SSY 345,370 . HSC 210 or 4111 or,
427, PED 388, P ED 405 or 499 , ED 485, 588, 589 .
Master of Arts in Physical
ducation (code 5-1201)
The Department of Physical ducation offers graduate study for he master of arts degree in physical
education. Curricular flexibility allows he student to pursue individualized oals of either comprehensive study specialization within the scope of equired to complete a core of courses which includes a thesis or ral and written comprehensives eneral curriculum option and the specialization option is contained in Degree in Physical Educater of Arts Degree in Physical Education,
available upon request from the avalable upon requ
Each applicant should request a copy of the official transcript of all ollege course work be sent to the ducation in addition to the copies equired by the Office of Admissions nd Records
(1) A bachetors edited institution with a major in physical education; or
(2) A bachelor's degree with minimum of 24 units of upper education composed of prerequisite courses needed for tentative degree plan and remaining courses to be selected by the student in conjunction with the student's major Physical Education Graduate Advisory Council. All deficiencies must be removed prior to
advancement to candidac (3) An overall undergraduate GPA of 2.50 or better and an upper division physical education major
GPA of 2.75 or better. (4) A minimum cumulative score and analytical sections of the Graduate Record Examination Advancement to Candidacy University requitirements for Unversity requirements for CSULB Successful completion of the Examination. Information is available in the Testing Office (SS/A-216); (3) A graduate program must
have the approval of the candidate' advisor, department graduate advisor, and the Associate Dean of Graduate Studies, Research, and and Human Services

Arts Degree:
(1) A minimum of 30 units with at least 24 units of 500 and/or 600 series courses in physical education including P ED 590, 696, 698, a
thesis, and an oral examination o the thesis; or
(2) A minimum of 36 units with at least 30 units of 500 and/or 600 series courses in physical education,
including P ED \(590,695,696\) and an oral and witten comprehensive examination;
(3) With either option a maximum of six units may be elected outside the major. Specified upper division
courses taken after the bachelor's degree may be counted.
Courses (PED)
Activity Courses
100-199. Physical Education Activity (1) F,S
Broad range of physical education activitios is
offered Theese ortered. These activites are designed to provide
\begin{tabular}{|c|}
\hline \multirow[t]{7}{*}{} \\
\hline \\
\hline \\
\hline \\
\hline \\
\hline \\
\hline \\
\hline
\end{tabular}

\section*{Individual/Dual Activities (1)}
100. Archery
102. Badminton
104. Bowling
108. Golf
110. Horsemanship
112. Racketball
114. Tennis
145. Gymnastics
152. Yoga

Combative Activities (1)
106. Fencing-Foil
07. Fencing-Sabre
147. Judo
149. Self Defense

Wilderness Studies (1)
113. Rock Climbing
118. Wilderness Surviv
131. Canoeing
153. Orientering

Aquatics (1)
121. Saliling
124. Surfing
124. Surfing
125. Swimming
126. Swimming Conditioning
27. Synchronized Swimming
128. Water Polo
132. Springboard Diving 133. Windsurfing
133B. Windsurfing
ness Activities (1)
itness Activities (1)
141. Bicycling
142. Low Impact Aerobics
44. Fitness \& Conditioning
146. Jogging
51. Weight Training and 55. Stretching
158. Senior Citizen Fitness
159. Aerobic Fitnes

Team Activities (
161. Basketball
162. Beach Volleyball
165. Flag Football
165. Flag Football
166. Rugby
167. Soccer
169. Softbal 171. Track and Field 172. Volleybal

\section*{Recreational Dance}
181. Folk Dance
183. Recreational Dance Workshop 185. Social Dance
122. Scuba (See Lower Division)
157. Fitness for Living (See Lower Division)

Special Topics
198. Special Activities
* See Physical Education protessional coursee
for adoditional actuvites open to non-malior.

\section*{Physical Education Professional}

Physical (P ED):
Courses
Physical education majors and minors will be given priority major. Selected courses are body to receive credit toward general education requirements Lower Division
122. Scuba Diving (2) F,S Prerequisites: Swim test and diving exam. An introtuctory class in recteational skin and
sucuba diving tectriciueve in preparation for an
openwater diving ceeritication card. (Activity scuba div
openwate
hours)
157. Fitness for Living (3) F,S

This course is a practical and personalized
 be accomplished through a synthesis of food for finess, circulatory efficiercy evaluation and
infiomation, relexation skils, and a variety of comemetic andor body condition ing techniquee
(Leeture 2 hours, Activity h hours.)
(3) F,S

Theory and practice of first aid tor the injured. Successtul completeio of courser requiriementis
leacs to the American National leads to the American National Red Cross
advancod first aidd and personal sadery and

\section*{community CPR certificate.}

\section*{215. Career Perspectives in} An overiew of human movement including opportuntios Orientation to current program and proficiency requirementis. Studentis
entering the physical edoucation maiof ate entering the physical ediucation maidor are
requived to enront in this course their frot mester of stucy
230. Sports Appreciation (3) F,S Introduction to the study of
institution in American societ.
240. Lifeguard Training and Water \(^{\text {Safety Instructor (2) }}\) F,

Prerequivites: CPR and Standard First Aid
Certification and P ED 125 or equivalent. Instruction and tochniques in ilifeguard training skills, advancod swimming skills, basic water
safety, emergency water safeyt, and infant and
 opportuntit to qualify for the Anerican National


242. Backpacking (2) F, An experiential examination and analysio in the
fdogment, neowedege, equipment and skills jucgment, knowledge, equipment and skills
necessay to oafe widderess travel and living.
(2.3 day field experienece requirec) 43A. Winter Mountain Environment (3) F Introduction to winter mountaineering skills;
stady of the mountain eevirionment. An

\section*{243B. Spring/Summer}

Mountain Environment (3) Instruction and extended experience
developing the attitudes, iudgment.knowledge developing the attitudes, judgment, knowledge
and skils for sale mountain travel and living. and skils tor sate mountain travel and liwing.
Trip planning, logistics, navigation, mountain
medicine, mountaineering techioues. medicine, mountaineering tecchniques, safe and
ecological camping will be leanned and ecological camping will be learned and
practiced while on a ten-day expeotion.
Throughout the widderness expedition group Throughout the wildernese expedition group process, leadership, problem sooving and
jucgent al provid growh and experiential
education opportuntitios that develop the edcucation opportunities that
successtul widerness travele.

\section*{243C. Desert Environment}
(3) F,S
introduction to the skilis, attitudes and of deseeret areas. An interdiciccipininay introduction to the meaning and significance of the desert. Trip planning, map use, methods of sate travel Course includes feild trip
244. Kayaking (2) F,

An experiential examination and anayysis of the
iudgment, knowedge, equipment and skill
 mequitevater
require).
245. Wilderness Water
Environment (3) F,S

Introcuuction to the skils, attruves and knowedge equiriect or sale use of varied type
of widerness waters. The skils and techniques of widermess waters. The skilis and techniques
of boot handing and trip planning An
interdisciplinarly introduction to the study of interdisciplinary introduction to the
waterways. Course includes feld trip.
246A. Mountaineering (2) F,S
An experiential examination and analysis in the
judgment, knowiedge. equipment and skilis necossary to safe mountaineering (2.3day fell nexpesseny to seate mount
\begin{tabular}{|c|c|c|}
\hline (2) & wing, hitting, sliding, unting. Comprehensive tea & \\
\hline \(3 s\) tra living involving snow. Course includes trip. & \multirow[t]{2}{*}{\begin{tabular}{l}
257. Techniques of Volleyball \\
(1) F,S \\
(Open to Physical Education majors and minors only.) Instruction in individual and team techniques utilized in the sport of volleyball.
\end{tabular}} &  \\
\hline 246C. Advanced Mountainee & & \\
\hline \multirow[t]{3}{*}{Prerequisite: P ED 246A or 246B or consent of instructor. Mountanneering skilis with advanced
techiquese and skils for solving the probiems of mountain travel and lling on rock, snow, and iee. Special topics of ice axe, crampons, techniquues, mountaineering sking, advancer
tiver crossing, snow sheters, and route finding will be selected based upon skill needs of the students. Course includes a fied trip.} & \multirow[t]{2}{*}{\begin{tabular}{l}
260. Fundamental Rhythms \\
(2) \(F, S, S S\) \\
Instruction and practice in fundamental rhythms involving folk and social dance forms. Designed for physical education majors and minors, but open to all students. (Laboratory) Grading: Student Option.
\end{tabular}} & and techniques of the prevention and common athletic injuries. (Lecture, \\
\hline & & 8. Ad \\
\hline & 263. Techniques of Physical Fitness (2) F,S & \\
\hline & \multirow[t]{4}{*}{Instruction, practioe and evaluation in physical fitness. Calisthenics, statro and ite
flexibility exercises, weight training, finess trail, running, and other aerobic activities, including exercises to music and relaxation. (Laboratory, including off campus long distance runs and other aerobic activities.)} & no \\
\hline & & Developmental and peutic Exercise (3) \\
\hline & & \\
\hline B. Adva F, & & \\
\hline & & \\
\hline & \multirow[t]{2}{*}{(Open to Physical Education majors and minors only.) Instruction and techniques in individual skills and strategies for successful performance in golf.} & \\
\hline & & Prerequisites: PED 308, 309, and permission of instructor. Theory and application \\
\hline 248A. Techniques of Country Skiing (2) & 265. Techniques of Gymnastics (2) F,S & \\
\hline & \multirow[t]{2}{*}{(Open to Physical Education majiors and minors only.) Instruction techniques and evaluation in gymnastic skills and eventis which
constitute the compettive programs tor men and women.} & \begin{tabular}{l}
\[
\begin{aligned}
& \text { Id for physical education } \\
& \text { ic training track. (Lecture: } 2
\end{aligned}
\] \\
hours)
\end{tabular} \\
\hline & & \\
\hline \begin{tabular}{l}
248B. Advanced \\
Skiing (2) \(\mathrm{F}, \mathrm{S}\)
\end{tabular} & \begin{tabular}{l}
266. Techniques of Badminton \\
(1) F,S
\end{tabular} &  \\
\hline instructor. Emphasis & (Open to Physical Education majors and minors only.) Instruction and techniques in the skills and strategies for successful performance in badminton. & \begin{tabular}{l}
315. Motor Developme \\
(3) F,S
\end{tabular} \\
\hline \begin{tabular}{l}
scheduled day ski sessions. \\
249. Techniques of Wrestling \\
(2) \(\mathrm{F}, \mathrm{S}\)
\end{tabular} & \multirow[t]{2}{*}{\begin{tabular}{l}
267. Techniques of Tennis \\
(1) F,S \\
(Open to Physical Education majors and minors only.) Instruction, techniques and analysis in the concepts of teaching, coaching. and playing tennis.
\end{tabular}} & the period of intancy \\
\hline Instruction and practice in take breakdowns and controls, pinholds. reversals, blocks and counters. & & 320. Adapted Phys Education (3) F,S \\
\hline \begin{tabular}{l}
250. Te \\
(1) F,S
\end{tabular} & \begin{tabular}{l}
Upper Division \\
300. Kinesiology (3) F,S
\end{tabular} & \\
\hline (Open to Physical Education majors and minors only) Instruction in individual and team skills and techniques utilized in the sport of
basketbal for succeesstul performance. & \multirow[t]{2}{*}{Prerequisites: A/P 202, satisfactory completion of a proficiency exam covering anatomy administered within the first two weeks of this course. Anatomical structure and function, and mechanical principles relating to human (Lecture, laboratory.)} & al. \\
\hline \begin{tabular}{l}
253. Techniques of Soc \\
(1) F,S
\end{tabular} & & successfully integrate the disabled individual into the physical education mainstream (Lecture 2 hours, Laboratory 2 hours). \\
\hline minors only.) Instruction in individual and team skilts and techniques utilied in the sport of & \begin{tabular}{l}
301. Exercise Physiology \\
(3) F,S
\end{tabular} & 22. Physical and Moto ssessment (3) S \\
\hline \begin{tabular}{l}
255. Techniques of Softball \\
(1) \(\mathrm{F}, \mathrm{S}\) \\
(Open to Physical Education majors and minors only.) Instruction and practice in
\end{tabular} & Prerequisite: A/P 207. Basic concepts of immediate and long term physiological responses of the body to the exercise demands experienced in physical education, athletic and physical fitness programs. (Lecture, laboratory.) & Prerequisites: P ED 315,320 . Background in basic statistics of \(P\) ED 483 strongly eccommended. The selection, administation, and motor assessment of individuals with aceptional needs (lecture, labratory) \\
\hline
\end{tabular}
425. Gerokinesiatrics (3) F Prerequivites: AP 202, 207 and GERN 400; or conduut of exercisiee programs for the older adult. (Lecture, laboratory,)
441./541. Applied Biomechanics:
Lifting and Work Capacity (3)s Lifting and Work Capacity ( 3 )
1993 and every third semester 1993 and ev
Prerequisites: P ED 300 or PT 301 and 302
 poommended) Study of the mechanica星 application to the evaluation of weightilliting application tothabilitation exauratioses, as well cocupational liting tasks. Cititial analysis of radtional grading only.
447. Wilderness Studies:
rinciples and Methods (3) F,S Prerequisite: Completion of a minimum of six
units of wididerness studies course work. An investigation of the philosophies, principles and program methods underlying the
wildemess adventure programs.
48. Wilderness Studies:

Leadership Practicum (3) S
Prerequisistes or corequuistes: P \(P\) ED 346,447 Anaysis and practice of the leadersthip and oaching techniques approppiate
453. Theory of Coaching Football (2) s

Prorequisistes: Junior or semior standing,
consent of instructor. Theories of caaching pensent of instructor. Theories of coaching and inter acolegiagete football. (Lecture: 1 hou
acturys: hours, 8. Theory
458. Theory of Coaching
Swimming and Water Polo
(2) \(F, S\)
rerequiuiste: P ED 240 or equivalent. Theory and practice of tactics, strategies, organization
and coaching techniques for interscholastion and intercollegiate swimming and water pole. Cocture 1 hour, Activity 3 hours.) 62./562. Advanced Strength and Conditioning (3) \(\mathrm{F}, \mathrm{S}\)
Prerequisites: P ED 300,301 . Study o
biomechanical and kinesiological factors which are important in understanding the function
and proper techniques for execoction of a wide and proper technicues for execution of a wide
variey of standard and advanced weigh training exercicises. Physiological bases for
stingengh traing and adapations caused by strengtht training and adaptations caused by
different training reegimes are emphasized.
Traditional grading only 65./565. Clinical Exercise AP Prerequisites: AP 207, P ED 301, andior
nastuctor consent. A study of the physiolog and patho-physidiogy oft the electrical apstivity of The heart. Instruction is directed toward pattern
and exercise electrocardiograms. (Seminar 3
hourrs.
475./575. Psychology of
Coaching (3) F,S Current topics of pyychoogogical concern and
application as related to athletio performance. 476. Physical Education for
Elementary Teacher lementary Teachers (3) F,S instruction and practice in developing physical
education programs for children. The purpose of this lecture/abocatory course is to provide Classroom teachers, elementary physiceal
educuation specialists, and administrators with the information necessaray to develop a quality physical education program based upon the
California State Physical Education Framework. Emphasis is placed on learning progressions
and the incorporation of the Physical Bees
 physiacal education ac
Laboratoy 2 hours.)

\section*{477. Innovative Curriculum in} Elementary Schoo
ducaion (3) S ,
Prerequisites: PED 370 or 476 or consent of
instructor. Theory and application of elementary school physicall eldicucation
curriculum. Designed for students specializing in eulementary school phtersicisal edpeciacization
program. (Lecure 2 hours, Laboratory 2 programs.
hours.)
480. Behavior Management in

Physical Education and Sport

\section*{(2) \(F, S\)}

Prerequistes: PSY \(100, P\) ED 370 , senior
tanding and concurrent enrollment in \(P\) ED
 unique to physical education and sport. Focus
on procedures to strengthen or maintain on procedures to strengthen or maitain
appropiate behavior and weaken, redice o
eliminate eiminate inappropriate behavior. Includese behavior menazaement tort progigninam that cean be effectivel mimpomemented in mon- trantitional
classroom seotings in physical educuation and classrom setiting in thecture)/discussions 2 hours.) 483. Measurement and Evaluation in Physical Education Preequisites Prerequisites: Senior Standing. Principles and
techniques leccniquess of construction, organization,
administration, interpetation and evaluation of

485. Neurological and Pathological Foundations for
Corrective Therapy (3) F Corrective Therapy (3) \(F\) Prerequisite: AP 202, 207, P ED \(300,301,320\)
4899 or permission of instructor. A sunvey of neurologicemicositino of of instructor. A survey of the implications of various medical pathologies for rehabilitation. Emphasis on inflammatory
processes,
metabolic asial
 defficiencies, neoplasms, degenerative
conditions and congential disorders as relatec
to the practice of Corective Therapy. to the practice of Corrective Therapy
489. Fileld Work in physical
Activy setitings
\((1-3)\)
F.s Prerequisite: Completion of physical education
course reacuirements for the courre reauiern in then. Superised practico
which field work is taken in working with individuals or small to large
 approved community ftreses experiencoses in two
different agencies as an aditiona different agencies as an additional
preercuiste). Creditivo credit grading only.
May be erepeated to a maximum of nine units of May be repeated to a maximum of
creditit
A. Fieldwork in Adapted Physical B. Fdielcation in At B. Fieldwork in Athletic Coaaching
C. Fieldwork in Athetio Training D. Fieldwork in Com muminity fitness
F. Fieldwork in Corrective Thereapy G. Fieldwork in in Morotor Dive Thereapy
H. Fieldwork in H. Fiedwwork in Gerontolology J. Fieldwork in Berenviology Management in
Physicual Education wind Sport.
 48dive Superised practico in working with
indiviual or smal to large groups in publich private agencies and schools in Patricula pirvala age
emphasis will be given to deosigning and implementing a ane io designing and
manaenavement program that can be effectivel
 setings in phyicial education and sport.
CeridiNNo creditit grading only. (Fieldwork, 2--
hours.)
*497. Independent Study (1-3) F,S
Prereacuistes: Maior or minor in physical
education, semior status and education, senior status and consent of
linstutor. Student will conduct independent
librayy instuctor. Student will conduct independent
libary or laboratory research under the
superision of a tacuity member and wite a superision of a taculty member and wite
repor of theinvestigatio.
a may berepaeted to report of the investigation. May be repoeated for
a maximum of six unit. Traditional grading
only.
*499. Special Studies (1) F, Group investigation of topics of current intierest
in physical educaction or athleticu. Topics to be in physical education or ath hetios. Topics to be
announceed in the sched
ante of Classes. May be bed repeated for a maximum
with change of topic.
Graduate Division
521. Sports Management (3) F 1992 and
thereafter
Prereauisite: EDSS 450 P or equivalent, of teaching experience (including equant, or ont
teaching). A course in the management and teaching). A currse in the management and
spuensisory
phatiosopophies;
prinincipies and practicos of afdimsinitietesing atrinciples anperising
physical education and athletio programs in the physical edccation and athletic programs in the
publio schood system,
pincluding scheduling
 liability, supervision of pelssonnel, curriciulum
and evaluation; techniques of mannegumen and evaluation: techniquess of management
and superisioion as they apply to athlectics and physical education at the seca
college levels. (Seminara 3 hours).
524. Analysis of Teaching in
Physical Education (3) F1992 hys and every
thereafter
Analysis of teachers and teaching in physical actuity environment: focus on developoin observational competencies, analysis of
research completed and future research designs.
525. Instructional Design in hysical Education (3) F1993 and every
Trerequisites: Undergraduate major in physical ducation, IM 300 A A sytemem approach to program.
526. Applied Behavior Analysis \(n\) Physical Education (3) \(\mathbf{S}\) 993 and every third semester thereafter
Application of applied behavior anaysyis
pinciples to physical education (sport) with paticiular emphasio on single subbiect reeearch designs and behavi
537. Physical Education for Special Populations (3) F1 and every
Foundations in the organization and conduct of
Adaped hhyical dapted Physical Education
338. Motor Dysfunction and the xceptional Person (3) F and every
Prerequibite: A basic undergraduate course in
Adapted Physical Education or its equivalent. Ademporition, anavyeis, astesesment and
Remeciation of movement problem in a child with minor nerrous system dyytunctions. 540. Biomechanical Factors in and every third semester and every
thereafter
Prerequisite: \(P E D\) ED 300 or equivalent. Study of tatic and dynamic principles of mechanics influencing human motion in spori, dences and
rehabilitative programs, including techiques lor age-elated qualitative and quantitative
nalysis.
541./441. Applied Biomechanics: Lifting and Work Capacity (3) \({ }^{1993}\) and every third semester hereafter
Prerequisites: P ED 300 or PT 301 and 302 (PHYS 100A and a course in Trigonometry
recommendeed. Stucy of the mechanical properties of bone, ligament, tendon, and of seleal muscocled bioverechanicical modedels with application to to te evavauction of weightiliting
and rehabilitation exercises, as well as and rehabilitation exercicses, as well as
cocupational liting tasks. Citical analysis of methods used to develop and teat strength Traditional grading only.
546. Developmental Aspects of Motor Behavior (3) S 1993 and
every third semester thereafter Prerequiste: P ED 315 or equivalent. The study Prerequatite: P EDO 315 or equivient. The study
of maior factors which contriute to to the
develomenton of motor skillituness tom birth to developmen
maturty.
550. Human Performance Instrumentation (3) S 1993 and
every third semester thereafter every third semester thereafter Prerequistes: \(P\) ED 300,301 . Fundamentalas of
instruments used in adaroced studies of
kinesiong and exerctiee physiology, kinesiology, and
biomechics. 551. Advanced Exercise 551. Advanced Exercise
Physiology (3) F193 and
every third semester thereafter Prerequistes: P ED 300, 301. Advance concepts of exercise physiology. (Seminar)
 third semester thereafter
Prerequisites: P ED 301. Classroom and field experience pertaning to the various aspects of hearth eenhancement exerctise programs (e.g,
physiologogical assosement. physical traninh physeiological assesament, physical taring
managment of weight octuro, and behivio
modification) for heathy indivduals and modification) for heathy indididuath and
patients with systemic diveases a uch as
patent patentes wion, coronary arter
yppernensio aimays obstruction.
chion
hroronic aimways obstruction. port (3) S 1993 and every third emester thereafter
 nuivients and AP 202 and 2077 or theif equivalonts. Examination of hoath probiem tetinty, Tradtional grading only. (Seminar) 561. Musculoskeletal Injuries in semester thereafter
Prevequisites: \(P\) ED 300 and 307 or their
equivalents and AP 202 or its equivalent. \(A n\) quivialents and AP 202 or tis equivalent. An indepeth study of the most prevalent
musculoskeletal infuries occurring in sports
 esponses, and management
Tradtional grading only. (Semina)
62./462. Advanced Strength and Conditioning (3) S
Prerequisites: P ED 300,301 . Study of tiomechaniical and kinesiologicica tactors which

 strength traning and adapatations caused by
different training regimes are emphasized. 565./465. Clinical Exercis Electrocardiography (3) S Prerequisites: AP 207, P ED 301, and/or
nostuctor consent. A study of the physiology instructor consent. A study of the physiblogy the heart. Instucution is directed toward pattern
ecognntion of normal and abnomal resting hours).
573. History of Sport in the
U.S.A. (3) F 1992 and every third semester thereafter Prerequulite: \(P\) ED 335 of equivalent. An
analysis of the history of American sport as it analysis of the history of American sport as it
refects the dominant themes in American \begin{tabular}{l} 
eciecty. \\
sely \\
\hline
\end{tabular} 574. Contemporary International Sport (3) F 1993 and every third
Investigation of contemporary international
sport in various world cultures. 575./475. Psychology of
Coaching (3) F,S,SS Current topicis of pyychological concem and 577. Sport in U.S. Culture (3) S 1993 and every third semester thereafter
Prerequisite: P ED 3321 or equivalent. Analysio
of physical activities in U.S. culture of physical activtities in U.S. culture.
Consideration of the relationships between soporta and gamen end the factors of status,
values, environment and cuturual change. 588 . Clinical and Therapy (3) F,S Prerequisites: Completion of Bachelor's degree
in phyyical education, phyyical therapy,
 Program and succocosetul completion of a
course(s) in pathological and neurological foundations of rehabilititation or approval of the foundations of tehabilitation of appoveva of the
Corrective Therapy Coordinator. The theoretici foundations of olilical practice
Therapy. Tradtional grading only.
588L. Corrective Therapy Clinical Training I Laboratory (6) Clinic
,
Corequiste: P ED 588 . Instruction and
obsenation in the Long Beach Veterans observation in the Long Beach Veteran
Hospital. 589. Corrective T
Training II (3) S

Prerequiste: Satisfactory completion of \(P\) ED
588 . The theory and practice of 588 . The theory and practice of corrective
therapy techniques in the hospital seting. 500 therapy techniques in the hospital setting. 500
hours of instrution and observation at the Long Beach Veterans' Hospital.
laboratory.) 589L. Corrective Therapy
Clinical Training II (3) F,S Corequisite: \(P\) PD 599 . Instruction and
observation in the Long Beach Veterans
590. Statistical Analysis and Measurement in Physical
Education (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\) Prerequistes: EDSE 421, EDSS 450 Por 450 W ED 483 or equivalent. Consideration of the


coaching setting, jointy supenised by
University Faculty member and a aupervio
 paid or volunteer capacity. Note: 6 units in o emplyed.. My ber bepeated for tor a maximum till 594. Exercise Sclence Internship
(2-3) F,S

Prerequistes: P ED 550 and 551 (P ED 40
 experience in applying exerclise science will consist of conductingt the exercise testing and monitoring or leading the exercise trainin
of selected subiect populations such patelected undergoing populiations sush shabitation asymptomatic
(1-3) F,S,SS
reerequisistes: Consent of physical education laculty member and graduate advisor.
ndopendent research under the guidance of a Independent research under the guilance of a
faculty member. Varied learning activites
Itilized to achieve competency ralated to utilized to achieve competency related to
Physical Education not offered in regular classes. Witten report required.
grading only. (ndidependent Study)
630. Seminar in Motor Learning 3) F 1993 and every third
semester hereat
Prerequisites: P PD 312,500 and 696 (may be
aken concurrenty). Identification and analysia If pincipipeses and soncooptsisation aplicable to motoo
633. Seminar in Spor Psychology (3) F 1992 and every third semester thereafter
 (including teaching student coaching teaching).
experienco
Study peychologicial theoriese and conccepts and the viewed in the context of the paaticipant, the leacherlo .ach, the spectator and the entrepreneur
38. Seminar in Trends in Adapted Physical Education (3)
S 1993 and every third semester thereafte
examination and analy P ED 537 or of the current tend in Adapted Phyyical Education.
671. Seminar in Current Trends and Issues in Sport and Physical ducation (3) S 1993 and every
third semester after
Educeation and sport.
74. Seminar in Philosophical Concepts of Sport and Physical
Education (3) F1 1993 and every third semester thereafter In depth, critical analysis of philiosphical
movements affecting physical esucation with emphasis on practical application and future

Moveminar in Human
Movement Theory (3) F1993
and every third semester and every
thereafter Examination of the writings of the malo human
movement theorists inducting the aesthetic
nature and signifcance of the humar nature and significan
movement experience.
685. Seminar in Athletics (3) 1993 and every third semester thereafter
Experience in the field. Special problems
related to the administration of an athletio program including current issues and practices and superised research in selected areas 695. Seminar in Professiona Literature (3)
Prerequisites: P ED 590, , 696 . Citical analysion
and synthesis by comparative review of and synthesis by comparative review of
proferasional itieratur in phycical education.
Required of all candidates not electing thesis Required
option.
(3) F,S,SS
in physical education undergraduate majo in physical education or related field
Methyodocogical apporoaches
 design and reporting; bibliography. Required of
all master's degriee candidates. To bo all master's dogree candidates. To be
completed within the first 12 units of \(500-60\) series course
697. Directed Studies (1-3)
F, SS

Prerequistes:
Prerequisites: P ED 500,606 , advancement to
candidacy. candidiacy. Research in an area o,
specialization under the diriection of \(a\) facuity
member.
698. Thesis (1-4) F,S,S

Prerequisites: P ED 590,696 , advancement to Prerequusites: \(P\) ED ED 590,696 , acvancomenent to
candidacy
completion of an approved theosiaration and 699. Seminar in Selected Topics (3) F,S

Prerequistes: Teaching experience. intensive
study of salient problems of ourrent
protessional porefosional salient problems of curren
physical educatorans. May be be repeated (with physicial educators. May be repeated (Mith
selection of a second topic) for a maximum of
six units. Topics to six units. Topics to be announced in the
Scheocule of Classes.

Department Chair: Ray J. Morris Department Office: Industrial Telephone: 985-4072
Faculty: Professors: Kay Cerny Charles L. Carter; Associate Croressors: Joyce Campbell, Dee
Lilly-Masuda, Ray J. Morris, Albert C Russo.
Emeritus Faculty
A. Jerome Nielsen
Department Secretary
Lois M. Magette
Lois M. Magette
The Department
Students desiring information
Students desiring information
should contact the department office shor referral for advisement.
The physical therapy curriculum is a competency based program designed to prepare entry-l-evel
practitioners who will become a integral part of the medical rehabilitation team as a professsional science, professional, medicial and clinical experiencos are provided. Successful completion of the degree
requirements leads to a bachelor of science degree in physical therapy and qualifies one to write the State of physical therapist. The program is accredited by the American Physical Therapy Association.
In accordance with a professional
goal in physical therapy, all physical therapy entry-level education programs will preferably be
conducted at the master's level. The conducted at the master's level
program at CSULB is currently planning for this transition.
The comprehensive curriculum plan includes a sequence of integrated to enhance attainment of terminal competencies. As a professional health care provider the ph herapist will be able to 1. Determine the physical therapy 2. Design a physical therapy plan of

3. Implement a physical therapy an of care;
4. Evaluate, interpret and respond
o changes in physiological state: 5. Identify and recommend solutions or architectural barriers
6. Interact with patients and families 7. Demonstrate safe, ethical, and legal practice, effective communication skills; 9. Participate in the design and
management of a physical therapy service;
10. Apply basic educational
concepts of learning theories;
concepts of learning theories;
11. Apply basic principles of the
scientific method; 12. Assume res professional growth;
13. Identify activities between al, health and education
14. Identify issues and problems in
14. Deantify issues and problem
15. Engage in the clinical
decision-making process;
16. Design a program of
elf-learning and professional self-learning a
development.
Requirements for Admission The pre-physical therapy education quirements are similar to rofessional programs. Students must ollow a prescribed program which ark vork and appropriate physical, The number of applicants to the hysical therapy professional progran exceeds the number that can be accepted. For this reason physica upplemental criteria in addition to hose required for admission to
University. Admission is on a competitive basis and preference is iven to California residents.
Applicants with a bachelor's degree
shuld consult the current CSULB atalog for second baccalaureate degree requirements.
Admission to the Professional Program
In addition to meeting the Universitit's academic standards fo admission in good standing, the pplicant must:
1. Declare physical therapy as a
naior (if not declared prior to admission);
2. Complete and file a

Supplemental Application with the epartment;
3. Complete a minimum of 82 , emester units including all prerequisites. All lower-division ererequisite courses must be completed prior to admission to the professional program. NOTE: A maximum of 12 units may semester. Mid-term grades must be submitted and a final passing grade must be received by the depart perore finana acceptance in:
4. Complete PT 374 at this campus. Note: PT 374 may be taken at another campus, but ew ow one Opportunities to enroll in PT 374 at CSULB vary acco
5. Submit transcripts of all academic work attempted; 6. Submit a minimum of three etters of recommendation; 7. Complete the Graduate Record analytical portions);
8. Possess current CPB

Certification.
In determining the eligibility of an program, the admission committee will consider
1. All information in the
supplemental application
2. All college/university academic work completed with emphasis on all prerequisite courses. The following courses and their semester unit values
are the CSULB science prerequisites are the professional program: Statistics course (biostatistics preferred) (3)
Human Anatomy - Ap Human Anatomy - AP 202 (3),
Physics - PHYS 100AB (8), Human Physiology - APP 207 (4), General Psychology- PSY 100 ( (3). Genera
Chemistry-CHEM IIA\&B (10) Chemistry- CHEM IIA\&B (10),
Organic Chemisty- CHEM 327 (4),
Psychology of Disability - PT 374 (3): 3. Documented exposure to the practice of Physical Therapy in variety of settings:
4. The state of physical/emotional wellness in order to carry out the
yypical responsibilities of a therapist; 5. An interview of the applicant (a the discretio
committee);
6. Results of the Graduate Record Examination (Graduate and/or Undergraduate)
Requirements for Admittance to
Clinical Practice: Clinical Practice:
1. Complete all requirements for the application for admission to clinical practice;
2. Earn a minimum of 2.0 (C) in 3. Successsfully course attempted 3. Successfully completio a Note: Students who complete the Physical Therapy and after succestain completion of an internship (PT 485), completion of an internship (PT
iffered by the Physical Therapy xamining Committee, are qualified to hysical Therapy Examining Committee.
Requirements for the Bachelor of 3-1226)
Lower Division: None
Upper Division: AP 307, PT 301,
302, 325, 350, 351, 353, 360, 371,
374, 380, 430, 431, 440, 446, 450,
Post Baccalaureate: PT 485
Critical Dates:
1. February 15 and September 15 Supplemental physical therapy transcripts, references, etc.) due for
fall and spring admission;
2. May and January: Notice of
Admission decision for fall and spring cceptance, respectively.
Courses (P T)
Lower Division
10. Orientation to Health Care
s (1) F,S
rerequuiste: Consent of instructor. Orientation to Upper Division
301. Anatomy and Kinesiology I 4) F,S

Prerequisites: Admission to the physical therapy
proferssional program and consent of instruction Coverestional nomacromam and consent of instructor covers normal human anatomy, kinesiology and
pathkinesiongy with mphosis on the uper
xtremity, heac, neck, and trunk. Also inductues extremity head, neck, and trunk. Also includes
histology, tissue mechanics and tissue athomechanics. (Lecture 2 hours, laboratory 6

\section*{(4) \(\mathrm{F}, \mathrm{S}\)} (4) \(\mathrm{F}, \mathrm{S}\) Prerequiuites: Admisesion to the physical therapy proressional program and consent of instructor.
Continuation of PT 301 with normal anatomy kingsiolosy on the pathomechaniis of posture and gati. (Lecture
hours, laboratory hours). 325. Human Development fo Therapists (2) F,S Preerequisites: Admision to physical therapy
professional program and consent of instructeon profoestional program and consent of instructo.
Human develogment from conception throug
changes changes accompanying the aging process with
emphasis on normal development of the sensocimotor system. Also o inclucdes normal and abnormal refiex developoment, asesessment of the psychosocial development.
350. Principles of Physica Prereaquistes: Admissio professioneal program and consent of instructo. The recongition, specification and pertormance o deffititve musculoskeletal physical therapy
assessment planning process. (Lecture 2 hours, laboration 3
hours.) 351. Principles of Physica
Therapy II (3) F S Therapy II (3) F,S Prerequisites: Admission to the physical therapy Principioses and practice in consentic of pationtructor Principles and practice in basic pationt care
including massage, hydrotherapy, traction intermittent compression, wrapping, bandacain and aspectio euch
laboratoy 3 hours.)
353. Principles of Physica Therapy III (3) F,S Prerequiutase: Addimsion to the physical therapy
professional program and consent of insturtion protesilional program and consent of instructor
Principes and practice in electrotherapy and assosesment procedures for neuromuscoular
disorders. (Lecture 2 hours, laboratory 3 houra) 360. Neuroanatomy for Therapists (3) F,

Prerequuisites: Admission to the physical therapy
profeesional program and consent of instructor. professional program and consent of instructor. Normal human neuroanatomy with emphasis on and blood supply item, Inctudues labe faboraton experiences with CNS and
(Lecture 2 hrs, laboratory 3 hrs).
371. Clinical Medicine I (3) F,S Preerequistes: Admission to the physical therapy
professional program and consent of instuctor. professional program and consent of instructor.
Suresy of general pathocony with mempasis.
the roole of the physical therapist in patient care. 374. Psychosocial Aspects of Disability I (3) F,S Preerequisite: PSY 100,370 (may be taken
concurrenty) and consent of instructor. Suviey o the peschyo-scial consent of in instructor. Sunvey
reactions to disease and dianality and cultural eactions to disease and disabality.
380. Clinical Practice I (1-4) F,S Preerequisites: Admiesion to the physical therapy
Peotesional program and consysi
Intial superised intrutor
precinical experience in in

\section*{} definitive
procedures.
401. Applied Anatomy (4) F,S Preerequisites: AP 202, AP 207. Advanced study
of the structure and function of the of the structure and function of of the
neurimusoculatosketeal systemm with emphasis neuromusuculatoskelotal systems with emphasis
on the surface, muscle and joint anatotom, nevive
 prosected materials. (Lecture 3 ho
3 hours.) Tradtional grading only.
407. Systems Physiology fo Therapists (3) F,S Preerequisites: Admission to the physical therapy
professional
program and consent of proterssional. Program and consent of the
inntructo. Mechanismm of action and interaction
of the physilogical of the physiological body systems with emphasil
on the cardiovascuiar immune respiatory and on the carciovascular, immune, respiratory, and
renal systems. Pathological and clinical
ond consididerations relevant tophyysical therapy are
also presented. (Lecture 2 hours, laboratoy also prees
425. Biophysical Aspects of Human Growth (3) \(F, S\) Prerequisistes: AP 201, 207, P T 401
(Concurrenty). Study of human development tron birth to seneescence with emphasis on concoepis of motor, skeletal, and neurological developmen processes necessary to prepare for evaluation
and treatment intervention in musculoskeletal and neurological disabilities. (Lecture 2 hrs , lab 3 hr
Traditional grading only. Traditional grading on
430. Principles
430. Principles of Physica
Therapy IV (4) F,S Prerequisistes: Admisaion to the physical therapy protetesional program and consent of instructor.
Priniples Principles, and practice in designing
implementing and managing a physical therapy plan of care, induding therapuutio exercie
desion, assistive devices design, assistive devices and the recougnition
specification and pertormance of defintive phyyical thenapy assensment procedurea
(LLeture
hours, laboratory 3 hourv) (Leoture 3 hours, labocatory 3 hours.)
Therapy V (4) F,S
Prerequistres: Admission to the physical therapy professional program and consent of instructor Principles and practice in advanced therapeutic
exercise, including the recogntion exercice, inclucing the recogntion and
performance of defnitive phyyitial therap
assessment procedures assesment orocedures. (Leeture 2 hour
laboratory 3 hours.) 440. Administra Therapy (2) F,S Prerequuistes: Admision to the phyyical therapy
professional program and consent of ind professional program and consent of instructor
Design and management of a physical therap Design and management of a physical therap
sericic by applying the administrative principles
ot of planning, organiziation, superision, contro and evaluation. Also includes the relationship professions in the heatht care delivery systems. 446. Learning and Counseling for
Therapists (2) F,S Therapists (2) F,S
Preerequisites: Admission to the phyyical therapy
professional procram and consent of the

Concepts of learning theories in designing. implementing \(\left.\begin{array}{c}\text { and } \\ \text { experiencos ind ovaluating lear leaning } \\ \text { order to } \\ \text { teach patients and }\end{array}\right\}\) amilifes, and to design and implemem
anmunity education ommunitity education in-senice
Tradtional grading only. (Leoture.)
450. Principles of P
Therapy VI (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisistes: Admission to the physical therapy profeassional program and consent of instructor Application of basic \(\left.\begin{array}{c}\text { knowedge } \\ \text { physiology } \\ \text { cardioulmenary }\end{array}\right)\)
 electro-carcligyaphy, eataded and and operation
administation and establisment and
intervention
rehabilitation of interention and renabilition
cardi-pulimonany exercise programs. (Lecture e 460. Neuroanatomy (3) F,S Preerequisite: \(P T\) 401. Investigation of human
neuroanatomy including the peripheral, central and autonomic nervous systems. (Leoture
hours, lab 3 hours). Traditional grading ony. 461. Neuromuscular Physiology (4) \(F, S\) Prerequisites: AP 207, PHYS 100 A 8 B .
Advanced reoulatory physiology of the central
and peripheral nenous systems including tunction. (L.ecture
Traditional grading only

\section*{472. Clinical Medicine II (3) F,} Prerequisistes: Admission to the physical therap proteossional program,
instuctor. Pathology, andor surgical management and the role of the physical therapist in pationt care, inctuding the
reconalitio, selection and
performance recognntion, selection and pefformance
defenintue physical
phereap procedures.
475. Research Methods (3) F,S Prerequisites: Any basic course in tatititics and admission to the physical therapy program incluang research planning, research design meirasy researtch. LLecture 3 hours.)
480. Clinical Practice II (1-4) F,S Prerequistes: Admission to the physical therapy protessional program and consent of instructor
continuation of \(P\) T 350 with emohasis advanced principles and practice in desigigning implementing and manaing a phicical theray plan of care.
485. Clinical Practice III (6) F,S Preerequisties: Completion of all professional
courses mith amininum passing grade of 2i. (ic) and eorssent of instructor. Superised cilinice
experience
(internship) in
designing implementing and managing a physical therap
plan of care in a variety of clinical setings tor plan of care in a
\(18-40\) hour weeks.
490. Independent Studies (1-3)

F,S
Prevequisite: Consent of department.
Independent projects in any area of physical Independent projects in any area of physical
therap. Human diseotion is avaiaboe as a
special study. May be repeated to a maximum of six unita.
499. Special Topics (1-3) F,S Pretequisites: Admission to the physical therapy
professional program and consent of instructor. Identififation and investigation of ourrent topics in
selected areas of physical theapy. Topics to be announcoed in the Sobedulue of classes. May ye repeated for a \(m\)
change of topic.

\section*{Recreation and Leisure Studies}

Department Chair
Michael A. Blazey
Michael A. Blazey
Department Officie: Applied Arts and Sciences Building
Faculty: Professors: Marilyn A.
Jensen Assolate Professors.
ensen; Associate Professors: CeEtta Crayton; Assistant
Professors: Michael A. Blazey
Emeritus Faculty: Rhoda (Randy)
E. Gray, John (Jack) Minar

Department Secretary:
Quincy Bowyer
Graduate Advisor:
Kathleen. Halberg
The Department
Students desiring information on ndergraduate or graduate degrees or certificate programs in
dministration of Volunteer Services dministration of Outdoor Services, Recreation, and Travel and Tourism hould contact the department offic or referral to one of the faculy

The experience of leisure is one elemental experience, essential to the total well-being of every person
is a reflection and expression of the cultural values of a society; it is an important treatment modality. The provision of recreation services is one of the largest industries in the
world, whether measured in dollars spent, persons served, hours of time devoted, or resources used. The udy of leisure and recreation is a road discipline, combining aspects
if diverse fields of study and professional practice.
The Department of Recreation and Leisure Studies exists to understanding of the role of leisure and recreation in the lives of all people, and to enhance the quality of experiences available to each in the four-fold mission of the Department of Recreation and eisure Studies: (1) to offer a curriculum which leads the student
an increased understanding of the leisure phenomena; (2) to
conduct basic research which contributes to the general body of knowledge; (3) to serve the research and providing consultation and training to practitioners; and (4) to serve society by providing proiessional pracitioners who a
skilled, dedicated, and ethical stewards of the profession.
The department is accredited by he American Association for Leisure and Recreation.

\section*{Bachelor of Arts in Recreation}

\section*{Academic Program:}

The curriculum is designed to prepare men and women for
positions of leadership, supervisio positions of leadership, super ecreation and park departments, armed forces recreation, industria camping and outdoor education, oluntary youth and adult serving gencies, travel and tourism, and mercial recreation. he curicur includes selected psychology to provide an understanding of people; courses in creation leadership and professional courses to develop an understanding of American leisure and the recreation profes
epartmental Policies Each major student must
maintain a cumulative 2.0 GPA on all units attempted and attain a minimum of a ' \(C\) ' grade in each course required in the major. grade in a required recreation prefix ourse must repeat that course. A ecreation prefix course may be epeated only one time
Students wishing to substitute the Department requirements must submit a letter of request to the Department faculty No more than may be taken by contract Fieldwork may be taken by contract.
s. graded CredititNo Credit. Fieldwork courses may be taken only during the last two semesters
before graduation. Fieldwork I may not be taken during the summer, and Fieldwork 11 may be taken in the August.
Requirements for the Bachelor of Arts in Recreation (code 2-1220) Lower Division: REC 100 (must be completed during first two semesters after declaring the major),
211, 241; , Upper Division: REC 300 (must be competed during first two semesters after declaring the major),
\(304,312,3401,350,421,425,475\), \(304,312,3401,350,421,42\)
482,484, and 485 or 486 . Additional Courses: Each maior student is required to complete courses in the following groups:
REC 315 or other upger division REC 315 or other upper division
program skill course approved by program skill course approved
advisor; choose two courses from the following: REC 402, 408, ED P 301, 302, 311, PSY 370; choose three courses from the following:
REC 426 or 450 or 490 (Convention Management and Services), REC 491, REC 493, REC 317 or 323 o 495, REC 316; choose seven unit
from the following: REC 400,401 , from the following: REC 405, 406, 407, 410, 411, 412, 413, \(414,415,416,430,490\); choose
one course not used to meet othe one course not used to meet other
major requirements from the major requirements from the
following: REC \(315,316,317,323\) \(402,408,426,430,450,490(3)\).
\(491,493,494,495\) 491, 493, 494, 495. Minor In Recrea
A minimum of 21 units approved A minimum of 21 units approved
by departmental advisor which must
include: REC 211, 241, 312. 3401. 421 or 425 , 484 ; one of the following: REC
\(493,495,497\).
Certificate Program in Therapeutic Recreatio (code 1-1150)
Requirements for the Certifiate in Therapeutic Recreation:
(1) A bachelor of arts degree or minor in recreation. The majerity o
the work for the the work for the certificate can be
done concurrently with the recreation degree;
\begin{tabular}{|c|}
\hline (2) REC 402,484 or 485,487 , 491 and 494. REC 484 or 485 , (Fieldwork I or II) must be completed in an approved therapeutic setting REC 487, (Internship), must be taken after completion of the baccalaureate degree in Recreation. The internship requirement is 480 hours to be completed within a maximum period of six months; \\
\hline (3) Nine units of upper division course work must be taken from two or more of the following areas, with approval of the Therapeutic Recreation Advisor: Biology, Educational Psychology, Health Science, Physical Education, Sociology, Social Work; three of these units must be in a science. \\
\hline Certificate Program in Administration of Volunteer Services (code 1-1020) \\
\hline Students pursuing an approved degree at CSULB may, at Management of Volunteer Services Courses taken to meet the requirements of the certificate may also be used simultaneously, where appropriate, to meet the general education requirements of the cooperating departments. The certificate may be earned through continuing education by students not regularly enrolled at the University. The program is also open to persons who have years
volunteer services in their background and are interested in becoming employed as paid volunteer coordinators. \\
\hline Requirements for the Certificate in Administration of Volunteer Services: \\
\hline (1) A baccalaureate degree w may be awarded concurrently: \\
\hline (2) Satisfactory completion of 25 units which must include 10 units of core requirements as follows: REC
\(400,488,493\) and 499 ; 15 units of elective courses including REC 410, REC 490; at least one three-unit course in administrative skills, one in communication skills, and one in an area related to the student's special interest. All electives must have prior approval from the adviser of the certificate program; \\
\hline (3) Overall GPA of 2.5 and maintenance of 2.5 GPA in all courses in the program. \\
\hline
\end{tabular}

Certificate Program in Administration of Outdo (code 1-1000)
Students pursuing an approved
degree at California State University, earn a Certificate in Administration of Outdoor Recreation Resources Courses taken to meet the requirements of the certificate may
also be used simultaneously, where appropriate, to meet the general education requirements of the degree or credential requis.
Requirements for the Certificate In Administration of Outdoor Recreation Resources:
(1) A baccalaureate degree which
may be awarded concurrently; may be awarded concurrently (2) Satisfactory completion of 24
units which must include 15 units of core requirements as follows: REC \(430,489,495,499\) and either 317 or 486. Nine units of elective courses from Biology and/or Geogra
approval of faculty advisor;
(3) Overall GPA of 2.5 , and maintenance of 2.5 GPA courses in the program. Certificate Program in Tourism (code 1-1010)
Travel and tourism is a very large and growing field for which there are sually many opportunities tor eriftrificate program provides istruction in the history and istruction in the history and ncluding its economics, psychology and legal aspects. The
fundamentals of business, food and food service technology, the nanagement are themes throughou the program.
Admission Standards and
Requirements for the Certificate Adminitration of Travel and Tourism:
To be eligible for admission a student must have an overall GPA of 25. A student must maintain a 2 GPA in all courses taken for the ertificat
Only REC 481 and 484 may be
taken for Credit:No Credit grading

\section*{Prerequisites:}

For REC 481: Permission of the instructor and 1,500 paid or volunteer hours of experience in a or REC 484; other course prerequisites as listed.
Course Requirements:
A total of 24 to 27 semester units as follows: REC 326, 450, 481, 490 or 499, GEOG 352; Electives: Six
units of upper division courses listed units of upper division courses listed
in the University catalog under the "Regional" category in the Department of Geography; three additional upper-division units
selected in consultation with the Program advisor.
Graduate Certificate Program in
Adis Admission/Prerequisites: Persons holding a bachelol's or master's
degree in Recreation or Therape degree in Recreation or herapeutic
Recreation or a closely related allied health field, e.g., Occupation Therapy, Music Therapy
Gerontology, Psychology, Adapted
Physical Education, Counseling Two years verified experience in counseling approved by the program advisor. Requirements for the Graduate nseling Satisfactory completion of 2
units of coursework which must units of
include:
(a) Recreation 402/502, 411, 503,
588 , 590; 588, 590; 532. 533 ;
(b) Educational Psychology 434
(c) Electives, selected in

\section*{advisor, 3 units.}

Master of Sclence in Recreation Administration (code 6-1220) The Department of Recreation and Leisure Studies offers a program of graduate studies leading Recreation Administration. Detailed information about the program is available upon request from the
Recreation and Leisure Studies epartment. The program helps prepare professional personnel who can contribute to the development competent managers of private and public agencies and programs, and who can accomplish the field research necessary to suppori
current and future operations.

Unusually fine opportunities exist in this area for interaction with
recreation agencies of all kinds. Each applicant should request a ollege course work be sent to the graduate advisor in the Recreation and Leisure Studies Department in addition to the copies required by hecords.
Prerequisites:
(1) A bachelor's degree with major in recreation; or,
(2) A bachelor's degree with inimum of 24 units of upper hose required in the undergraduate ecreation major at this University. Students deficient in undergraduate eparation must take courses to
move these deficiencies at the iscretion of the departmental raduate committee.)
Advancement to Candidacy:
(1) Satisty the general University quiremen: or advancement to andidacy,
(2) Completion of the Graduate Writing Proficiency Examination:
(3) Approval of the department raduate advisor and the Associate Dean of Graduate Studies and
Research, College of Health and Research, Coliege
Requirements for the Master of cience
(1) Thesis option program: thirty nits with a minimum of 24 units in \(571,595,591,696\) and 698 (Thesis 4 units) with an oral examination on he thesis); Comprehensive birty-six units with a minimum of 30 units in Recreation including REC \(01,521,571,595,696\), and 697 vitten comprehensive the oral and examinations).
(2) REC 696, Research Methodology, must be completed in oncurrently with the first enrollment a 500 or 600 course. 3. A maximum of six units may be elected outside the department.

Courses (RE
Lower Division 100./300. Orientation to the
Recreation Major (1) F,S Evaluation of student's academic, social and personal attitudes and abilities determine
 philosophy of the Recreation and L.iesure
Studies Deparment, and empleyment
potentials of the feeld. Notopen to stucents with potentials of the fiel.
credit in \(R E C B 30\).
211. The Recreation Program
\({ }_{\text {(3) }}^{\text {211. }} \mathbf{S}\)
(3) F,S

Meethods and materials used in planning and
conducting organized recreation programs in public and privato agencies. Theory and
practicum. Special emphasis on supenise practicum. Special emphasis on superise
hours, Activity 2 hours.)
215. Management of Outdoor
Field Trips (1) F

Field experiences in unia Field experiencess in unique outdoor recreation
programs. Course content will indude planning
 241. Introduction to Leisure 241. Introduction
Services (3) \(F\),S

Principles and organization of community
recreation. Concepts of community structure.

Upper Division
300./100. Orientation to the
Recreation Major (1) F,S

Evaluation of student's academic, social and personal apitudes and abilities soctermineed
through standardized testo through standardzed teets. Personen philisosphy of the Recreation and Leisisur
Studies Department and employment potential of the feld. . Not opent to studentis with creditit in REC 100 .
304. Computers in Leisure
Services (3) F,S,SS Services (3) F,S,SS Emphasis is on the practical aspects of
computers in Leisure
Serice Agencies. Techniques of analying Serice agency neenced selecting harctware and sotitware, and utilizin
communication capability are induded. communication capablility are include
Labooratoy projects
ivivoling studentu weo of th computer are required. (Leecture/activity 3
hours.)

\section*{*312. Rec}

Prerequisites or corequisites: REC 211, 241 Theory and application of leadershi, as it
pertains to leisiure serice agencies. Analysis of pertains to teisure semice agencies. Anaysis of
interpersonal and group skills neccossay to interpersonal and
effective leadership.
315. Recreational Sports
Supervision (3) \(\mathrm{F}, \mathrm{S}\) Organization and supervision of recreatione sports for communit-wide participation.
(Leeture 2 hours, Actuity 2 hours.) LLecture 2 hours, Activity 2 hours.)

\section*{316. Campus R
Services (3) S}

Prerequisistes: Junior Standing. Prinoiples and Prerequisistes: Junior Standing. Priniples an
praticices in the provision of recreation senices
on college, on college, secondary, and delementary school
campuses.
317. Administration of Organized Camps (3) S
Program and administration of the summer
camp, with special emphasis on the camp, with special emphasis on the
responsibities of the camp cunnesor
Designed for studento seeking summer camp employment. 320. The Universality of Play
(3) F S

Prereaulistes: ENGL 100 , Upper Division
 standing. Examination of the theories of play
Exploration of the ethnic orgins of play tom an
interational persective international perspeotive. Infuruence of play on
the creativivy, dirive and selfimage of society. the creativity, ditive and
Theory and practicum.
323. Environmental

Interpretation (3)
Prerequisites: Juniror Standing. Principles and
practices of environmental interpertation of
outdocec ecreation *3401. Leisure in Contemporary Society (3) F,S Prereauisto: Upper rlivision standing. Intensive
study of the new lelisure and tis impact on contemporary society. 350. Media Relations in Leisure Service Agencies (3) F Basic knowledge and skills in media relations
explored to provide techniques to effectivel explorod to provide ecchiciques to effectivel
promote and publiczze recreation and leisur
activities. activties.
(1) S . Policy-Making Boards (1) S Study of policy-making structures within private
and publie and pubbic organizatitons with special attention
to volunteers workikng int the edmita \({ }^{*}\) Management (1) S
On-ste, hands-on experiencos in swimming
pool operation and facilty management. polas operation and faclity management
Classcom theory in areas of pool water chemistry. fititation and publich haeatl
requirements for private and public poo reguireme
operation.
402./502. Leisure Counseling (3) S

Current procososes and procedures in leisure
counseling. Includes techniques of liwr counseling. .nncludes techiniques of leisure
needs assesment develoment of leisur
resource fies and piove
05. Management of Assaultive Behavior (1) F
Current techniques and procedures utilied by - assautive patient/dlient, emphaszing suod uper therapoutios apploacheses. Certificati Surse. (Lecture \(1 / 2\) hour, Activity 1 hour.) 406. Legal Aspects in Leisure


A survey of legal aspocts relating to park land Acquistion, iliability, Constitutuonal issues, and Uudents sill participate in legal research, cas
udies, lecture, probilem solving. 407. Starting a Recreatio Business (1) F,S
Examines the basio legal, financial, and
practical concoms related to stating a practical concorns related to
408./508. Aging and Leisure 3) \(F\)
 hfuencose on satisfaction with retireme cuusing on leisurar- -elated issues. Overiew of eocontinuum of senicees, emphas avaliable to idder people.
410. Designing Effective Workshops and Conferences (1) F
course will enable a student to analze elements of workhop and confierence dosign,
and provide the studen with the knowloge
and skills nececesary to do develop effective. and skills necesosary to
particiatitione group meetings.
411. Assessment of Special Populations For Recreation and Leisure (2) \(F, S\)
Current rectreation and lieiure assessment xxplored for utilization as a basis of planning ind evaluating therapeoutic recreation se Lecture \(1-1 / 2\) hours. Activity 1 hour. 412. Political Reaiities in A survey of the political attrudes. values, and
philosonical postions of elected and

413. Community Recreation for the Handicapped (1) F,S
A survey of current practices and methods
utilized in developing recreation services for
 414. Cultural Arts for the Handicapped (1) F,S
A survey of practices and methods utilied in stinging cuiturual arts to the handicapped.
open to student with creadit in REC 416 .
415. Camping for the
Handicapped (1) F,S

Survey of specialized camping sencices to
percons shalenged by handicapping

Conditions. Not open to students with credit in
416. Recreation Services for the ped (3) F,S
Survey of camping, outlural ars and
community based recreation semices for the handicapped. Not open to students with credil in REC 413,414 or 415 .
\(\begin{array}{lll}\text { *421. Supervisory and } \\ \text { Administrative Practices } & \text { (3) F,S }\end{array}\)
Prerequisite: Lower division requitements. Concepts and techniquese of supervision and administration in recreation agencies
emphasis on recenutment, assignment emphation on recrutument, assignment,
425. Finance and Marketing of 425. Finance and Mark

Prerequisites: REC 304, or consent of
instrutor. Types of financoing in pubilic and private sector; management by objectives a ices in publice and private sector agencies nd organization
426. Travel/Tourism and
rerequites: REC 100300, 241, Fnd
standing. Cuirent proceodures and procoesses in developing and maintaining taruvelourism and ommercial recceation enterpisioes. Diocussion Wituree enterpritiee organizing and managing uman resources and marketing the sericiee id of commercial leisure sericices. Tradition ding only
30. Recreation in the Ocean Environment (3) SS
sudy of the skilis and lechniques creational resource, induluding management and trip planning. Course content will b applemented With a weok long field tip 450. Tourism Planning an evelopment (3) F,S Anaysisis of elements which are included in Community developoment plan. Assoesoment e tourstici popential of a region or \(\operatorname{lil}\) andinistration of a tourism developoment plan. sentification of sources of resistance 4755. Philosophy of and Leisure (3) F,S
Corequiste or prerequistes: REC 48 Exploration of the philicocophicos basesen for curren practices \({ }^{\text {in }}\)
organizations.
481. Internship in
dministration of Travel and Tourism (3) F,S
Prerequiste: REC 484 o 1,500 hours of paid of
 tor REC 48 are are listed in the bubleinin). \(A\)
minimum of 120 hours of superised work
experience in an approved agencoy, jointly
superised by the aegoney supeniso and a
Univesity taculty member. May be in a paid or University faculty \(y\) m.
voluntary capacity.
*482. Human Services man Services (3) F,S Exploration of the occial problems, minority populations and community resourcos of the
urban impacted areas in relation to concoerns of recreation and human needs.
483. Professional Preparatio
For Leisure Services (3) F,S

Corequiste REC 484. Synthesis of knowedge
and experience comparing and contrastity
trends in a variety of leisure service agencieg trends in a vaiety of teituure senice agencies.
An integral part of the course is completion of
 emphasis on analysis of protessional goals and
the divelopmont of
Traditional grading only. 484. Field Work I (3) Pretequiaites: Consent of intructor, REC 211,
\(241,300,312\), senior tand 241, 300,312, senior standing: plos a minimum
of, 100 o hours of verifided pald or voluntee leadership experience, approved by facuily
adviso. An intensive laedership experience in advisor. An intensive leaderathip experiences in
an appoved agency jointy superised by
unviverity a and agency personnel. 485. Fleld Work II (3) F,S Prereauisites: Consent of instructor, REC 211 ,
241, 300, 312, 484, senior standing: plus 241, \(300,312,484\), , senior standing: plus
minimum of, 000 o hours of verified paid of volunteer leaderaship experiencoe, approved by
taculty adrisor Superised experiences taculty adisisor. Superised experiences
recreation leadership. supenision a admministration in an approved agencey other
than the one to than the one to \({ }^{\text {w }}\),
assigned in \(R E C 484\).
\(486 \mathrm{~A}, \mathrm{~B}, \mathrm{C}, \mathrm{D}, \mathrm{E}\). Field Work in Recreation Settings (3) \(F, S\) Prerequisithes: Consent of Instructor, REC 211,
\(241,300,312\), senior standing: plus a minimum of 1,000 hours of verified pald or voluntee leadership experience. approved by facuity advisor. Superived leadership in one of the A-Outdoor Recreation
B - Therapeutic Recreation
C- Administration of Volunteers
D. Travel and Tourism E. Commercial Recreation Minimum of 8 o hours of superisised experiencee in an approved agency reguired. Not open
studuent with credi tin REC 486. Only on
course in the 486 series may be taken. ourse in the 486 series may be taken. *488. Internship in Management
of Volunteer Services (3) F,S,SS Prerequisites: 1,500 hours of paid or unpaid
 experience
or REC 44. A minimum of 120 hours
superiseed work experience in a specifio
 vised by a coordinatoro o v volunteer sericese and
a University faculty member. May be in a paid a U inverity facuity member. May be in a paid
or
R or volunteer capacity) Doose not sub
REC 488, 485. Tradtional grading only
*489. Internship in
Administration of Outdoor
Recreat
\(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Prerequistes: REC 484 or 1,500 hours of paid
or volunteer experience in a recognized outdoor fecreation agency. A minimum of 120 hours of superised work experience in an approved outdoor recreation agench, jointy superibed
by the gaency supeniso and a Univerity
facuity member. May be in a paid or vilunteer facuity member. May be in a paid or volunteer
capacity. Note: Doos not subssitute for REC
484,485 , 486. Traditiona 490. Special Studies in Recreation (1-3) F,S Dentification and critical analysio of current
probolem in selected areas of recteation. Topiess to in ee ancolted arcease in the fercraation.
Classes. May be repeated tor a meximum of of six ciasses. May berepeated or a r max
units of redit with change of topic.
491. Therapeutic Recreation
rocedures I (3) F,S
Analysis of adapted reereational and lelisure
activities and their relationship to the institutionalized or
handicapoed person.
*493./593. Management of
Volunteer Programs (3) S
This course is designed to develop an
understanding of volunteer services and their value to agencies; to provide knowledge of the Loccuire administrative skilise which hille enable
supenisorss to provide meaningtul toles for supenivors
volutiteers.
494. Therapeutic Recreation

Procedures II (3) F,S
Prerequisite: REC 491. Advanced principles,
theories and trends relating to the feld of
theories and trends relating to the fifld of
therapeuticic recreation. emphasis on laboratory therapoutit recreation. emphasis on laboratory
oxperiences leadinn to certificates in specialzed rehabilitation areas. Management (3) F,S Extensive review of the techiniques of
management of outdoor recreation resources management of outcoor recreation resources
and th relos of fedral, state, ocal and pivate
acencen agencies in acc.
499. Independent Study

1-3) F,S
Prerequuistes: Consent of dept. and approval
by department chairperson. Individual by department chairperson. Indididual projects
 member. May be repeated for a maxim
units of creditit with consent of instructor.

Graduate Division
500./400. Policy-Making Boards (1) S

Study of plicy--making structures within pivate and public organizations with special attention
ovolunteers working in the administrative area. 501. Readings in Recreation and eisure Studies (3) F Critical analysis and ssynthesib by comparative
review of professionan Ilterature in the field of
Recreation and Leisure Sorvices. 502./402. Leisure Counseling (3) s current processes and procedures in leisure
counseling. Includes techniques of lefisur counseling. Includes techiquaes of lieiure
needs asessament, development of lieiure
resource files and leisure values orientition 503. Leisure Counseling Practicum (2) F, Corequisite: REC 502/402. Clinical obsenvation of Leisure Counseling gessimoas inservation
traning sites. Leeture/discussion of significand traning sties. Lecture)diciscussion of significance
of assesment and evaluato in Leeiure
Counseling. Discuusion and evaluation of 508./408. Aging and Leisure (3) F Prerequistes: REC 211 and REC 312 Chfluenco of instructor. Theories, concepts and the continuum of sernicos, emphasazing liew ofure serices, available to older people. 521. Recreation Administration ) \(F\) rganizational theory; planning, staffing and sovernmental and vociuntaray agencies. 571. Philosophy, Issues an Trends (3) F Current philosophy, trends and issues in the 86. Internship in Therapeutic Recreation (3) F,S,SS Prerequistes: BA. . degree in Recreation pluu
PEC 491, 494,484 or 485 , plus nine course work trom reated allied units copartments. Students are required to complete 480 hours within a maximum of 6
months at an ageny cotififed by the Caliofnia honths at an agency certified by the Califonia
Loard of Park and Pecreation Personnel. Not 587. Field Work in in ReC 487 . 587. Field Work in Recreation
Administration or Supervision (3) F,S (3) F,S Prerequiste: Fulltime reccration leadershio experience. Minimum of 80 hours of
supenised
administation or sudership of isision in in tecreation administration or supenision in an approved
public or private agency. Limited to students who expect to
or supenision.
588. Internship in Leisure Counseling (3) \(F\), \(S\)
Prerequisites: REC \(502,503,500,411\); EDP
430, 510, 536; Electives 430, 510 . 536 ; Electives -3 unitita approved by
advisor. A minimum of 150 hours training in
 the agency supenisoor, and a a university faculy
member. May be in a mapacity.
590. Special Topics in
Recreation (1-3) F,S

Prerequiaite: Consent of instructor. In-depth
investigation of topics of current interest and concerm to students experienced in recreation. May be repeateded (witheriencead in rection of differen. academic sub-topics) for a maximum of six
units of elecetive credit. Topics to be announced unit of elective credit. Topio
591. Research Proposal Writing
(1) FS (1) \(\mathrm{F}, \mathrm{S}\)

Preerequisite: REC 696, Course is concerned
with variations in research design and with variations in research design and
methodolay. Completion of a thesis proposal
is a requitement of this course. is a requirement of this course.
593./493. Management of
Volunteer Programs (3) S

This course is designed to develop an
understanding of volunteer sericees and their understanding of volurnter serices and their
value to agencies; to provide knowledge of the
stucturue and function of scolial agencies structure and function of sccial agencies, and
to accuire administrative skills which will enablo supenisors to provide meaningtull roles tor
volunteers. Traditional grading only.

\section*{595. Management Studies} (3) S

Administrative studies and surveys; procedurea
for conducting appraials of recreation programs and facilitios.

\section*{599. Independent Study}
(1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)
Prereququistes: Consent of Gracuate Advisor
and dopartment Chair. Independent research
under the supenision of Aloter under the superisision of a Recreation and
Leisure Faculty member. May be repeated up Leisurut Faculty member. May be repeated \(u\)
to a maximum of six units. Traditional gradin
only \({ }^{\text {only. }}\).
696. Research Methodolog
(3)

Research methodology in recreation. To be Research methodology in recreation. To be
completed within the first 12 units of the
500600 series of coursees.

\section*{697. Directed Studies}
(1-3) F,S
Prerequistes: REC 698, advancement to to
candidacy. Independent inveastigation of field research problems in recreation
698. Thesis (1-4) F,S

Prerequusistes: REC 591, 696 , advancement
candidacy.
Planning, completion of an approved thesis.

\section*{Technology Education}

Department Chair: Robert J. Kunst Department Office: Technology Telephone: 985-468
Faculty: Professors: Robert J. Kunst, Robert L. Nicholson, John C.
Patcha, Donald H. Smith; Assoclate Patcha, Donald H. Smith; Associate
Professors: Clinton H. Isbell, Ross Drofenstins, Louis E. Quinones; Assistant Professor: Ku
Becker, Colleen M. Hill.
Emeritus Faculty: David C. Church, Boyd Davis, C. Thomas Dean, George Genevro, Floyd M. Grainge, Invin T. Lathrop, Bill Macon, Paul Powell, Robert D. Routh, James
Ryan, Milton Schmidt, Earl M. Smith, Leonard Torres, Robert G. Trout. Department Secretary
Mina B. Thompson Mina B. Thompso
Students desiring information should contact the department
for referral to one of the faculty advisors: Undergraduate Advis
Graduate Advisor, Credential Advisor Technology education is a study of
industry primarily designed to prepare elementary, secondary and community yollege teachers who wil help stuacens gan an insight and
understanding of industry and its place in the American culture, discover and develop attitudes and and activities requiring technical information and skills.
The Technology Education curriculum is designed to meet the students: (1) those preparing to enter the teaching profession in the field of industrial arts/technology education those preparing for certification as manual arts therapists; (3) those who are teaching industrial artstiechnology
education and who desire to further their professional growth; (4) those who desire to broaden their experiences but who do not plan on
entering the teaching profession: (5) entering the teaching protession, (J) and who desire to qualify to teach industrial arts/technology edusacial
subjects in their special areas; subjects in their special tereas, (o) subjects credential with specializatio teaching and who wish to teach
occupational subjects in secondar schools, ROP and ROC centers,
community community
education.
Courses in Technology Education are designed for students completing majors in other subject fields and Wishing to take elective units in this
area. Courses offered in Technology area. Courses offered in ectnology
Education have been selected so that the student can qualify for: (1)
technical training leading to the technical training leading to the
baccalaureate degree: ( 2 ) a teaching baccalaureate degree, ( \()\) a teaching
major or minor in Industrial Arts for the teaching credential; (3) the standard
designated subjects credential with designated subjects credential with
specialization in vocational trade and speciaization in vocational trade and arts degree with a major in Industri Arts; (5) a certificate in industrial
plastics processing and design in plastics processing and design
association with the College of
Encineering Engineering: (6) a certificate in
automotive supervision; and (7) certificate in graphic arts supervision. Graduate work in Technology Education provides the opportunity for increase competencies in one or more areas of specialization; (2) develop maturity of thought and gain insights into problems of: professional leadership and knowledge to assume positions of understandings to be able to engage in research resulting in contributions of knowledge in an atmosphere of
freedom of inquiry; and (5) engage in ireedom oh inquiry, and (5) engage in faculty and qualified students in a spirit of research and scholarship professional competencies.
The master of arts degree in Industrial Arts is provided for: (1)
those who are teaching and who want hose who are teaching and who w naster's degree to become better teachers (2) those who participate in dustrial training programs, and
dose who wish to pursue work hose who wish to pursue work
toward the doctorate degree. Each graduate applicant should request copy of the official transcripts or al
college course work be sent to the graduate advisor in the Technology
Education Department in addition to ducation Department in addition to Admissions and Records.

Bachelor of Arts in Industrial Arts (code 2-1025)
Lower Division: TED 283 and 12
courses: TED 101, 111, 121, 131,
141, 151, 161, and 170 in consultation
with an advisor in the Technology
Education Department. Upper Division The following courses are required of all Industrial
Atts maiors: TED \(329,349,343,369\), \(385,3881,483\), and EDSS 300 T . In industrial arts courses, planned in consultation with a major advisor, are required. 4501 is not a requirement for be taken the semester before student teaching.
Minor in Industrial Arts (code 0-1025)
The minor in Industrial Arts requires minimum of 20 units of technical courses selected in the general area well-baltranced lot provide a well-balanced program. The 20 -unit
program should include work in at east three of the eight areas available the major. It is recommended that here be concentration in two areas of ypper division level., It is
ecommended students consult with an adviser in the Technolog
Certificate in Automotive
Supervificate in Automotive (code 1-1030)
Stin The Certificate Program in
Automotive Supervision and Service is designed to prepare students for automotive supervision positions that equire a strong technical background poeration Opportunities in automotive upervision and service range from manulacturer's customer and echnical
This interdisciplinary program
provides a student with a depth of
lechnical training in automotives.
lelated technical courses and also
h supervision necessary for
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
Requirements for the Certificate in Automotive Supervision: \\
(1) A bachelor's degree in Industrial
\end{tabular} & Certificate in Industrial Plastic Processing and Design (code 1-1100) & seeking map making careers in both the public and private sector. The \\
\hline \begin{tabular}{l}
Arts that includes the following: a minimum of 18 units of automotive technical courses selected from TED \(361,362,363,364,365,461,462\), 466 and 492. In addition, the student must complete 20 units of supporting technical courses and professional courses chosen in advisor: TED 321, 322, 323, 326, 331, 343, 370, 384, 470 and EDSS 450; \\
(2) The completion of the following courses from the Department of Engineering and Industrial Technology: ET 307, EIT 300, 309, or their equivalent.
\end{tabular} & The Certificate Program in Industrial Plastics Processing and Design is an interdisciplinary program sponsored by the Technology Education, Mechanical Engineering and Chemical Engineering Departments. Polymeric materials rank as second in tonnage use currently of all materials, and indications are that in the near future they may surpass metals in total usage. There is a definite need for personnel familiar with the processing and special design considerations necessary to properly make use of the special properties of this broad class of materials. The program permits a & \begin{tabular}{l}
the nature of the field which has two major aspects - thematic and topographic. Those skills required by both branches are encompassed by a core program and the two concentrations provide specific training for each of the two types of cartography. \\
The Thematic/General concentration is designed for students whose goals involve graduate programs in cartography or map librarianship or working for commercial map making firms, planning departments and the like. The Topographic concentration is designed for the student who intends
\end{tabular} \\
\hline Any deviation from this program requires the written permission of the program advisor. Interested students should contact the Department of Technology Education. & student to study in detail the industrial production processes, material testing procedures, economics of the polymerics industry and degradation of polymerics. All students in the & \begin{tabular}{l}
to work for engineering or geological research firms or agencies. \\
Requirements for the Certificate in Cartography:
\end{tabular} \\
\hline Certificate in Graphic Arts Supervision (code 1-1090) & program complete an inc project, consisting of the item, choice of proper po & (1) A bachelor's degree; may be earned concurrently with the certificate: \\
\hline The Certificate Program in Graphic Arts Supervision is an interdisciplinary program sponsored by the Technology Education Department in cooperation with the Engineering and Industrial Technology Department (College of Engineering). The printing industry ranks as the second largest industry in the United States. A definite need exists for personnel familiar with the procedures necessary to operate in the supervisory realm of the industry. The program would permit a student to study, in detail, industrial production processes, quality control procedures, economics and personnel requirements of the industry. & \begin{tabular}{l}
material for the particular application choice of the processing operation and construction of the necessary molding tools and testing of the completed device. Contact the Department of Technology Education. Requirements for the Certificate in Industrial Plastics Processing and Design: \\
(1) Bachelor's degree in industrial arts or engineering: \\
(2) Satisfactory completion of the 23 units listed below; \\
(3) Approval of the certificate committee for admission to the certificate program. An advisor will be appointed at that time;
\end{tabular} & \begin{tabular}{l}
(2) 30 units distributed as follows: A. Core (required of all students) of 15 units: GEOG 380, 482, 492, 484, and TED 352; \\
B. Concentration (required of all students) in one of these two patterns selected in consultation with an advisor: \\
1. Thematic/General Cartography: \\
Group A: Six units chosen from: GEOG 400, 490; IT 315; MATH 101, 180, 115S, 270; C/ST 200; Group B: Six units chosen from: TED 141, 151,341, 342, 453, 454; ME 172; \\
Group C: Three units chosen
\end{tabular} \\
\hline Requirements for the Certificate in
Graphic Arts Supervision: & (4) Advisor's approval of completion of special project. & \begin{tabular}{l}
rom: C E 225, 428; GEOL 490F; \\
2. Topographic Mapping \\
Group A: GEOG 440 and six unis
\end{tabular} \\
\hline (1) A bachelor's degree in Industrial Arts that includes the following: TED 342, 343, 351, 352, 353, 391, 453, 454, 455, 492; & \begin{tabular}{l}
Required Courses: \\
Polymeric Processing: TED 370 , 470; ME 471, either ME 472 or 476 ; \\
TED 492 (four units minimum) and/or
\end{tabular} & \begin{tabular}{l}
chosen from GEOG 487, C E 225, \\
420, 428; GEOL 490f; \\
Group B: Three units chosen
from: TED \(141,341,342\); ME 172
\end{tabular} \\
\hline \multirow[t]{2}{*}{(2) Approval of the Certificate Committee for admission to the certificate program during the first semester of enrollment. An advisor will be appointed upon admission to the program;} & & \\
\hline & \begin{tabular}{l}
Certificate in Cartograph (code 1-8040) \\
Director: Dr. Judith Tyner
\end{tabular} & \begin{tabular}{l}
315: C/ST 200. \\
Master of Arts in Industrial Arts (code 5-1025)
\end{tabular} \\
\hline (3) Satisfactory completion of 24 units as listed below, or their equivalent: ET 307, EIT 300, 309, 315,405; ACCT 202, FIN 222, PSY 381. & \begin{tabular}{l}
(Geography) \\
The Cartography Certificate program offers specialized training in a variety of theoretical and applied cartographic techniques. The
\end{tabular} & \begin{tabular}{l}
Prerequisites: \\
(1) A bachelor's degree with a major in Industrial Arts; or \\
(2) A bachelor's degree in Industrial
\end{tabular} \\
\hline \begin{tabular}{l}
Any deviation from this program requires the written permission of a program advisor. Interested students should contact Mr. Ross Martin, \\
Department of Technology Educa
\end{tabular} & \begin{tabular}{l}
program is designed to provide experience in communication through maps and serves as a supplement to standard degree programs. It \\
provides essential training for those
\end{tabular} & the Technology Education Department to be the equivalent of that required at this University; or \\
\hline
\end{tabular}
(3) A bachelor's degree with 24 Industrial Technical education.
(Students deficient in undergat (Students deficient in undergraduate
preparation must take courses to preparation must take courses to
remove these deficiencies at the discretion of the Department
Graduate Study Committee)
Graduate Study Committee.)
Advancement to Candidacy:
(1) Satisfy the general University candidacy (upper division courses marked with an asterisk may be program);
(2) Approval of the department
graduate advisor and Director of Graduate Studies and Research
College of Health and Human Services.

\section*{Requirements \\ Arts Degree:} (1) Completion of a minimum of 30 graduate courses;
(2) Completion of a minimum of 20 units of TED courses of which 18 units must be in the 500 and/or 600 series
(3) Completion of TED 696 and 697 (4) Thesis approved by the
Department Graduate Study

\section*{Committee.}

Courses (TED)
Lower Divisio
101. Basic Photography (2) F,S

A beginning course to familiarize students with
the fundamentals of photography. Units pertaring to cameras, exposure meters, film darkroom technique, lighting,
111. Introductory Wood (2) F,S Sunvey of basic wood processes, practices and apparatus with emphasis on the understanding of current principleses and procedures. (Laboratory
included.).
Processes (2) F,S
Properties of ferrous and non-terrous metals charawe ar the basio procoseses of metal Casting, machining,
light metal fabication and welding. (Laboration included.)
131. General Electricity (2) F,S Survey of electical priniples and devicess
Discussions and activites emphaskin Discussions and activitios emphasking
magnetim, \(D C\) and \(A C\) theory, basis tein equipment, components and circuits and the
importance of electricity to technology. importance of elect
(Laboratory included)
141. Industrial Drawing I (2) F,S Basic principles of instrument and freehanc
drawing. Use and care of instruments, leteteing, drawing. Use and care of instruments, lettering
isometics. orthographics, sections, auxiliay
views, charts and (raphs, maps, and
architectural drawing. (Laboratory incluced.) 151. Intr
(2) \(\mathrm{F}, \mathrm{S}\)
(2) \(\mathrm{F}, \mathrm{S}\)

Pincoiples of elementay typographio doesign and
layout, type layout, type composition and ppossswork.
Divocsusine and actives emphasize the
letterpess, offeet lithography, silk screen and letterpress, offiset lithography, silk
intagio prieen and
p
 161. Automotive I (2) F,S
(2) F,S Principles of operation of various componentis
and the economics of selection and use of the modern automobile. Practical experience in
maintenance and repair at the oxner-operator maintenance and repair at
level. (Laboratory incluced.)
170. Introductory Plastic (2) \(F, S\) Materiass, proccossess and applications of
induutrial plastics and polymers. Besic ooperation industrial plastics and Poysmers. Basicicoperation themopoplastics and thermoset plastics material
\({ }_{\text {F }}^{231 .}\).
Prerequistes: TED 131 or equivalent. Theory and
 semiconductor devicess in these circuits and the use of test equipment will be emphasiec
Lectur 2 hours, laboratory 2 hours \()\) 247. Architectural Drafting I (2) \(\mathrm{F}, \mathrm{S}\)

Basio principles of instrument usage and
treehand sketching as it reiates to architectural Irating, Beasic lettering, floor plans, archine ectural
standards, practices, and techniques. (Lab 4 standards, practices, and
hours.) (Lab fee equired).
281. Exploratory Woodwork (2) \(\mathrm{F}, \mathrm{S}\)

General woodworking designed to provide a
broad background of information related to Wroad background of information related to to
woodving procoseses involing both hand and maccine toots..skesils and sate work habits
developed through hindididual solutions to given probiems. Cortification of satety instructions
(2) \(28 . \mathrm{S}\)

Metalworking in the areas of bench work, torging,
casting. at metal, sheet metal and welding
processes. Designed: (1) to give broad
processes. Dosignoed: (i) to gio a in the technology of mateials: (2) to devevop skills through indididual solutions for given problems:
and (3) to develop safe habits in working with and (3) 10 develop saie
metals and equipment asis)
wark. (aboratory indududed)
283. Introduction to Computer

For Technology (3) F,S
Survey of basice computer operation tor
technology. A beginning coorruse ueraiton miror
computers and postuare apporopiate for teaching computers and sottware apporopiatat for teaching,
technology. Topics include sytem components. technology. Topics include system components,
progaraming languages, tiandard \(\begin{aligned} & \text { softwar }\end{aligned}\)
packeges.
graphics and classrocom management sotwa Upper Division
*304. Intermediate Photography (3) \(F, S\)

Prerequisite: TED 111.1. Course designed to further
increase photographic knowiedge in camera, incease photorgaphic knowiedge in camera,
darksom and lighting An enphasis is lace on
reaching a higher level of print quality (Laboratory reaching a higher level of print quality (Laboratory
included.)
*306. Color Photography (2) F,S Prerequibite: TED 101. Suney of current color materials and processes with emphasis on
exposing. developoing and printing exposing, developing and priniting. Contemporary
approach to ocolo photoggaphy will be stressed. (Laboratory included.)
309. Alternative Photographic Processes (3) F
Prerequisites: TED 101 or equivalent. A survey of
non-traditional photographic
 historical develiopment. Includees the formulation,
application, expososure photographic emulsions. Incoesporates af aestious conoerns with processes selection. LLab tee
tequired.) (Lecture 2 hours, laboratory 2 hours.) *311. Industrial Coatings (2) \(F\) Development, manutacture and use of modern Industrial coatings, with emphasis on their
application as protective and decorative application as protective and decorative
substances for wod and allied materials.
(Laboratory includued.). (Laboratory included).
*312. Machine Wood (3) F,S Prerequisite: TED 111 or equivalent. Basic
pinciples and study of the proper care, selection, maintenance of powere equipment, with emphosio
on afety and proper techique and use of power on satery and proper techinique and use of power
machines as they evelate to the industrial Ats
program. program. (Laboratory included.)
*313. Wood Technology (2) S Prerequiste: TED 111 or equivialent. Applications,
implications and values of wood and woodworking in our technolololical society, with emphasis upon understanding through study
and experiment. (Laboratory included.)

\section*{321. Patternmaking and Casting} Processes (3) F,S
Prerequisites: TED 111, 121. Theory and practice metalcasting patercocesosing, includidimakikg green sand Lermanent mold coasting and appplicablele relatied
*323. Machine Tools I (3) F, Basic principles and practices in machining
operations indududing bench work, ditiling lathe, opetations incluoding bench work, drilling, lathe,
miling, and grindin with emphasis on tool
pet-upe and procodures tepresentative of set-ups and precodures
nouty. (Labooratory included
324. Production Techniques and M24. Production (3) F,S
The ettudy of production procosses and common ndustrial materials utilized in manutacturing of
iducts.
Includes laboratory application in

*326. Metal Forming and
Fabrication (3) \(\mathrm{F}, \mathrm{S}\) Prevequisite: TED 121. Priniciples and practices of
 procouction fabricating techniqiques and metal
poining processes. (Laborotory indududed.) 329. Production Technology (3) s

Survey of industrial production technology,
Topics include: production technology, careers Iopics includd: production tecenhology, caraeers
naterials and processing methocs, role
 marketing and quallity assurance. and
Theorypracticu application. (Lecture 2 hours laboratory 2 hours.)
332. Semiconductor Devices
(3) \(\mathrm{F}, \mathrm{S}\)
rereacuisites: TED 231 or equivalent. Theory and
oferation of discrete and integrated operation of discrete and integrated
semimonductor devices. Circuit analysis, deign
measurement and test neasurement and test equipment will be
emphasized. (Lecture 2 hours, laboratory hours.)
*333. Electronic Communication
(3) F,S ) \(\mathrm{F}, \mathrm{S}\) rerequisites: TED 332,335 or equivalent. Theory
and operation of receivers, tranemiters nod operation of recoivers, transmititers
nocultors antennas and related circuits
Specifo applications for AM FM vide Specifio applications for AM, FM, video
nicrowave, radar and optical data links will be presented. (Lecture 2 hours, laboratory 2 hours.) 335. Digital Electronics (3) \(\mathbf{F}\) Prerequisites: TED 231 or equivient. The theory
and operation of digital eloctionics. Logio circuits
and devices. Both sequential and combininational
 logic circuits will be presented. (Laborator)
inculuded.)
341. Industrial Graphics (3) F,S Prerequiste: TED 141 or equivalent. Use of
graphic tecchniques as a means of presenting data and the solution of arthmetical problems
The course encompasses the application o automated computer graphics, geometrical
dimensioning and tolerancing and sim metric
ditand

\section*{342. Technical Sketching}
2) \(\mathrm{F}, \mathrm{S}\)

Prerequiste: TED 141 or equivalent. The
pincipiese and practice of freehand and mechanically assisted sketch hing to to produce a cluded.
343. \(\mathrm{F}, \mathrm{S}\)
Creative Problem Solving

Prerequisites: TED-141 of equivalent. Course
deals with the elements of two and three dimensional design, stressing the understanding
and application of creative probilem solving and design principles to to the technology education
progara. (Techical activity and labocratory: 6 ours) Grading: Student Option.
Trerequistes. TED 141 or equivilent (3)S
and dravesing of machine peats ind detail and in
assemby. Use of nomenclature standaral tables and empirical formulae. (Discussion-Laboraton
345. Industrial Drawing II (3) F,S Prerequisite: TED 141 or equivalent. Theories and
graphic solutions in rotation, Bememtio, oblique projections. intersections, curved surfaces developments,s, space problemm of angle and
distance. (Laboratory indudued.) *346. Small Boat Design (2) F,S Prerequibiste: TED 141 . Development of
prefiminary drawings for a sailing or planning peeliminary drawings for a sailing or planning
vessel. The set of drawings includes the line drawing. arrangesment and porofile plans, sail plack,
table of oftsets, transom expension and deck beam develocoment. The design will be analyzed beam development. The design will be analzzed
using graphio methos and statio alculations
using a computer. (Laboroatory indiuded.). using a comphicuter. (Laboroatory induluded) *347. Architectural Drafting
(3) F, (3) \(F, S\)
Preerequiste Prerequisit: TED 141 or equivialent. Develiopment
of drating techniques applicable to graphic employed in the pelanning and stucy of of light trame construction and
(Laboratory included.)
348. Perspective in Architecture and Interiors (2) S
Prerequistes: At 100 os 181 , TED 141 or HEC
142. 142. Per spective drawing of architiectural interior
and exxeriors. Includes various perspectival and exteriors. Includes various perspective
approanher; shades, shadow, pen and pencil
techniques. Same course as HEC 348 . techniquess. Same
(Laboratory included.)
349. Communications Technology
(3) F (3) F Analysis of the newer communication tranotorming, andor retrieving of of intormation. A emphasais wall be placed on the integration of communication and computing. i.e., intormation
management, electronio mall, on-line data basee, telecommunications, and the myriad new
information services. Llecture 2 hours, laboratory

Composition Methods in Graphic Arts (3) S
Preerequiste: TED 151 . Advanced typographic
design and layout. Discussions and activities emphasize newspaper and magazine layyut,
mutitie run in position methocis, copyiting hot
 composition of piniting papers and inks. New
techniques and developments in graphice arts
included. (Caboraton indulded) ncluded. (Caboratory included)
*352. Graphic Arts Photography
(3) F, S Photorap graphic atts. Study of procoess camera in making ine, haltone enegatitres and stats. Use of the vacuum trame and point light source for
contacting and various proofing procoseses. Basic stripping operations presented. (Labocrator *353. D
353. Design and Layout of

Principleas of printing layout, type estimating and typoprapophical specifications. Exxeperince offered printing torms. (Laboration incoluded.)
*354. Graphic Arts Handicrafts (2)
Methods of producing printing designs with minimum equipment and parining dessigns And
projects specifically designed for recreation and junior high school graphic ats instructional *361. Auto Engines (3) F,S Preerequisite: TED 161 or equivalent. Theory of
design, construction and operation of internal design, construction and operation of intennal
combustion engines. Laboratory experiences are focuused on the praticices and procoseses of
engine diagnosis and overhaul. (Laboratory engine diagnosis and overhaul. (Laborat
included.)
*362. Auto Electronics (2) F,S Prerequibite: TED 131 or 161 or equivalent.
Principles and theory of operation of electrical Principles and theory of operation of electrical
and eleotronic system components that are and electronic system. components. that are
commmon to autmombie. Latest methods of
teesting and diagnosis are stresesed. (Laboratory included.
*363. Chassis Technology (2) F,S Prerequisite: TED 161 or equivalent. Theories of destign and operation of chassis componentin
afecting stopping stability power fiow
suspension and teoing suspension and steering. Includes testing, trouble
diagnosis and modern methods of sevicing
(Laboratory included.)
*364. Auto Body Repair (2) F Preerequistes: TED 161 and 322 , or equivilents.
Techniques and paratices of boy rebuiding.
refinishing and stying. (laboratory indudedd) refinising and stying. (Cabooratory included.)
*365. Small Engine Technology (2) S

Prerequisiste: TED 161 or equivalent. Theory of
 reconditioning of mall lawnmower, chainsaw
outboard moped and motorycyce engines
(laboraton included)

\section*{369. Energy and Power}

Study of energy and power production systems
with emphasis on basic energy with emphasis on basic enerery conversion
proceoses for electric power procuuction including
 distribution, economics, social and envirinmental etffects, and energy policies. Tradtional grading
only. (Discususion-labocratory 4 hours.) *370. Advanced Plastics Processing (3) F,S Prerequisite: TED 170 or consent of instructor.
Primary plastics processing

 molding, extrusion and blowmolding equipment.
Procuct and process evaluation. (Laboratory included.)
*373. Plastics Application to
Design (3) F Design (3) F
Prerequiste: TED 17
Preerequisite: TED 170 or consent of instructor.
Interpetation of plastic design data in their capabilites and limitations as a claass of
materials. Provide an understanding of the
 Pinciples indortying the properties of plastics
and dosign problemm asosocited witp plastics
through the laboratory application of plastic through the laboratory application of plasic
proceseses and their effects on desig. procosses and ther
(taboratory indududed)
*381. Shop Maintenance (2) F,S
 Syytems used in the maintenance of recor
toocs and equipment. (Laboratory hinoluded.) 383. Survey of Building

Methods and techniques of building construction as they relate to doeign and function. Thie
course addreseses the concopts of residential and commercial building construction.

\section*{*385. Organization and} Education Facillities (3) F,S Area planning problems with emphasis on gen
eral architectural specifications, auxiliary spacees eralal architioctural speocifcotition, auxiliay spaceces and selection of trools, equipment and suppliea
Plans and specifications for an instructional aree
 considierations as applied to the planning,
ppearation and utilization of laboratory facilitios. operation and utilication of laboratory facilith
Not poen to students with credit in TED 492. 3881. Technological Llteracy (3) F,S,SS Exploring technologicial concopts as they impact
on humans, sociely and culture. Emphasis wil on humans, oscierech andoculuture. Emphasis whil system and its reletaionstip to sociologicial and *389. Career Education for Children (2) \(\mathrm{F}, \mathrm{S}\)
Prevequisite: TED 3881 or equivalent. Further
studies in integrating ocostuction with chidren's studies in integrating construction with children's
programs. Special emphasis on Career
 *301.
Education (2) \(\mathrm{F}, \mathrm{S}\)
Preerequisite: Consent of coordinator. Planned
coordinated and supenised work experiencce in
an industry allied wint the students' techrical an industry allied with the students' 'echnical
areas of concentration. May be repeated for maximum of eight units. Students may receine technical credit the second and the fourth time
the class is repeated. Field tips into industria the class sis repeated. Fivelal thips into industrial
compexes are scheodiled according to technicaa areas of interest
400./509. History and Criticism of hotography (3) F
Preerequiutes: A minimum of 3 photography
courses or permision photography from to ori instructor. History developments in the wentiteth century. Citical and philosophical. approachers to
photographic medium. Tradtiona grading only. *401. Photo Marketing/ Portfolio (2) S

Preerequisites: TED 304, a minimum of four
additional upper The at and cratt of prepating a profeessional photargapher's portiolio and the neccesary the poottolio as the chier marketing tool
402. Fine Print Photography
(3) \(\mathrm{F}, \mathrm{S}\)

Prerequiustes: TED 101 or equivalent
Preseantation of acvanced printing technique
exposure/developoment, processing chemistry
 *403. Photographic Senitometry (3) S Prerequisites: TED 101 or equivalent. Emphasizes Preerequisitess TED 101 or equivalint. Emphasizes
photo oraphic ontrol of exposure, development
and printing through and printing through sensitometric procedure
Examines control techniques such as the Zone Sandors, and Davis systems. Lab and field
experience in exposure, development and
 *404. Commerclal Photography (2) F Prerequivitif: TED 101 or equivient. Course
deseigned to to give exploration of camera an descgned 10 give exploration of camera and
laboratoy techniquess as applied to advertising and commercial fields. Related. phot
assignments of studio and location problems wil be given. (Labocratory included.)
*405. Nature Photograph (2) \(F, S\)

Prerequisite: TED 304 or consent of instructor.
Course directed toward a reperentation
 white. Will include infrared photography a macro techniquese . Field trips will be utilized.
(Laborator include) (Laboratory included.
(2) S
(2) S

Prerequisite: TED 101 or equivalent. Course work

 mill be used for stucio
407./507. Documentary
Photography ( 3 ) \(F\) Photography (3)
Preerequisites: TED 101 or equivalent. History,
theory, practice, and procuution of still dheoumentaray photocographic works with emphasis on the photograph as an instrument for social
infuence and change. (Lecture: 2 houl inffuence
Labocatory: 2 hours.)
chan
*408. Corporate Presentations (3) F,S
Prerequibites: TED 101 or equivalent. Planning and producing slidetape presentations.
Scripting. photography, sound recording and
 (AAtrivit)
*411. Furniture (3) F,S
Prevequiste: \(T\) ED 312 or equivalent. Analyis of
characterisitics and principles of furniture design. Tharacteisistiss and principles of furnturer desiong. tunniture, employing advancod hand and
machine tool operations. (Iaboratory included.)

\section*{*412. Carpentry (2) F}

Preeraquiste: TED 111 ro equivalent. Planning and techniques of estimating building construtuction costs, with the study of techniques involved in the
laying out and traming oo a structure. laying out and
*413. Upholstery (2) \(F\)
Preerauisite: TED 111 . Use of tools, equipment,
and materials as they are employed in the process of upholister. (Laboratoy included) *414. Boat Construction (2) S Preerequisite: TED 312 or consent of instructor.
interpetation of line drawings and specifications, design and construction of forms, molds and
hulls of stroked, molded phywod and fiberglass hulls of stroked, moldod plywed
syitems. (Laboratory inclucded.)
*415. Industrial Wood (2) S
Prerequisite: TED 312 . Compretenensive study of
modien industrial woodworking, ths production modern industrial wood trorking, iskiled production crattsmanship to numerical automation, with
emphasis on the operational functions and technical procedures involved. (Laboraton *420. Welding Technology (3) \(\mathrm{F}, \mathrm{S}\)

The study of oxy-acetylene and electric welding
principles and practices, welding equipment and piniciples and practices, welding equipment and
principles of welding, metalury. Includes laboratory application in oxy-acetlijene brazing.
cutting and welding, metallic stick electrode and cutting and welding, metalilic stitck electrode and
inert gas welding processes. Leoture 3 hours, inent gas welling promer
Labaratory 3 hours.)
*423. Machine Tools II (3) F,S Preeraquiste: TED 323 or equivalent. Advancod
machining EMD tooling operatations indududing machining EMD tooling operations including
basic machine odesign, tool and cutter maintenance, numerical, control (NCC) and
electical discharge machining (EDM). elecotrical diacharge
(Laboratory induded.). 425A,B./525A,B. Numerical Control Manufacturing ( 3,3 ) S Prerequisiste: TED 323 or equivalent. Pinciples
and practices of numerical control part and practices of numerical control. part
programming. machine setur and operation. TED
 techniques. TED
programming. (Laboratary in inctuded)

\section*{*430. Electronic Service and} Repair (2) F,S
Prereauiste: TED 23
Preerequiste: TED 231 or equivalent. Repair and Preeverutive maintenance of electronic and
eleetrical equipment. (caboratory included).
*432A,B. Amateur Radio Licensing \((2,2)\) S
432A - Amateur Radio code and electrical
theory in preparation for the Federal theory in preparation for the Federal
Communication Commision's.s Examination for the Novice. Technician and Genenatl Class
amateur license. 4328 - Amateur Radio code amateur license. 4328 - Amateur Radio code
and electical theory in preparation for the Federal Corical Communination preparation for the the
CXamination for the Advanced and Exta Class Examination for the Advanced and Extra Class
amateur license. (Laboratories included in both A amateur Iice
and \(B\).
433./533. Electronic

Communication Circuits (3) S
Prevequisites: TED 333 ro e euivialeat. Theory and
opera tion of electronic circuits opera tion of electronic circuits used in
communication. Topics in ilude: Phase-locked lopps, video ampliferss, AMM FM. PM mosula a tors
and demodulators, active filters and \(F C C\)

*435. Digital Electronics I (3) F Prerequistes: TED 331 . The theory and
operation of digitial electronorics logic circuits and ogic cirouits will be presented. (Discoussion 2 hours-laburatotory 2 hours.)

\section*{\({ }^{*}\) (3) F,S \\ F F Electronics II}

Preerequiste: TED 435 or equivalent. A study of mieropprocessor theory and operation induluding;
number systems, codes,
microprocessor number systems, codes, microprocoessor
442./542. Architectural Planning and Presentation (3) S Prerequisiste: TED 347 . Study and planning of
structures for speefifo function Develoment of presestration drawings including perspective drawing. shades and shoduows, peterspective
color. Review of architectural history. Lecture, olvors. Review of architectural history. (Lecture
*443. Electronic and
Electro-Mechanical Drafting
(2) F,S Electro-M
(2) \(\mathrm{F}, \mathrm{S}\)
Prerequisites
reerequistes: TED 131, 141. Development of drating techniques applicable to electionic
drating standards, temminoloyy and schematioc
wining and interconnection diagrams. It also wining and interoconenetion diagrams. It also drawing and study of electro-mechanical packages. (Laboratory included.) *445. Computer Graphics for
Interiors and Architecture (3) Prerequisites: TED 141 or 247 . Principles an methods of computer graphic applications Specification witing, drating, graphic
fustrations, space planning, and perspective are Ilustrations, space planning, and perspeoctive are plotteres, programs and procossing, color,
2-dimensional and 3 adimensional planning
(Discususion 2 hours, Labocatory 3 hours.) *446. Presentation Techniques:
Architecture and Interiors (3) F,S Architecture and Interiors (3) F,S Prerequisites: TED 348 or HEC 348 and consent
of instuctor. Tecchniques in preparing two and throe dimensional architectural and interio renderings and presentations. Same course as
EC 446 . (Technical Activyt-Laboratory 6 hours.)
*447. Rapid Techniques: Architecture and Interiors Presentations (2) S Prerequisite: TED 446 or HEC 446 or consent of
instructor. Methods of visual communication used in architecture and interior presentation with emphasis on development of professional
tormats using abstraction, fluidity and rap ormats suing abstraction, fluidity and apid
ecchniques. Same course as HE EC 447 techicicues. Same
\[
\begin{aligned}
& * 453 . \mathrm{G} \\
& (3) \mathrm{F}
\end{aligned}
\]

Preecauisite: TED 151. Principles and techniquees of both letterpress and phote-offset preseswork. Discussions and activities emphosiziz the theorn
practice and problems of letterress and phot-ooffseet pressswork. Develolopment of technical momedge or maienals and methods. Practice unning increasingly complex jobs
454./554. Color Separation Techniques (3)
Preerequisite: TED 352. Advanced presentation of
photographio theory and practices common the graphic arts field. Laboratiory techniquees to ncompass the basicic kinds of olobr separation These include indirect and direct method
utilizing the enlarger, process camera utilizing the enlarger, process camera and
contact trame. Masking techniques to
include both silimer and dye masks. Experimenta)
proceeses to be induced. (Laboratory induded.) *455. Graphic Arts Printing Production (3) S
Prerequisites: TED 351, 352,453 or consent of instructor. Principle of and experiencoses in pinting
production. Through lecture and laboratory production. Through lecture and aborator
experiences the course identifes and cover topiss such as: production planning. cosel
estimating, job order planning and contol
 material control. (Laboratory inclucled). *461. Automotive P
Diagnosis (3) F,S Diagnosis (3) \(\mathrm{F}, \mathrm{S}\) Theories of design and operation of fuel and
emission control syytems. Laboraton experiences focused on diagnosisis and serice
using advanced analysis equipment. (Laboraton Using advar
included.)
\(* 462\)
*462. Automatic Transmissions (2) \(\mathrm{F}, \mathrm{S}\) Prevequisiste: TED 161 or equivalent. Theories of
design and operation of ftovt wheel dine and deeign and opperation of front wherl divive and
rear wheel drve automatio transmissions. Latest
methods of teesting. methods of testing, senicing and repair are
streseed. (Laboratory included.) 466./566. Automotive Computer Controls (2) S
Preerequisites: TED 161 or equivalent. Theory and operation of automotive compputiriced
combustion control systems including computer combustion contro systems including compute
controt oubysytems, air conditioning and tuel
iniection iniection. Laboratory experiences emphasize
syytem diagnosis and senviing. (lab included) *470. Reinforced Plastics and Composites (3) F,S Prereauisie: TED 170 ot consent of instruct Mold preparation and production of reintrocee plastios products. Standard specifications for (Laboratory included.)
474./574. Plastics Mold
Construction (3) F,S

Prerequisite: TED 170 or consent of instructor Prerequastise. . TED 170 or consent of instructor
Proertios and characteristics of themo-setin
and and thermoplastic materials. Anayseis and
construction of molds and dies for use with
 themmotorming processes, extrusion and
compression and transter molding. (Laboratory included. ) 481. Ho
of migned tor the homemaker desinng knowledse
of matrials and metheds construction. Not open to industrial arts maiars.
*482. Teaching Aids (2) F,S Prerequisite: Basic Woocworking or equivalent.
Citteria for the selection, planning, development and construction of teaching alds for the indivcian studentt and/or teacher. Laboratory
experiences to develop familiarity of above
criteria and their *483. Research and Experiment *483. Research and Experiment Principles and techniques of research experimentataion in techichology education utilizing
the cielentific method of problem solk the scientific method of problem sobving.
introcuuctory
knowiedge of mechanical
 demy) Grading: Student Option *485. Explorations in Technology
For the Middle School (3) F,S Prerequisites: Application to a teaching credential program or a valid teaching crodential or
permision of instructor. Orientation, philsosohy. obiectives, stratetegies., materialas and moodules used to teach an exploratory technology provieam at the Middle school level. Students will
experience solf-directed learning in technology
 facility environment. Curriculum evaluation and
development will be emphasized. (Lab fee required.) (Lecture 2 hours, laboratory 2 hours.)
Tradtional grading only. Traditional grading only.
491. Special Problems in

Precerauisite: Consent of instructo F,S werequistit: Consent of instructor. Advanced
work within an area of specialization done on an
experimental or research basis. experimental of research basis. The area
designated by leterer at the time of registration as: (a) woods, (b) metals, (c) electicicty-lectronics,
(d) induastral drawing, (f) automotive, (g) industrial crats-plastics, (M) profeasional, D
photography, (M) plastics, () graphic ants. May be repeated tor a total of six units. (Non-technical *492. Advanced Technical
Studies (1-6) F, S
\[
\begin{aligned}
& \text { Studies }(1-6) \text { F } \\
& \text { Praraniates: }
\end{aligned}
\]
Tereequisiteses

Preerequisites: Consent of instuctor and area
requisite courses. Advanced work done within an area of s.upeciasization designed for the pritesent
Industrial Ats teacher who wants upgrading in Industria Ars teacher who wants upyrading in
his freld of concentration. Covers new industrial
preceses and processes and materiais that may be related to
teeaching in the eecondary shools. May be teaching in the secondary schools. May be
repeeted for a maximum of six units per area of concentration (automotive, drawing, eleectricity-lecectronics, graphic arts, industrial
cratts, plastics, metals, photography, woods and crats, plastins, metals, photorraphy, woods and allied to an area of
(Laboratory included.)
*493. Industrial Rehabilitation
Therapy Clinical Practice (3-6

\section*{F,S}

Prerequisite: Consent of department. Supeerised
experiences in industrial Rehabilitation therapy at experiencese in industrial Reenatilitation therapy at
various Veterans. Adminintration hosphatas and
rehabilitation centers. Students rehabilitation centiers. Students will acaurite
through obsevation and participation, clicical through observation and participation, clinical
insight and experience in the prococoures and
practices in the feid. 240 hours of experience practices in the field. 240 hours of experience
required (Field work).

Graduate Division
507./407. Documentary
Photography (3) F

Prerequisites: TED 101 or equivalent. Histor. heory, practice and production of stit os the ehotograph as an instrument for socia
infuence and change. (Lecture 2 houra infuence and change. (Lecture 2 houra
laboratory 2 hours.)
509./400. History and Criticism of Photography (3) F
Prerequusites: A A minimum of 3 photography
coursees or permisesion of instructor. History of photography trom its ori gins to contemporar photography fom its on gins
devolopments in the twentemporater century. Critical
and and philosophical approaches to the
photographic medium. Traditiona grading only. 525A,B./425A,B. Numerical Control Manufacturing \((3,3) \mathrm{s}\) Prerequibite: TED of numequival control par and practices of nume programming, machine setup and operation. TED
\(425 A\) deals with manual programming techniques, TED 425 B is computer-assisted programming. (Labocatory included)
533./433. Electronic

Communication Circuits (3) S Prerequisites: TED 333 or equivalent. Theory and
opera tion of electronic circuits used communication. Topics include: Phaselocked
lopps, video amplifers, AM, FM, PM moctulator and demodulators, active fiters and FCC liconsing require ments. (Leoture 2 houn
laboratory 2 hours.) Traditiona grading only. 542./442. Architectural Plannin and Presentation (3) F ,
Prerequiste: TED 347 . Study and planning of structures for specific functions. Developmement of drawing, shades and shadow, materials and colors. Review of
laboratory 6 hours.

These include indirect and direct methoch
utilíing the enlarger, process camera and utilizing the enlarger, process camera and
contact frame. Masking techniques to include both silimee and dye maks. Experimentel 566./466. Automotive Computer Controls (2) S
Prerequisites: TED 161 or equivalent. Theory and operation of automotive computerize control subsystems, air conditioning and the iniection. Laboratory experiencoes. emphasize 574./474. Plastics Mold
Construction (3) F,S

Prerequuiste: TED 170 or consent of instructor
Properies and characteristics of themosin and thermoplastics materials. Annarvois and and thermop astics malds and diess for ueso with
 heermpoteming procososes, extrusion and
compresion and transter molding. (Laboratory included.)

\section*{90. Supervision and \\ Administration in Technology
Education (3) F}

The study of management and superisory methoss., systems and theorese as asporised to
industry and to Technology Education programs. 591. Industrial Program 591. Industrial Progr
Development (3) \(F\)

The selection and organization of industrial
 592. Evaluation In Technology Education (3) S
Development of methods, techniques and
devices for evaluating poople, progyams and other aspects in in industry and ind in Technology
Education. Evaluation of Education. Evaluation of studentis, employees,
facilities, safery and other areas of interest with
emphasis on development of vevaluation delices.
594. Technology and Civilization (3) S

The study of the creation and utilization of
acaptive means, including tools, machines, adaptive means, including tools, machines,
materials, techniques, and techical sytems
and the relation of the behavive of thesese elements and the eletation ot the behavio of thesese eiements
and yystems to human beings, sociely, and the and silization procecss.
599. Advanced Individual Studies
(3) \(F, S, S S\) (3) F, s ,

Preerequisite: Consent of instructor and graduate
advisor. Acvanced individual projects with faculy advisor. Advanaed individual proiects with faculty
superisisen in en area of Technology Education
 650. Seminar in Industrial Practices and Education (3) F,S
 Including important legistation, industrial problems. Tocins will beannoundecodinemporary
of Classes. May be repeated tor a maximum of six unts.
696. Research Methods (3) F

Selecting, deffining and presenting methods
applicable to the solution of problems in Technology Ediucation with emphasis on
 697. Directed Research (2) \(S\) Prerequibitios: TED TE96, acvancoment to
candidacy. The definition, presentation and candidacy. The deffition, presentation and
divacusion of seleccted probolems in Technology
Education. dircurasion
Eucation.
698. Thesis (1-4) F,S

Pleaequingite: Adveparation and complotion of a thesis Planning, preparation and completion of a thesis
related to this field. Limited to clasafied gracuate students who have completed or are completing TED 697.
554./454. Color Separatio

Techniques (3) F
Proerequivite: TED 352 . Advanced presentation of
photogaraphic theory and practices common
the graphic arts ffold. Laboratory techniques to
necompass the basio kinds of color separations. 593. Teaching Industrial Subjects (3) S
and plaaning in industrial tranining programs and lpanning in industioal
pubbic and private educuation.
panization


Dean: Virginia Warren
Secretary: Cheryl Eame Assoclate Dean
Shirley Mangini
Coordinator for Student Relations and Activities:
Administrative Services Manager: Linda Mc Connell Coordinator, Educational Polic Assistant to the Dean: Assistant to to the
Secretary: Roxane Landake College office: McIntosh
Humanities Building (MHB), Rm 215 Telephone: 985-4201 The Humanities
The greatest obstacle to change is not ignorance, , but the illusion o knowledge. It is the role of the
Humanities not only to preserve bu Humanities not only to prieserve
also constanty to question established concepts of knowledge considering whether they constitu
knowledge, illusion or ignorance. knowedge, iliusion or ignorance. in postuluated as possible, potential, necessary, in order to preserve ou
cultural heritage as an active force cultural heritage as an active force
and not as mere dogma. Study in the Humanities will, therefore, be inquis
lively.
At California State University, Long Beach, the College of Humanities pursues this always challenging
investigation in a dozen fields, ranging from the consideration of literary, linguistic, and philosophical monuments, to analysis and training
in the very ways in which we can talk and listen to one another, the analysis of how we conceptualize and describe numbers and forms and
use of technologies with which we communicate.
In the College of Humanities, complacency will find no comfort, an the search tor solutions to eterne directions to pursye. For none will the
study of Humanities be a closure.

Degree progr
Comparative Literature BA.
English B.A. M.A
- French B.A., M.A.
- German B.A., M.
- Linguistics M.A.
- Mathematics B.S., M.S
- Philosophy B.A., M.A.
- Radio, Television, and Film B.A.
- Religious Studies B.A
- Spanish B.A., M.A.
- Speech Communication B.A.

Degree Requirements:
Specific degrees requirements are described in the appropriate
departmental sections of this Bulletin. Double Major
Although students may not work
toward nor receive two degrees concurrently at this University, they
may complete the requirements for a second major and have this noted on their transcript
Humanities Minors and Certificate Programs
Students are strongly encouraged to combine a minor and/or certificate program along with their chosen of 18 units (as specified by the department or program), at least nine of which must be upper division. The minor may be in a single subject or,
may be interdisciplinary. However, no may be interiscipainary. department may be counted toward the mino department may count both toward the minor and toward requirements for the major.
The College of Humanities offers minors in the following disciplines:
Comparative Literature (Classical Studies). English (Literature, Language and Composition, Creative Writing. Ieaching, or Special Option),
French, German, Greek, Italian, Latin Linguistics, Journalism, Mathematics

Russian, Spanish, and Speech
Students may also elect to complete a certificate. Undergraduate certificates will be awarded only the awarding of the bachelor's degree Advisement Departments in the College of
Humantities maintain academic advisors. Students are encouraged to
contact the department of their maio contact the department of their maior
well in advance of registration day for advice on degree requirements or other matters regarding their academic programs. Students may Special Majors Offices.
Internships
The College of Humanities and the
Disorders, Journalism,
Radio-Television, and 'Speech Communication offer internships with n- and oft-campus cooperating tudents with practice in the field Under supent Activitios
Most of the departments in the Most of the departments in the
College of Humanities have either a student association or honor organization which provide students
with a program of activities. Student whth a program of activites. Students major to inquire about the kinds of
organizations available to them. The College and Associated Students promote the Humanities student Council with its representation rom each department acting as administration, faculty, and members of the College's student body. The tudent Council provides a forum the discussion and resolution of
common student concerns, also Some of the activities of the
Humanities Student Council and its member department student
associations include: cultural associations include: cultural dinners, career programs,
conferences, publications, conferences, publications, social and
sporting events, and faculty-student programs.

College-Based Courses (HUM)
Upper Division
Interdisciplinary Courses 300. Student Life in London (2) F Oirentaiton to the culture and conditions of modern Bitiain, designed as preparation for the histor, iliereature, and contemporary life. Strongly Sememmended for all paticipants in the London discussion and two hoorn of huoprisised actititites. SBS 300 .
3021. Molecular Biology and Bioethics (3) F,S Prerequisites: ENGL 100 and upper division
status. \(A\) systematio sturuy of some of the
profound advances in proffound acvancos in Moloculuar Biology and the
main genetic and etthical issues these acvances nain genetic
have ralied.
310. Film and Culture (3) F,S Prerequilites: Upper-division status, English 100 shape, reinforce and/or change culture. A variety
 nstructors trom several discipilines. Same course ts RIVF 310 . Course fee: \(\$ 20\)
501. California Culture (3) FS Prerequisites: ENGL 100 and upper division
status. This course examines the culture of California trom several distinct disciplinary geography, sociology, at, and literaturre. It seeks to integrate the knowildge and methodologoges of
these disiopilienes the tey converge on the tudt these disciplines as they converge on the study
of Califoria. The course is team-taught and modular in format. Studentst take three four-week intensive moduies synthesizing module.
3631. Implications of Human This course examines human language from the perspeatives of linguistics, psychology, and
communicative
disorders.
Topics include ccommunivarv
relationships between languages of the world, language acquisition, and the social meaning of
language and dialect dififerences. The languuge and dialact dififerencos.
implications of language for the indidual and herlhis social experience are examined through 400. Evaluas of hinese discipinines Prerequisites: Linited to students in the Liber Sturies major, Track 1 , who have completed all AREA I Core requirements with a 'CC or better
grade and passed the WPE, or consent of grade and passed the WPE, or conssent of
Program Direatore. Stury of oontemporany literacy
Theor and practice with theory and practioc with focus on language
cuture, literature, and development of literacy
 Understanding of literacy assessment and his
implications, determinations and effectis as they implications. determinations and effects as they
aremensemers nateseser for language
cometencies. Tradtional grading competencies. Traditional grading only 402. Problem Solving Application
In Mathematics for Elementary Teachers (3) F,S
Prerequistes: Math 110 and Math 111 or 366
and a course in Critical Thinking with a 'C' or better grade in each course. Problem socking applications involing the operations of the real nuemetry, measurement and the use of the geometry, measurement and the use of the
compute. The pervasiveness and usefuness of mathematics in a variety of fields of inquiry will bo
explored . Student competency in understanding explorem.
mathematical conceptis, representations and procedures and the cornections among them wil be assessed. (Not open for credit
Mathematics malors.) Tradtional grading only.
490. Special Topics (1-3) F,S Study of specific topics to be announced in the
Schedre of Classes.

\section*{Internship Courses}

\section*{492A. Internship in Humanities} Proerequisites: Upper division standing consent of Preetequisites: Upper division standing consent of
instructor, and a formaly declared major in one the programs included in the College of
Humantites. EPIC field experience. Students qualifing can be plazed in mainor or
career-elated volunteer assignments in pivate
 indutatry or public agenciee. AA organtzed plan
utilizing a series of seminars a and leaening agreements is required, accompanied by
selected asigngments. (Mininum 120 hours work
 repeated to a maximum of six units. No more
than six units total in 492 A and B . Traditional than six units
grading only.
492B. Internship in Humanities (3) \(\stackrel{\mathrm{F}, \mathrm{S},}{\mathrm{P} \text {, }}\)
Prerequuistes: Upper division standing, onnsent of
the instructor, and a formally dedared mein in the instructor, and a formally dediared major in Humanities. Co-OP field experience. Stucents who quality can be placeed in maior or
career-elated, communty-based, preprofesion-
 a series of seminiars and reaeninged plan utirementing is reauired accompanied by seletected assignments.
(Minum 120 hours work per semester. May be repeated to a maximum of six units. No more than six unitit
grading only.

\section*{Comparative Literature and Classics}

Department Chair
J. Charlies Jernigan
Department Office: McIntosh
Humanities Building (MHB), Rm 517 Humanities Building (MHB), Rm 5 Telephone: 985-4239 Faculty: Professors: Roland
Bush, Frank Fata, J. Charles Jernigan, Roberta H. Markman Associate Professors: Conrad
Barrett; Assistant Professors: Alwin Barrett; Assistant Professors: Alwin Baum, Douglas Domingo-Forastion The Department
Students desiring information should contact the Department office sor referral to one of the faculty. Comparative literature is the study o
foreign literatures in translation and the relationships between those literatures and between literature and other fields such as art. music, history
and theatre At CSULB, comparative literature also offers a strong focus in folklore studies and mythology as bases for understanding literature see ourselves and create our own environments. Suggested Preparation: Course work in world
literature, English composition, and foreign language.
Classics includes the studies of ancient Greek, Latin, and classical
literature, mythology and civilizations, literature, mythology and civerizas. Suggested Preparation: Course work in Latin, Greek, and classical history,
att and literature. at and literature.
Bachelor of Arts in
The Bachelor of Arts in Comparative Literature (code 2-6832) consists the required core of courses (2
units), together with one of the three emphases that follow. In addition, C \(\AA\) T 261 is strongly recommended The Core.
24 units, required of every major
distributed as follows: distributed as follows:
C 1 T 330 A and 330 B
At least one course from each of the
following groups:
(1) Genre: 346, 401, 440, 453;
(2) Author: 430 or 449
(3) Non-Western or Mythology: 403
(4) Theory: 361;
(5) Movement or Comparative

Study: \(349,404,450,452\);
(6) Period: \(428,431,432,437,438\). (()) Pete: C/LT 440 may be used in both groups 1 and 3 only with Emphasis
This emphasis is designed primarily to prepare the student for graduate studies in Comparative Literatur
related fields; it is a traditional undergraduate major in Comparative Literature
Primary Concentration: 15 uppe division units from any one of the
following: English, English/creative writing, a single foreign language, philosophy, religious studies, music hists. (If this concentration is English o
art toreign language, the equivalent of 6 of these units must be in iterature.
the concentration is English/creative witing, 12 units of creative witing will be permitted, with the remaining units
in literature. If the concentration is theatre/ drama, courses in dramatic Iiterature may be chosen from English theatre arts, foreign languages or courses.) Secondary Concentration: 12 upper
division units (six of which must be in
. the case of languages offering a limited number of courses, the equivalent of four semesters of college study will suffice. If a foreign
language has been chosen for the primary concentration, the studen may elect the secondary creative writing, another foreign language, philosophy, religious Iancuies, music history,
history, or theatre arts. Emphasis Il: World Literature: This emphasis is primarily designe This emphasis is primarily designed
for the student who wants a broad for the student who wants a broad
background in world literature in translation allied with a strong
concentration in one specific field. This emphasis is also designed for the student who elects the Comparative Literature teaching
option of the English Single Subject option of the English Single Subject
Credential. Advisement from both

English and
Cossany. Parative Literature is its trom any: 24 upper division units from any one of the following:
English, English/creative writing, a single foreign language, philosophy, history, history or theatre arts. (ff the concentration is English/creative writing, 12 units of creative wititing will be permitted, with the remainder
literature. If the concentration is theatre/drama, courses in dramatic literature may be chosen from English theatre arts, foreign languages or
comparative literature/theatre arts comparatin
courses.)
Foreign Language Examination: A
basic reading examination in a basic reading examination in a foreign
lanquage will be adminitered to language will be administered to test
a student's reading proficiency. Four semesters of college study of a foreign language or equivalent may
be used in lieu of an examination.
Emphasis III: Interdisciplinary Studies:
This emphasis is designed to allow
the student, with the aid of a faculty the student, with the aid of a faculty interdisciplinary program of study founded in literature.
Concentration: 24 upper division units to be arranged in an interdisciplinary pattern by the studen committee. It will be the responsibility
of the faculty committee to be sure that the student's program is academically defensible. All students wishing to participate in this emphas department chairperson before beginning the process. The committee will be chosen by the
student in cooperation with the student in cooperation with the
department chair and will consist of two full-time faculty in comparative literature and one full-time faculty
member from another discipline. The student's program must be established by the end of the firs semester of the junior year Foreign Language Examination: A language will be administered to test a student's reading proficiency. Fou foreign language or equivalent may be used in lieu of an examination.
4121. Art and Literature (3) F,S Preereauisites: ENGL 100 and upper diwision
status. An interdicipipinary study of the dominant hovements in art and literature during the 193 m and zoth centuries, ftom Realism though
Postmodernism. The course emphasizee Postmoderism. The courree emphasizes
comparative analysis of the tylyes, methos, , and
aesthetic prinicileses chacacterisicio of the various eosthetic principles characteristici, of the evarious hovements, fousing on the works of maio social and historical
movemento developed.

\section*{4131. Romantic Spirit (3) F} Prerequisites: English 100 (or its equivialent), one
 Romanticicm comparing represestative works in and musio with a partituluar emphasais on those from Germany and France inducing some England and Russia in the period from about
17755 to 1800. May
Mor be used for the maion in comparative Literature: Traditional grading o
420I. The Greek World (3) \(\mathrm{F}, \mathrm{S}\) Prerequisites: ENGL 100 and upper division
status. An interdiocipiplinary examination of maior status. An interdabsip the sexaminalon or maice
events and ideas in the society and culture of anncisent areecec with an emphasis on literature
the arts, and the historical forces at tork Topice the arts, and the historical forcoes at work. Topica
induride the foundations of Greek culture, Minoan include the foundations or Greeer culurar, Mnhoay and religion, Iyric pootry, the Persian Wars, the
"Golden Age" of Athens, the Pelloponesian War Hellenistic culture and the contributions of the
Greess to the modern world. Same course as Greeks to
HIST 3101
4211. Classical Drama (3) F,S Prerequisites: ENGL 100 , uppor division status,
and one curse in itierature ot thearte atro. An interdiscipininary examination of maior plays of the
Greeks and the Romans, both as itereature and as theatre Incluvest the "Invertion" of the drama as an ant form, the development of tragedy and
comedy, and works by Aeschyyus, Sophocles,
 Terenence, and Seneca Considers also the debt th
modern drama and dramatio liferature to the modern drama and dramatio itieraturu to the
theaetre of the ancients. Same course as THEA
A211
4221. Renaissance Theatre and Drama (3) F,S
 interdiscipininary study of the achievements.
problems, themes and trends of Renaisance
 beterveen 1350 and 1655 . Maior plays of the
peprico are read in translation, includung works by
Machiavelli, Tasoo, Tirso de Molina, Lope de
 treated both as literal
course as \(T H E A\) A22.
428. Selected Periods in Theatre and Drama (3) S
Prerequisene: One course in inerature of thearte
arts. Stucy of special movements and pericos in arts. Stucy of special movements and periods in
the history of drama and theatre, to be selected each semeste.
430./513. Dante (3) F,S Preerequisite: One course in ilterature oc consent
of insuructor. A reading. in translation, of the maijo works of Dante, including the Viat Nuov
and the Dive Comecy. Examination is also and the Dwine Comed. Examination is also his sourcess and hisive influence on later witer
artists, and composers. artists, and composerers
Prerequisite: One course in literature (3) F
 transiation, trom witings of the medien
refecting dominant ideas of the time.
432./515. Continental Renaissance Literature (3) S
Prerequiuisit: One course in literature or consent of instructor. A comparative study of the malio
works of the chief non-dramatic authors whenke of the chief non-cramanatic Euthors tollowing: Pettrarch, Boccaccio, Loernaz
de'Medici, Machiaveli, Ariocto, Tasso, Ronsard,
 also given to influencoen
to the modern world.
437. Romantic Literature (3) S Preeraquistes: ENGL 100 or its equivalent and one
course in 1 Iterature. Aepresentative selections, in
 Romantic period with an emphasis on
comparative tuduy of works from Geermany and
France trom about 1785 to 1870 Tradition France trom
grading only.
438./516. 20th Century Continental Literature (3) F,S
Preerequisite: One course in Iherature or consent
of instuctor. Comparative stury of continente of instructor. Camparative stucy of continental
European Irearature, in translation trom 1900 to
 Gide, Proust, Hesse, Moravia, Kazantrakis, and
Mann: dramatists include Pirandello, Cheiho
 realism, naturalism,
psychologaical
novel.

\section*{psychological nove nove.
theatre of the absurd.}

440/520. Latin American Literary Studies (3) F,S
Prerequiuste: One course in lierature or consent
of instructo. A comparative study of maicichent gentes in Latin Amearican sturaturure in in relation to the pincipal periods and movements of the
Western inerary tradition. The gences for the
 semester may
Classes May
to nine units.
449./521. Critical Studies in Major Continental Writers (3) F,S
Prererauiste: One course in ineerature oc consent
of instuctor. Intensive and comparative study ol of instructor. Intensive and compoatativ. study of
one to three major continental authors. Authos to one tutree maior continenta authors. Authors so
be studied will be announced in the schedui of
Classes. May be repeated for credid to a Classes. May be repeated for credit to
maximum of nine units with different toplcs. 450./522. Comparative Studies (3) F,S
Preerequigite: One course in ilierature or consent
of instuctor. Interemeationhip of woo or mere diecipines. with emphosis on ereicrocal influ-
ences and borrowing of materials during various
literary periods. The class wil feature a dififerent
interdisciplinany study each semester to interciscipipinary stucy each semester to be
announced in the Scheodutu of lasses. May be announcod in the Shereduil of classes. May
repeated for a maximum of nine units wim different topica
4511. The Novel and the Motion
Picture in Contemporary Society (3) S \(\qquad\)
 particuluar focus on novels made into films and on
the aesthetio distinction of both forms as malo gentes in the 2ath century.
452./523. Studies in Mythology (3) F,S
Prerequisithe: One course in ilierature or consent.
of instructo: intercelation of gies, mythologocical themes of theories mot mythology. This class will feature a different area of an interdisciplinary or comparative naturue in the study of mythology each semester, to be announced din
the Schedue of Classes. May be repeated with different topics to a maximum of nine units. 4521. Mythic Visions into Mythology (3) F
Preerauistes: ENGL 100 and upper dvision status. Thematio polaritios in mythology will be
examined. Chaos and Comosi; Micococom and
Macrecos.
 453./517. Fairy Tales (3) F,S Preerequiste: One course in itierature or consent
of instructor. An indeopth stuy of the tairy tale as \(a\) unique itietary gente and art form. Class will a uninue iterary gente and art tom. Class wir tales and identity poychological., religiouss
cultural, and alchemical patterns and symbols that reappear in fairy tales and manitest man's eary realization of his hetity and of the cre
461. Topics in Contempora Literary Criticism (3) S Prerequisite: CLT 361 . An indepth study of a particular cartic or movement in contemporary
fieteray theor. May be repeated for credit to a 499. Directed Studies (1-4) F,S Preerquisite: Consent of instructor. Independent study of special topics under supenision of a
taculty member. May be repeated for a maximum of six units with consent of department. Graduate Division:
501. Advanced Interdisciplinary
Study (3) \(F\) Study (3) F
Intensive study of the theories and methods of
comparing and interelating Iterature with other Comparing and intererataity hiterature with other ans. the social sciences and the sciences.
511./401. The Modern

Confessional Novel (3) F,S
Preerequisite: One course in inerature or consent
of instructo. A comparative anayysis of the of instructor. A comparative anayysic of the
 Representative novelis trom
Latin America are examined.
513./430. Dante (3) F,S Prerequisite: One courss in iliterature or consent
of instructor. A reading in translation of the of instructor. A reading, in translation, of the
maijo works of Dante, inducing the Vita Nuova mald works of Dantite, nincucining the vita Nuvo given to the comparative nature of Dante's work:
his sources and his influence on later witers, hatists, and compmosers.

\section*{\(514 . / 431\). Medieval Literature
(3) F} (3) \(F\)

Perequiste: One course in literature or consent of instructor. Representative selections, in
ranalation, from witings of the medieval period. Iefecting dominnant ideas of the tim

\section*{15./432. Continental}

Renaissance Literature (3) S Preerequisite: One course in literature or consen
of instuctor. A comparative stucy of the majo works of the comperarative studuy of the maior Rennaisaance Europe, including all or some of the
Iolowing: Petrach,
Boccaccio.
Lorenza de'Medici, Machiavelili, Ariosto, Tasso, Roronsard Also given to influencose, trendsanteand. ©onphasibution the modern world
516./438. 20th Century Continental
iterature (3) F S Literature (3) \(F\),
Preferquistie: One course in literature or consent European ititerature, in translation of continental he present. Nowelists studied include Kafke Gilde, Proust, Hesse, Moravia, Kazantrakis, and
Mann; dramatists include Pirandello, chekh seckett, Sartre, and Camus. Moverements incluc Feaism, naturalism, the development of the
peychological novel, existentialism, and the satre of the absurd.
517./453. Fairy Tales (3) F,S Prerequaste: One course in literature or consent a unique literary genre and ant torm. Class ail investigate various theories as applied to the laues and identity pyychological, reiligious
cuturual, and alchemical patterns and symbols
 process.
20./440. Latin American Literary (3) F,S

Prerequiste: One course in literature or conseni of instructor. A comparative study of major literary the principal periods and movements of the Western literary tradition. The genres for the
semester will be announced in the echedulu of
and Classes. May
521./449. Critical Studies in Major Continental Writers (3) F,S Prerequisite: One course in interatura or consen one to thiee major continentala authors. Authors to be studied will be announcod in the Schedule Classes. May be repeated for credit to
maximum of nine units with different topices.
F.S
(3) Preerequisite: One course in literatue or cone of instructor. Interelationship of two or more
discipiplines, with emphasis on reciproca influences and borrowing of materials during
various literay periods. The class will feature a vififerent intererciscoipipinarary study each semeester be announcod in the Scherdue of Classese. May
be repeated for a maximum of nine units with be repeated for a maximum of nine units w
different topics. \(523 . / 452\). Studies in Mythology (3) F, S
Prerequisites: One course in literature oc conseen of instructor. Intiereleation of two of moic
myythologies, mythological themes or theories mytholocgy. This class will feature a different are
of an interdiscoilinay or comparative nature in of an interdiocipilinary or comparative nature
the stucy of yythology each semester, to bo announced in the Scheduib of Classes. May be
repeeated with different topics to a maximum of repeated
nine units.
550. Topics in Comparative Literature (3) S
Prerequisiste: CLT 501 or consent of instucto
Special studies of movements, figures
 literaturue end other disisiplines. Topics to bo
announced in the Scheculie of Classes. May be repeated to a maximum of nine units wi

Students may pursue sever aspect of ancient Greek and Roman civilization by taking classes in the Classics Program and in related Comparative Literature, En Historary Philo Ltepotature, Englilish, and Religion. Courses in the Classics Latin, to understand ancient institutions and cultural practices, be conversant with Greek myths to the ancient languages, and to appreciate the Greek and Roman views of human nature. Interested
students should confer with the students should confer with the
Classics faculy to plan a Special Major in Classics or one of the minors
described below described below.
Minor 0 Classical Studie The Minor of
tudents majoring supplement tha opportunity to background in the oldest European

The Minor consists of a minimum
20 units which must include a minimum of 9 units of upper division
coursework selected from the following:
(A) Two courses in Latin or Greek th in the same language.
(B) A minimum of two courses from 3101; C/LT 4211, 450*, and 452* (with an appriopriate topic); or addiit
courses in Latin or Greek, not necessarily in the same language as
selected in (A) selected in (A).
(C) A minimum of two courses from
the following: HST the following: HIST 3101, 313, and
314; PHIL 421 and 422; ART 416 and 417; ENGL 426 and 431; ANTH 140 and 450; and POSC 30
Interested students should contact
the Classics Advisor prior to or during the first semester of taking courses toward the Mino
Minor in Greek (code 0-6811) A minimum of 20 units which must
include four 300 -level courses. Prospective teachers are strongly urged to take, in addition, HST 313 , courses touching on the ancient world.
Minor in Latin (code 0-6815)
A minimum of 20 units which must include four 300 -level courses. Prospective teachers are strongly
urged to take in addition HIST 314 Courses touching on the ancient world.

\section*{Classics Courses (CLSC)}

Lower Division
200. Greek and Latin Roots in English (3) F,S
Survey of the makeup and use of English words
ot Greek and Lation origin, indudindin common as Al as specialized vocabibulary. Analysis of words and their component parts both in isolation and
3. Biomedical Terminology Study of Greek and Latin roots and word ements basio in the modem tethrinal f Greek or Latin required
291. Introduction to Greek
Mythology (3) F S Mythology (3) \(F\), ssurvey of the majior Greek myths, legends and
ther tales about gods, hercoes and wars The ourse wil discuss mydht heroes and wars. The planes of Earth. Upper Division
1101. Pagan Culture (3) F,S Frerequisites: ENGL 100 and upper division tatus. Students investigate the Pagpan culture of隹 onquests of Alexander the Great, and will
iterpert the human condition from the interpet the human condition from the
standpoints of ititaray witers and of philosophic
thinkers.

Greek Courses (GK)

\section*{Latin Courses (LAT)}

Lower Division
221A-B. Elementa
Introcuction to the Latin language as used Cicero, Liv, Catullus, seneca, Tactusus and Juvenal. Aom asan citureabulary to equip students
syntax, and basic y symbegin the study of these witers and daso late Latin, medieva
wrote in Latin.
221A. Designed for those who are
beginning the study of Latin
221B. Preequisites:
221B. Prerequisites: 221A or equivalent.
or one year of high school Latin. Upper Division
301. Intensive Latin (4)

One-semester course in Lating grammar:
Doesigned for undergaduate and graduate Designed for undergraduate and graduate
students with litie or no knowedge of Latin, whose degree programs require ar
reading knowiedge of the language.
reading knowedge of the language. (3-3)
331A-B. Intermediate Latin (3)
F(331A), \(\mathrm{S}(331 \mathrm{~B})\)
Contituud, study of the language and culture. Reading and translating adapted and origin lections of classical witeor.
331 A . Preerequisite: 22 .
331A. Preerequisite: 221 B of equ
or two years of high school Latin
331B. Preerequiti: 331B. Prerequiste: 331A or er euivalent
or more than two years of high school \(\underset{\substack{\text { or mot } \\ \text { Latin. }}}{ }\)
451. Latin Poetry (3) F

Prerequisite: LAT 331 B or it equivulent. Study of Latin poets such as Virgil. Catullus, Horavee, and
Ovid Discossion of themes, tochniques, and
and setting of the works. May be repeated with
different content tor a maximum of 9 units. Topics dififerent contient for a maximum of 9 units. Topic 452. Latin Prose (3) S Pereqequiste: LAT 331 B or equivalent. Reading of
Latin prose witers such as Clicero, Caeser, Seneca, Tactus). Discuscosion of thougo, Casht, itiearary art and histotical setting. May be repeated with
different content tor a maximum of 9 units. Topics different content tor a maximum of 9 units. Topics
will be announced in the Schedule of Classes. 490. Special Topics (1-3) F,S Preerequisites: 12 units of upper dvision Latin
courses or consent of instructor. Translation and Itierary stucty of the selected works of an author, genre (e.g., satire). of petiod (e.g., Medieval
Latin), May be repeated for credit up to six unts Latin). May ber repeas.
499. Directed Studles (1-3) F, S Prerequisite: Consent of instuctor. Directed studies to permit individual studentst to pursue topics of special interest. May be repeated for credit to a meximum of six units.

Iranslation and litetary study of one or
dialogues of Plato. Prose composition.
352. Homer (3) S, Odd Years

Prerequisite: GK 351 or equivalent or consent of instructor. Translation and literays study on
selected books of the liad or Coyssey. Prose
490. Special Topics (1-3) F,S

Prerequisteres: 12 units of upper-didision Greek

 genres e.e.g., oratory),
Greek) May be repe
with different topocice.
with different topics. 499. Directed Studies (1-3) F,
499. Directed Studies (1-3) F,S
Prerequiste: Consent of instructor. Directrod
P Prerequivite: Consent of instructor.
studies to permit individual studunts to pursue
thios topics of special interest. May be
creditit up to a maximum of six units

\section*{(221A), \(\mathrm{S}(221 \mathrm{~B})\)}

Introduction to the ancient Greek lanquage of the Atric (Athenian) dialect of the classical period, the Demosthenes. Forms, syntax and basio
Greek. Designed for those who are 221A. Designed dof trose
begin.
22ing tree stuvy of Greek pper Divisi

\section*{331A-B. Interme
\(\mathrm{F}(331 \mathrm{~A}) \mathrm{S}(331 \mathrm{~B})\)}

Continued study of the language and coiture 331A. Prerequisite: GK 221 B or equivalent.
331B. Pre

\section*{English}

Department Chair
Department C
Helen C. Gilde
Department Office: McIntosh umanities Bldg. (MHB), Rm. 419 elephone: 985-4223 Ames, Arthur M. Axelrad, A. Robert ell, Robert H. Berdan, Robert J. Brophy, Gene L. Dinielli, David M Fine, Elliot Fried, Helen C. Gilde,
Robert M. Hertz, Robert A. Hipkiss, Stephen R. Knafel, Alvin H. Lowson, Paulino M. Lim, Jr., Gera Charles E. May, Gioria G. McCullough, Curtis L. McCray,
Leslie B. Mittleman, David R. Peck eslie B. Mittleman, David R. Peck ora B. Polk, Stephen B. Ross,
David N. Samuelson, Charles E Stetler, Ronald J. Strahl, Jerry L. ullivan, Charles H. Webb, Donald uster J. Williams; Assoclate Professors: Elyse M. Blankley, dward J. Borowiec, Eileen S. Klink, Beth Lau, F. J. Plourde, Spiese, Diane Vipond, Rafael J. Zepeda; Assistant Professors: Roy C. Garrott, Wilhelmina Elizabeth V. Young
meritus Faculty: Charles A. Allen Ralph K. Allen, Kenneth J. Ames, Harold Aspiz, Abraham A. Avni,
George V. Betar, Albert B. Black Blaze O. Bonazza, Alice M. Brekke Charles B. Brooks, Walter B. Crawford, Richard H. Darbee, Alvin H. Lawson, Richard E. Lee Eileen E. Lothamer, Louise C. ubbe, Richard E. Lyon, Frederic \(J\) , Polk, Mary Purcell, Delmer J. oodabaugh, Aillee Wilford Ros Janet B. Sawyer, Arnold T. chwab, A. Keith Skarsten, George Dra Williams, Suzanne M. Wilson,
Robert C. Wylder.
Patricia Aleman

\section*{The Department}

Students desiring information ould contact the department office for referral to one of the faculty advisors: Undergraduate, Graduate, composition Technical and rofessional Writing, Linguistics, and e American Language Program. In the discipline of English, throughout the student's study of
language and literature and in his or her own witing, the teaching emphasis is on the development of the studdent's own critical reasoning, and meaningfulness. One's experience of life is broadened and deepened through literature, and thinking is sharpened and clarified language and writing. One learns to see and to seek out the possibilities of language and to use the essay dimension and meaning to the life within and around the self.
The courses of study for the undergraduate English major are designed to enfarge hant and prepare them for graduate study eaching, other professions, or usiness careers.
Study of a foreign language is
equired for one of the options and ecommended for the others, preferably to begin (if not continued om high school) in the lower vision Because at least one anguage is usually required to btain an advanced degree, tudents aiming at such degrees
hould include language study in heir undergraduate program. Bachelor of Arts in English In planning a program of courses \(s\) advised to keep in mind the different options explained below. More detailed information about each option is available in the student is also expected to consult a
department faculty member regularly
The major in English, for all options, consists of 41 units. This total may not include English 100
(which, however, satisfies general education requirements), but, upo petition to the English Department may include courses taken in oth
departments. Because some departments. Because some
courses are required in several options, a student desiring to change options can do so withou any great loss of
A student may accelerate completion of the major in English by taking advantage of the policy. Certain courses may be waived or substituted for under certain circumstances. Consult an English Department advisor for the option concerned Arts
- Option in Literature
(code 2-6830)
The literature option is designed grounding in English and American literature, particularly those planning on graduate study in English.
Students aiming at advanced degrees should take as many of the degrees should take as many of the
recommended electives as possible. Because a reading knowledge of at least one foreign language is usually degree, such students should also include language study in the undergraduate programs. This option consists of 41 units,
29 of which must be upper division, including the following:
Lower Division: ENGL 184 250A, B.
Upper Division: ENGL 384; three courses in English literature: 363
and either two courses trom the 450 and ether two courses from the 450 series and one course from 462, \(463,467 \mathrm{~A}, \mathrm{~B}, 468\); three courses in American literature: \(370 \mathrm{~A}, \mathrm{~B}\) and one
course from 474, 475, 476, 477A,B, curse from 474, 475, 476, 477A,B
479; electives to make up a total of

41 units. Recommended: 431 (Classical Background): course ngish inguistics, adatitional courses in the 450, 460,470 series Either ENGL 481 or 482 may be elected in satisfying this requirement. - Option in Language and

Composition (code 2-6829) option is designed to emphasize inguistic studies in preparation for either graduate study in language or eaching. Four coliege semesters, or than English are also required.
This option consists of 41 units, 9 of which must be upper divis cluding the following:
Lower Division: ENGL 184
Upper Division: Two courses in
American literature: \(370 \mathrm{~A}, \mathrm{~B}\); five courses in language: 325, 420, 421, 28 , and either 423 or 426 ; one 310; electives to make up a total of 41 units. Recommended: additional courses in literature and language, or 482 may be elected in satistying this requirement.
Option in Creative Writing (code 2-6831)
esigned for students who wish to write, as well as to study, fiction,
poetry, or plays.
This option consists of 41 units,
of which must be upper division, including the following:
Lower Division: ENGL 184, 205 or 206, 250A,B.
Upper Division: Any three classe Un ceative witing chosen from
ENGL 405, 406, 407, 499; THEA N80, 480; RTVF 404. Three classes in recent literature, literary genres, and/or literary criticism chosen from he following courses: ENGL 384,
\(385,386,459,467 \mathrm{~A}, \mathrm{~B}, 469,474\), \(385,386,459,467 A, B, 469,474\),
\(475,476,477 \mathrm{~A}, \mathrm{~B}, 478,479\). Electives to make up a total of 41 nits chosen from the classes listed
English courses
Option with Special Emphasis (code 2-6827)
The opportunity to pursue
individually designed 41 -unit
programs of study is provided for students who wish a major in English but who have special interests or
those for which the other options are designed that their personal educational needs would be better served by some other pattern of
courses. Students desiring to take the special option should present a detailed program proposal as early in their college career as possible only if planned in consultation with an English Department faculty advisor, approved in writing by the advisor, given signed approval by
the Department Chair, and caried out under the advisor's continuing supervision
Students must complete at least their special option program after it has been officially approved. The only specific course requirement

ENGL 184, Composition an eratiples of Literary Study (three units).
Electives in English and related保 ENGL 100 or 101 .
Option In English Education (code 2-6803)
American Studies Emphasis: Students are required to complete
the following core of thirty-one (31) units and fifteen (15) units to provide breadth and perspective. Core Courses ( 31 units): ENGL
184, 310, 363 , 482 ; Select one course from ENGL 320 or 325 ; Select three courses from
250A, 250B, 370A, 370B.
250A, 250B, 370A, 370 B .
Breadth and Perspective (15 Breadth and Perspective
units): AMST 300, 490, 498, H 477A,B.

\section*{\section*{Comparative}}

Students are required to complete the following core of thirty-one (31) units and twenty-one (21) units to provide breadth and perspective. Core Courses ( 31 units): ENG course from ENGL 320 or 325 Select three courses from ENG 250A, 250B, 370A, 370 B . Breadth and Perspective ( 21
units): C 1 T \(234,330 \mathrm{~A}\) units): \(C / L T 234,330 A, 3308\)
Select one course from C \(\_\)T 349, Select one course from C/T 349
\(431,432,438\); Select one course \(431,432,438\); Select one course
from C T \(403,404,430,440\) trom 451 ; Select one course from
\(C / T\) 3 \(342,402,445,452,453\)

\section*{lectives from} Creative Writing Emphasis Students are required to complete
the following core of thirty (30) units and eighteen (18) units to provide breadth and perspective. Core Courses ( 30 units): ENGL \(84,310,482,3\) units upper
division English elective; one course from ENGL 320 or 325; hree courses from ENGL 250A 250B, 370A, 370B.
Breadth and Perspective ( 18 units): Select nine units from
ENGL 405, 406,407 (may repeat any of these three courses for a maximum of 6 units); three
courses from ENGL 385,386, courses from ENGL 385, 386,
\(459,467 \mathrm{AB}, 474,475,476\), \(477 \mathrm{AB}, 478\). Dance Emphasis: Students are required to complete the following cort- of thity-one (31)
units and twenty-five (25) units to provide breadth and perspective. Core Courses ( 31 units): ENGL
\(184,310,363,482\); Select one 184, 310, 363, 482; Select one
course from ENGL 320 or 325 : course from ENGL 320 or 325 ; 250A, 250B, 370A, 370B. Breath and Perspective ( 25 units): DANC 114B, 2128,220
\(331,380,442 B, 470,485,488\). Journalism Emphasis: Students are required to complete the following core of thirty-one (31) units and twenty-four (24) units to
provide breadth and perspective. Core Courses ( 31 units): ENG 184, 310, 363 , 482; Select one course from ENGL 320 or 325 Select three courses from
250A, 250B, 370A, 370B.
Breadth and Perspective ( 24 units
minimum, at least 12 of which Breacth and Perspective \((24\) units
minimum, at least 12 of which must be upper division): JOUR
\(110,120,230,320,430 ; \mathrm{Select}\) one course from JOUR 322A one course from
3228 ; Select 6 units minimum from JOUR 115, 270, 280,
422 A or B, 431, 490, 499 . Language and Composition Emphasis:
Students are required to complete the fillowing core of thirty-one (31) provide breadth and perspective Core Courses ( 31 units): ENG 184, 310, 325, 363, 482; Select three courses from
\(250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\) Breadth and Perspective ( 18

Select 6 units from ENGL 423, 426, 499. Twelve units or equivalent of a oreign language. Students are required to complete the following core of thirty ( 30 )
units and sixteen (16) units to units and sixteen (16) units to
provide breadth and perspective. Core Courses ( 30 units): ENGL 184, 310, 482, 3 units upper division English elective; one course from ENGL 320 or 325 ; \(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\). Breadth and Perspective ( 16 units): Breadth and Perspective 16 units): ENGL 363, 384; C/TT 230; Select one course from 458, 459; Select one course from ENGL 474, 475, 476, 477AB, 478, Radio Emphasis:
Students are required to complete the following core of thirty-one (31) units and eighteen (18) units to Core Courses ( 31 units): ENGL 184, 310, 363 , 482; Select one ourse from ENGL 320 or 325; Select three courses from
\(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\). Breadth and Perspective (18
units): RTVF 150, 204, 220, 230, 240, 316 .
Emphasis:
Students are required to complete the following core of thity-one (31) units and twenty-one (21) units to
provide breadth and perspective Core Courses ( 31 units): ENGL 184, 310, 363, 482; Select one course from ENGL 320 or 325; Select three courses fro
\(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\) Breadth and Pers nits): Select one course from Snits.
SPCH 210 , 271 , 271 , Select threm
three courses from SPCH 331, 332 .
333,335 : \(\mathrm{SPCH} 440,448,450\). Theatre Arts Emphasis: Students are required to the following core of thirty-ome (31) units and twenty-five (25) units to provide Courses ( 31 units): ENGL Core Courses ( 31 units): ENGL
184, 310, 363 , 482; Select one course from ENGL 320 or 325; Select three courses from ENGL \(250 \mathrm{~A}, 250 \mathrm{~B}, 370 \mathrm{~A}, 370 \mathrm{~B}\).

Breadth and Perspective \((25\) units): THEA 100
\(346,374,476\). Certificate in
(code 1-6000)
This certificate program offers students the opportunity to follow their own reading schedules, fill in
gaps in their knowledge, and develop interests in a wide range of subjects offered by the English Department.
In order to apply, students must or better overall and 3.2 or better in their English concentration.
In addition to completion of a degree program in English, compidate must pass two examinations. Passing the first, a qualifying examination which is mainly objective, entitles the studen second, an essay examination consisting of an analysis of one or more specific texts, completes the

\section*{Minor in English}

\section*{Literature (code 0-6830)} The minor in English (Literature) equires a minimum of 21 units and must include: ENGL 184; eight units
trom ENGL 250A, B, 370A, B, and ine units of electives to complete east 21 units from ENGL 363, 385, 386, 390, 398 and/ or any courses rom the 450, 460, or 470 series.
Language and Composition (code 0-6829) The minor in English (Language and Composition) requires a minimum of 20 units and must
include: ENGL \(310,325,420,421\) 428, and 497. Also recommended are three units from ENGL. 423 or
\({ }_{-}^{426 .}\)
Creative Writing (code 0-6831) The minor in English (Creative
Writing) requires a minimum of 21 unitsg and includes a minimum of 21 ENGL. 184; three units from ENG 205 or 206, three units from ENGL 385 or 386 : three units from ENGL 385 or 386 ; and eight units of electives from ENGL 405, 406, 407.
\(459,467 A, B, 474,475,476,477 A, B\) 499. (Note: ENGL 405 and 406 may be repeated for credit to a maximum fix units by consent of instructor.)
Teaching Emphasis (code 0-6803)
The minor in English (Teaching
fi 21 units and includes the following: eight units from ENG 250A,B, 370A,B; ENGL 310; four units from ENGL 320 or 325 ;

\section*{approved electives.
Special Emphasis (code}

\section*{\(0-6828\) )}

The minor in English (Special Option) requires a minimum of 21 units in a program developed,
approved, and supervised in the same manner as the Special Option major. ENGL 184 is required of all students, with the rest of the program constructed in
consultation with a faculty advisor. Students may take courses which center on technical writing, for example, or other witing goals; they may focus on American or
English literature, literature in a particular genre, a particula historical period, or a particular theme.

\section*{Certificate Program in Teaching} English as a Second Language
1-6050)
Teaching English as a Second Language is conducted by the Linguistics Program faculty. Please
eefer to the Linguistics sections of refer to the Linguistics
this catalog, following.
Certificate Program in Technical and Professional Writing code 1-6060)
The Department of English offers
Certificate in Technical Certificate in Technical and interested in careers in writing and editing. Application forms and advising materials may be obtained
rom the English Department Office. Prerequisites for the Certificate Program in Technical and Professional Writing:
(1) Formal consultation with a aculty advisor in the Technical and Program:
(2) Submission of an application, supported by transcripts,
(3) Upper division or post-baccalaureate standing at
CSULB with a GPA of at least 2.75 overall:
(4) Admission to a degree
program in this university or possession of a degree from an
(5) Successful completion of English 317, Technical Witing, w General Requirements for the ertificate in Technical and Professional Writing:
(1) A baccalaureate degree,
which may be taken concurrently with the Certificate in Technical and Professional Writing
(2) A minimum of 24 units in ourses approved for the Certificate Program at this university, which the
student is expected to complete within 10 years of the first credi granted toward the Certificate
consult an advisor concerning consult an advisor concerning any
ransfer or extension credit that may be allowable);
(3) A grade of " C ' or higher in very course in the Certificate Program (a grade of 'CR' is
acceptable in no more than one course): (4) Completion of a program of
courses in Areas I through V
Vith developed in consultation with
advisor in the Technical and Professional Writing Certificate Program and approved by both the Director of the Program and the Associate Dean for Instructional (5) Demonstrations of competence in the use of computers and graphic media, in or outside the rogram of courses;
(6) Development of a portiolio of student during enrollment in the Certificate Program, for review and approval by facully in the Technical Program (required for a grade in English 492ABB, Area M):

\section*{Course Requirements:}

For each of the following courses
TPW Certificate students have been TPW Certificate students have bee granted enrolment rights eguatho
those of students majoring in the Department offering the course. Substitutions are also possible, especially of more advanced courses, with the a
Program Director.
Area I: Technical and
ENGL 417, 418, and one from the ollowing courses: ART 307, 309; CE 305; CRIM 302; EI
303,419 ; IS 301,305
Area Il: Language Studies
\((4\) units): ENGL 320 or 325.

Area III: Electives chosen from the foll Analytical Reading: ENGL 384 423,498 (topic: Science as
Literature) GFOG 380 HISTPHYS Literature): NSCI 3701 ;
Business/Professional Skills:
ACCT 201; EDST 301; FIN 222; JOUR 270, MKTG 300, 320, 330;
SPCH 334, 335, 344; TED 408; SPCH 334, 335, 344; TED 408; Computer Applications: C/ST
200; EDST T51, 452; MGMT 426; IS 200; NSCI 200; TED 283, 349; Creative Writing: ENGL 405, 406,
407: RTVF 204, 404: THEA 380; Intercultural Communication: Visual Communication: EDST Visual Communication: EDST
300; EIT 170; GEOG 200; ME 172; TED 141, 151, 247, 341, 342 . Area IV: Practical Writing (3
units): ENGL 491 (1 or more units), 492A or B (2 or more units). grade in Engish 492 will be portiflio, as indicated in Paragraph 6, General Requirements. Master of Arts in
(code 5-6830)

The Department of English offers graduate study leading to the master of arts degree. The candidate must satisty the general
requirements stated in this Bulletin requirements stated in this Butmetn
as well as the specific departmental requirements stated here and, more fully, in the Master of Ants Brochure which are available upon request). The candidate must file transcripts of all college work with the Department and must consult a graduate adviso Prerequisites:
An applicant may be admitted to An applicant may be admited
the M.A program in English only atter satistying University equirements for admission and the (1) A prerequisites to this degree: English from an accredited institution or a bachelor's degree from an accredited institution with
units of upper division English units of upper division English
courses that offer a broad coverage of English and American literature. Any deficiencies will be etermined by the Graduate Advisor consultation with the Graduate o remove course or unit deficiencies
program.
(2) A 3.0 GPA in upper division English courses. An applicant whose GPA is lower than 3.0 will be
eviewed by the Graduate Advisor and the Graduate Studies Committee. (3) Students must be formally admitted to the program before the
can enroll in English 696, which is pre-requisite or co-requisite to all other 600-level courses.
(4) During the first semester
following admission to the graduate following admission to the gradual diagnostic examination for purposes of advisement administered by the Graduate Studies Committee
eviewed by a faculty mentor reviewed by a faculy mento
selected by the student in consultation with the Graduate Advisor.
Advancement to Candidacy: (1) The student must satisfy the
general requirements of the University, including passing the Wititing Proficiency Examination WPE).
(2) The student's M.A. program must be approved by a graduate
advisor, the Graduate Advisor, and the Department Chair before
submission to the Associate Dean of submission
Humanities.
(3) Advancement to candidacy (3) Advancement to candidacy
should take place upon completion of at least six units (and preferably no more than nine units) on the M. program. Advancement to
than the semester preceding the awarding of the degree.
Requirements for the Master o Arts
(1) A minimum of 30 units of
approved upper division (indicate approved upper division (indicated
in the Catalog with an asterisk*) and graduate courses including 24 units in English;
500 ) A mindimum of 20 units in the this University, 16 of which must be in the 600 series, including ENGL 696 , which is to be completed before or concurrently with other
600 -series courses. (A student will not be granted credit for 600 -series courses unless admitted to the M.A. program);
(3) A minimum of two seminars in the 600 series
before 1900;

320. English Grammar (4) F,S Advanced study of the principles of English ammar.
325. Models of English

Grammar (4) F,S
Intoduction to structural and transtormational
nodelis of American English, with reference to models of American
traditional grammar.
337. Technology in the English

Classroom (3) F,S,SS
Moets Thite 5 computereducation requirements or the Single Subject. Cliear Teaching Clear Teaching Credential with English
Concentration. Focuses on: (1) issues in the Ooncentration. Focuses on: (1) issues in the (2) basic components and operations of
comuter-based technology: (3) computer computer-based technology:
applications/rogesams and video tapefilim for eaching problem.sowing. critical thinking,
 brainstorming, outitining, word procossing. procosesing, document, cheocking, destiop
ppubising, data bases, tetecommunications,
networking, program development, drills, and networking, program development, drillo, and
instuctional management.
363. Shakespeare I (4) F,S

Prinipipal plays of Shakespeare. Not open to
students with credit in ENGL 464 or 464 A .
370A,B. Survey of American
Literature \((4,4)\)
F,S
Representative selections from American witiers to and since about 186
3721. Wit and Humor in America (3)

Preerequisite: Upper division status. A stucy of the history of American humor from the reppesentative works studied will be from
literature; however, considerable attention will literaturue; however, considerable attention wil
be devoted to the manifestations of the American tradition of hummor as found on stage, in film, in song, and in signs. Theories 375. Contemporary American Ethnic Writers (3) F, American Ethnic Witters is a sunvey course that
will examine the literature of non-European witers of various ethnic witters who are contributing major American lily
gennees. Traditional grading only.
382. Women and Literature (3) F Images of women in English hiereature; works in
various gennes that ppesent the range and complexity of women's lives; feminist catival
approaches approaches and biblio
Same course as W/ST 382
384. Principles of Literary Study (3) F,S

Fundamental ibsues of lierary study such as Iiterayy histoy; literary toms, themes and
conventions: major critical approacheres. Itens conventions: malor ctricar approis practice in ilerary analysia
385. The Short Story (3) F,S The short story as a liferay gerne, with 386. Poetry (3) F,S Poetry as a liferay genre, with emphasis on 390 , Studies in Contemporary Literature (3) \(\mathrm{F}, \mathrm{S}\)
Reading and analysie of literary works, Bititioh end American, withen since 194ts. Tropics hemee, linitations for each section will be ppeated once with a different topic. 398. Modern Drama (3) F,S Continental, English, and American drama
|bsen to the present.

\section*{405. Creative}

Prerequibite: ENGL 205 or consent of instructor.
 reative procosess. May be repeated tor credit to maximum of 6 units by consent of instructor) 406. Creative Writing: Poetry (3) \(F, S\)

Prerequisite: ENQL 206 or consent of instructor.
Witing poetry, with a detalied stucy od
 creative procesess. (May be repaated for credit to
a maximum of 6 units by consent of instuctort.) 407. Creative Writing: Novel (3) F,S

Pretequiske: Consent of instructor. Wirting long fiction, with a detalied study of published
modelis and with emphasis on the creative modeis and win emphasis on the creative
procese. May be repeated tor coedit to a
maximum of 6 units by consent of instuctor.) \(410 / 510\). Theories of Writing 410./510. Theories
and Literacy (3) S

Prerequiste: ENGL 309 or 310 or consent of Rerequilister. Fecuses on several crosesdiscipilinay theocies of prowuing wititen
discourse. Studies how witing is leaned. taught, viewed by the public, and used in social and academic interchange.
417. Proposal Writing (3) F,S Intensive witing of proposals in their various
torms as leter, memo, and grant application. Main focus will be on the formal proposal as a marketing strategy.
418. Manual Writing (3) F,S Writing of oigignal manuals of various types in
technical and profesosional fields based on the echnical and protessionanat hiens as aosedels. 419. Writing in Science an Technology (3) F,S intensive practicic in witing on topics in science
and Itierature based on a study of tradional and inerature based on a
and 0 antemporay models.
420./520. English Phonology (3) \(F, S\)

Prerequisite: ENQL 325 or consent of instructor.
Sudy of the phonology of American English.
using articulatory phonetio, phonemic, and
distinctive feature anayses. Not open to distinctive feature anayses. Not
students with creditit in ENGL 321 A . 421./522. English Syntax (3) F,S Prereauisite: ENGL 325 or consent of instructor.
Stucy of the morpholcgy and syntax of American English, using structural and early And rocent transformational modelses. Not open to students with credit in ENGL 321 B . 423./523. Semantics (3) Study of meaning in language.
426./526. History of the English Language (3) F,S Development of the English language from tio
begininings to the present day. Not open to beginnings to the present day. Not open to
students with credit in ENGL 323. 428./524. Applied Linguistics (3) \(\mathrm{F}, \mathrm{S}\)

Preerequisites: ENGL 420 and 421. Linguistio research haplied to the
the English language.
429./529. Language Strategies for Billingual/TESL Classrooms

Prerequisite: ENGL 325 (may be taken concurrenty) or consent of instructor. Linguistio
strategies tor teaching the native speaker and strategies for teaching the native eppaker an
the second language learner. To gain practicic experience, students will work a minimum of 12 hours a semester in ifficampu
bilingual and ESL classrooms.
*431. Classical Background of English Literature (3) \(F\)
Greeak and Roman literature, in translation, in
relation to English literature; the interelelations of classical literature with philicosophy and art. Nol open to students with predidit in ENGL 331 . 435./535. Teaching Composition (3) \(F, S\)

Preerequisite: Consent of instructor. Intensive examination and study of compoostion teaching chools, indududing community colloges. 451./554. Medieval Litera
the British Isles (3) F,S

Representative selections of Old and Middle English proves and pootry read for the moost part n modern English including Beowuti, the
iomance, medival drama, Chaucert, and the romance,
ballad.
452./552. Literature of the Renaissance (1500-1603) (3) F,S Prose and pootry of Marlowe, Slidney, Raleigh
Spenser, and other predecessors and spenser, and other precoccesors and
contemporaies of Shakespeare, noting the
infuence of Humanism and the emergence of infuence of Hur
itierary identity.
453./553. Lterature of the Late Renaissance (1603-1660) (3) F,S PMetry and prose (chieffy non-cramatic) of
Miton. Bacon, Jonnon, Donne and the
Metaphysicals, and their contemporaries.

74./574. Twentieth Century merican Ilierature trom (bout 1914 to present. 475./575. The American Short Story (3) F
History and development of the short story and citicism in the United States. 7istory and development of Poetry (3) F History and development of pootry and its
ariticiem in the United States. 477A,B./577A,B. The American Novel \((3,3)\) F,S History and development of the novel and its
criticism in the United States to and since the citicicism in the United States to and since the
1 1200's. Not open to students with creadit in
ENGL NGL 477. American Dis 78./578. American Drama (3) F History and development of drama and its
ertiolism in the United States. 479. Critical Studies in Majo
merican Writers (4) F,S American Writers (4) F,S Prerequisites: At least senior standing, 12 units 37AA, . Intensive study of one to three maior American authers. May be repeated for credir but no mere than 4 untis maxy be used to satisty 481. Children's Literature (3) F,S Survey of ilierature suitable for children. 482. Literature for Adolescents (3) F,S Perequibiste: One colloge course in itierature. 84./584. Contemporary Literary Theory (3) F,S
Sudy of the principal theories of iterature duding Structuralism, Hermeneutics, theon 491. Applied Technical Writing (1-3) F,S
Preereauisite: Admission to Certificate Prooram
in Techina and profesional Writing. Witing
and edifing techrical reports and papers. and editing technical reports and papers.
lindependent productoo of a repor in a
technical of scientifo area under facuity techninal
superision
4 units. 492A-B. Internship echnical-Professional Writing and Editing (1-3) F,S
Preerequisite: Admission to Certificate Program 50 hours witing and editing with cooperating gencies and companies on- and offf-campus consultation with supencoaisors of the
participating agency or company on participating agency of compary. May be
eppeated to a maximum of 4 units.
497. Directed Studies in Prerequistes: Graduate standing, or consent of Prereauistes: Gracuate standing, or consent of
the instructor, or one hepper division writing
course in Enolish. Theory and practice of course in English. Theory and practice of tuturial instruction in English composition.
Recommended for single subject crecential Recommended for single subject crecentitiol
candidates and those preparing for collegegevel teaching. (One hour per week
seminar: four hours per week in Witing Center seminar; four hours per
*498. Topics in English (1-4)

specifio topics to to be language and literature spectirio topics 10 be announced in th
Sohediv of Classes. May be repeated with
different topics, different topicis, but no more than 6 units may
be applied to the 41 units required for the Englisphed majo

\section*{499. Directed Studies (1-3) F,S} Preerauisite: Consent of instructo Independient study undertaken under the
superision of a faculty member. May be repeated for credirit toa a maximum of 44 nutis. . .
appol plicable toward the Master of Atts in English.
Also see Comparative Literature epartment for course offerings. Graduate Division:
510./410. Theories of Writing and Literacy (3) S Presequisite: ENGL 309 or 310 or consent of instructor. Fouses on several croses
disciplinaryy theories of pront discicilinary theories of producing witten
discourse. Sudies how woting is learned
taught viewed by the publio. tiacourst viewe bluy the hew hublic, and used in social
and academic interchange. 520./420. English Phonolog (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: ENGL 325 or consent of instructor
Stucy of the Stucy of the phonology of American Englilih using articulatory phonetio, phonemic, and
distinintive feature anaysee. Not open to distitictive feature anayleses. Not
sturents with credit in NNGL 32 A . 522./421. English Syntax (3) F,S Prerequisite: ENGL 325 or consent of ingtructo.
Stucy of the morphology and syntax of Study of the morphology and syntax o
American English, using structural and early and recent transtormational molurals. Not opper
to stucents sith to students with creditit in ENGL 3218 . 523./423. Semantics (3) F Study of meaning in languag 524./428. Applied Linguistics
(3) FS Prerequis Prerequistes: ENGL 420 and 421. Linguistic
research applied to the study and teaching o the English language.
526./426. History of the English
Language (3) F,S Language (3) \(F, S\) Deveriopment of the English language from tis
begoiningsis to the peresent day. Not open to
students with credit in ENGL 323.
529./429. Language Strategies (3) F,S

Prerequisise: ENGL 325 (may be taken trategiens for teaching the native speaker and the second language learner. To gain practica Mperience, students will work a minimum of 12 hours a semester in off-campus or on-campu
bllingual and ESL classroms. 535./435. Teaching Composition (3) F,S

Prerequivite: Bachelol's degree or consent of
nstructor. Intensive examination and study of sotructor. Intensive examination anc study of composition teaching pracilices. research and
evaluation in tublic schools, including
37. Special To
37. Special Topics (3) F,S Designed for in-service teachers, Intensive
studules and research in special, timely topics as announced in the Schedule of Classes) eleated to the teaching of Engligh. May be
epeated to a maximum of 6 ix units with ifferent topics.
550. Old English Language and Iterature (4) F
Preerequisite: ENGL 461 or consent of oedections trom Anglo-Saxon literature in the 51. Middle
51. Middle English Language

End Literature (4) \(F\),S
instauctor.: Chaucer and other repereenentative oelections from Middle English literature in the 552./452. Liter

Renaissance (1500-1603) R,S
Prose and pootry of Marowe, Sidney, Raleigh, Spenser and other predecessors and
contemporaies of Shakespeare noting the
ne contemporaties of Shakespeare, noting the
infuence of Humanism and the emergence of
Iteray identy
553.453.
553./453. Literature of the Late
Renaissance (1603-1660) (3) F,S Poetry and prose (chiefly non-cramatic) of
Miton, Bacon, Jonson, Donne and the Metaphysicals' and their contemporaties. 554.
the British Isles (3) \(\mathrm{F}, \mathrm{S}\)

Representative selections of Old and Middle Representative eselections of Old and Madie
Engish prose end dootry read for the most part
In En modern English including Beowult, the
iomance, medieval drama, Chaucer, and the romance
ballad.
555./455. English Literature of
the Enlightenment (1660-1798)
(3) \(\mathrm{F}, \mathrm{S}\)

Prose and pooty (chiefy non-dramatic) of
Switt, Dryden, Pope, Johnson, Boswell, and Switit Dryden, Pope, Johnson, Boswell, and
their contemporaie. with emphasis malior
satires such as Gulvivers Trevels and The Rape satires such as Gulliver's Truveles and the Rape
ot the Leok. Not open to students with credit in of the Lock
ENGL 454.
556./456. English Literature of the Ron
Pootry and prose (chiefly non-dramatic) of Blake, Wordoworth, Coleridge, Byron, Sheley
Keats, and their contemporaries, emphasicing
 558/458. English Poetry 558./458. English Poetry and
Prose of the Victorian Age (1832-1900) (3) F,S
Poetry and prose of Tenryson, Browning
Amold, Cartye, Mill, and others, emphasizing Arnord, Cartye, Mill, and others, emphasting
Ifieray, social and political lisues, and refigious
 in ENaL 457.
59./459. English Literature of the Twentieth Century
(1900-Present) (3) F,S
Prose and pootry of Shaw, Conrad, Yeats,
tawence, Joyce, Woolt, and oothers, Lawence, Joyce, Woolf, and others,
emphasizing aristic expeimentation and the emphasizing artistic experimentation
developmento of modern value sytems
562.462 Chaucer (3) F,S 562./462. Chaucer (3) F,S Works of Geoffrey Chaucer in Middie English. 67A,B./467A,B. The English ovel \((3,3)\) F,S
History and development of long prose fiction 568./468. English Drama (3) F,S Readings from the history of English drama

 574./474. Twentieth Century American Literature (3) F,S American Ilterature from about 1914 to
575./475. The American Short tory (3) F
Hitory and development of the s scricicism in the United States. 576./476. American Poetry (3) F History and development of poetry and 577A B 477 AB B The American 577A,B./477A,B. The American
Novel \((3,3)\) F,S History and development of the novel and its
criticism in the United States to and since the
 NGL 477.1478 .
78./478. American Drama (3) F History and development of drama and is
criticiem in the United States. 583. Special Topics in Literature (3-4) F, Intensive studies in special topics in itierary theory. tecchicues, types sopreses, modes. themes, movements and in the relalions of announced in the Schedulu of Classess. May be
lepeated for credit, on diffeert topics, to a repated for credit
maximum of 8 units
584./484. Contemporary Literary Theory (3) F,S
Study of the principal theories of ilterature
Induding Structualism, Hermeneutics, theory Induding Stucturalism. Hermenetuice, theory
of gente, and theory of ctricicim. 598. Directed Studies (1-3) F,S Prerequisistes: Baccalaureate degree, consent
of instuctor, independent creative activity 652. Seminar in the English 6enalssance (4) \(S\)
Preerequiste: ENGL 696 (may be taken
concurrenty). Intensive studies in the literature concurrentit). Intensive studies in the itierature
of the period, fhifefy litazebethan. (4) F

Prerequiste: ENGL 696 (may be taken
concurrenty). Intensive studies in English concurrenty). Intensive studies in English
Ineratue of the Stuar and Commonweath
periods, including Miton. 655. Seminar in Restoration and Eighteenth Century Literature (4) S

Prerequisist: ENGL 69 (may be taken
concurrenty). Intensive studiee in English
Inerenter conccuruentiy. Intiensive studies in English
fiferaturue of the Restoration and eighteenth
century. 656. Seminar In Romantic 656. Seminar in
Literature (4) \(F\)

Prerequisite: ENGL 69 (may be taken
concurrenty). Intensive studies in English eriod.
657. Seminar in V
Literature (4) \(F\)

Prerequiste: ENGL 69 (may be taken Prerequisete: ENGL 696 (may be taken
concurrenty. Intensive studies in English 659 Seminar in Twerictict Century English Literature (4) \(F, S\) Prerequiste: ENGL 69 (may be taken
concurrenty). Intensive studies in English literature from about 1900 to the present. 672. Seminar in the Nineteenth
Century American Renalssance (4) F

Prerequiste: ENGL 69 (may be taken
concurrenty.). Intensive studies in American
 673. Seminar in American Realism (4) \(F\)
Preerquiste: ENGL 696 (may be taken
concurenty. Intensive studies in the
develoment of realim in American literature. 674. Seminar in Twentieth Century American Literature (4) s

Prerequisiste: ENGL 696 (may be taken
concurenty). Intensive studies of 2oth century concurrenty. Intensive studies of 2oth century
American winters, with attention to social torcess Conditioning their points of view.

French and Italian

Department Chair:
Department Office: McIntosh Humanities Building (
Telephone:
\(985-4317\)
Faculty: Professors: Lindsay Thomas, Jr.; Associate Professors: Clorinda Donato, Pier
Assistant Professor:
Assistant Professor:
Irene Marchegiani Jones
Emeritus Faculty: Eugene E.
Kessler, Elizabeth Quillen, Frederick M. Swensen, Herbert A. Winter Administrative Secretary: Karen Fawson
The Department
Students desiring information for referral to one of the faculty advisors: Credential Advisor, Undergra
In the history of Western Europe and its cultural development, the position of the French- and Italian-speaking peoples is central. These traditit ond
have been impressively fertile and have exercised far-reaching influence both in Europe and in North America. very well with specializations in a wide variety of other disciplines by
providing you with a cultural background and personal entichme
of lasting value, whatever your choic of a career.
The Department of French and alian has a carefully structured program. Bassic courses
with both cultural insight and thorough language training. Since al upper-division and graduate classe re studying, you will acquire fluenc in that language. The department als stimulates interest in study and tra participate in the international participate in the international University System and to enhance
their studies through close contact with French- and ltalian-speaking with French- and tialian-sp
The department offers basic and advanced level courses id ition you may choose from a wide variety of courses on iterature, civim
tolk-songs, geography, authors, and literary and philosophical mot
You may select courses that correspond to a topic of particular personal or professional interest
still meet degree requirement
The department offers graduate
study leading to the Master of Atts degree in French. In all upper-divisio and graduate-level courses, French the language of i
Bachelor of Arts in French (code 2-6812)
The maior in French consists of 30 upper-division units in the 300 -and
400 -evel courses indicated below. The number of lower-division units will depend on the amount of French college, since students with prior study of French may enter at advanced standing (usually second or hird year). The major program Single-Subject teaching credential ench, but credential candidates uust take French 414 (Phonetics). Major students should be mindful of equirement" - two college years language, not English. The pepartment also recommends nclusion of specified History cours
in the program of studies. These courses provide additional enrichment oothe cultural component of the udent's course of study. The n excellent liberal arts degree for eneral purposes as well as for professional careers.
Requirements fo
Requirements
Arts in French
Lower Division: FREN 214.
Students who have completed Students who have completed sufficient tigh schoor /rench may ower-division requirements have been met.
Upper Division: A minimum of 30 units of tuper--division courses which
must include FREN \(312 \mathrm{~A}, 312 \mathrm{~B}, 314\), \(335,336,411,440\) and three of the following courses: 414, 470, 471, 472
474, 477, 479, 490. Candidates for
the teaching credential must take
FREN 414 .
Departmental Requirement: Two years of a second foreign language at he college level or e
Departmental Recommendation Students speciailizing in French 32 and History \(335,336,337\). A selection rom the following courses would also e appropriate: HIST 332, 333.
Minor in French (code 0-6812)
A minimum of 20 units which must
include: FREN \(3122,312 B, 314,411\) and at least one other upper-division course in French to make a minimi
total of 15 upper-division units.
(code 5-6812)
Prerequisites:
(1) A bachelor of arts degree in rench, or
(2) A bachelor's degree with a
ninimum of 24 upper-division units French, comparabber-d to thisiose unequired French, comparaber in trench at this Un University. Deficiencies will be determined by the advisor atter consultation with ecords.
Advancement to Candidacy: (1) Approval of the graduate
program by the graduate advisor, the program by tor graduate advisor, the
faculty advisor and/or departmental commiltee, and the College of Humanitites Associa
Graduate Studies.
(2) The candidate should file for advancement upon completion of 6 units and preferably no more than 9 units on the
(3) Successful completion of the University Writing Proficiency
Examination.
Requirements for the Master of
units Completion of a minimum of 30 units of approved graduate-cred
French distributed as follows.
a. 15 units of 600 series courses
which must include PREN 696
b. 9 units of 500 or 600 series courses in French. graduate-credit courses. (NOTE: Courses taken outside the Department are subject
departmental approval.)
2. Two years of college-level study, or equivalent, of another language e.g., German, Italian, Latin, Russian,
or Spanish) with a minimum average grade of ' \(B\) ' or better. This requirement may also be met by passing the Graduate Studies Foreign
language Test (G.S.F.L.T.) in another anguage with a minimum percentile of 500 or better. This requirement comprehensive examination. Students who have a native language other than French or English may meet this second-language
equirement by completing ENGL 300 (Advanced Composition) with a
minimum grade of " \(B\) ' or better.
(3) A comprehensive examination Courses (FREN)
101A-B. Fundamentals of French 4,4) \(\mathrm{F}, \mathrm{S}\)
Fundamental skills of speaking, comprehending,
reading and witing. 101A: For thoee who are Seginning the study of French or who have had one year of high school French or equivalent
\(1018:\) Preerequisite: FREN 101 A or two years o high school french or equivalent. Continuation of
FREN 101 A . REN 101
201A-B. Intermediate French (4,4) Contin Contirued work in speaking, pronurciation,
comperension and wititing with some reading o modern witers in the second semester. 20 in
Preerequiste: \(F R E N\) 10AA-B or thee years of high scheol French of equivelent. 2018: Prerequist
FREN
POAA of tour years of high FREN 201 A or
or equivalent.
214. Intermediate Conversation (3) F,S
 preparef for more advanced work in FREN 314. CreditNo Credit Grading ons
Upper Divisio
312A. Advanced French I (3) F,S Preerequisit: Upper division standing in French \(O\)
equivalent. Review of grammatical principles with regular exerctises and composition work for the developmen
312B. Advanced French II (3) F,S Preeequisite: Upper division standing in French o equivient. Review of grammatical principles with
regular exercises and composition work tor the regular exercises and composition work for the
development of increased mastery of the witter language.

\section*{F,S}

Prenversation (3) Prerequuibit: FREN 214 or consent of ingtructor
Continuation of FREN 214. CreditiNo Credif Continuation
Grading only.
335. Survey of French Literature I (3) \(F\)

Prerequisite: Uper division standing in French.
From the Micdole Ages through the Eighteenth Foentury. Midole Ages through the Egitieen 336. Survey of French Literature II (3) s Preerequisite: Upper division standing in French 411. Advanced French Syntax and Composition (3) F
 Special emphasis on the witing of shor
compositions and developing an awareness of compositions
French styie.
*414. French Phonetics (3) S
 Linguistics applied to the stitudy and teacching of the French language. Articulatory phonetics as means to form native Fiench pronunciation
hatits with emphasis
encountered by speakers of A Americian Enfrgicishties. encountered by speakers of American (3) ES
440. French Cilization (3) S Preerequiste: \(\operatorname{FREN}\) 312A,B (may be taken
concurrently with FREN 335 or 336 or with consent of instructor). Significant aspects of French art, uuture and social institutions. 470./570. French Literature of the
Middle Ages (3) S, Odd Years Preerequistes: FREN 335 , 336 or consent Prefeceuctar. Study of reperesentative crama, poetry
instruct
and and prose of the period. Texts in modern French. 471./571. French Literature of the
Renaissance (3) \(F\), Odd Years Prerequisites: FREN 335,336 or consent of instructor. Study of representative drama, poetry and prose of the 1 toth Century
472./572. French Literature of the Seventeenth Century (3) F, odd yr Prerequisises: RREN 335, 336 or consent of
instrutror. Study of representative drama, poetry
and and prose of the century
474./574. The Age of

Enightenment (3) S, Even Years
Preerauiuites: FREN 335, 336 or consent od
instructor. Study of Instructor. Study of representative curtitent and
thinkers of the century. Drama, poetry and pocen 477./577. French Literature of the (3) F, Even Years

Prerequisites: FREN 335,336 or consent of
instructor. Study of reperesentalive witers of the instructor. Study of representative witers of the century. Drama, poetry and prose.
479./579. French Literature of the (3) F, Even Years
(3) F, Even Years Prerequistese: FREN 335,336 or consent of
instructr. Study of repesesntative witers of the
century. Drama, poetry and prose. *490. Special Topics in French (3) F, S
Study of a particular topio in French literature,
language Stury of a particular topitin in French literature,
language or culture. Speocifo topics to be
announced in the sched annourned in the Schedutitof claskes. May be
repeated with different topics for up to 12 units. 499. Directed Studies (1-3) F S Prerequisites: Consent of instructor and Preerquisites: Consent of instructor and
depatment chair Independent suty undertaken
under the supenision of a facouty member. May under the supenision of a faculty member. May
be repeated for three units provided the material is not the same. Additional coreditid beyond three
unitit is avaiable only under exceptional units is availabie onny under excoeptional
circumstances and with prior approval of the circumstancoes and with prior approval of the
department, but under no circumstances may the total exceed six units.

\section*{Graduate Division}
570./470. French Literature of the
Middle Ages (3) S, odd Prerequisiteg: FREN 335,336 or
 and prose of the period. Texts in modeen French. 571./471. French Literature of the Prerequides. FPEN 335,336 or consent
 instructor. Stuay of representation
and prose of the 16th Century.
572./472. French Literature of the (3) F, Odd Years

Trerequistes: FREN 335,336 or consent of nstructor. Study of representative drama, poetry
and prose of the century. 74, /474. The Age of
574./474. The Age of
Enlightenment (3) S , Even Years Ferequistes: FREN 335,336 or consent of nstructor. Study of representative wirters and
thinkers of the century. Drama, poetry and prose. 77./477. French Literature of the 577./477. French Literature of the Nineteenth Century
3) F, Even Years
rerequistes: FREN 335,336 or consent of instructor. Study of reppesentataive when centur. Drama, poetry and prose. 579./479. French Literature of the Twentieth Century
Prerequisites: FREN 335,336 or consent of instructor. Study of repeseantative
contury. Drama, poetr and pasee. 599. Directed Studies (1-3) F,S Graduate standing with baccalaureate degree of squivalent. Graduatelevel indepth study on
elected topics under the superision of a graduate faculty yember May be sepeated for a maximum of 3 unit. Topic and study outilin of
work undertaken to be on file in Dopartment. Enrollment contingent upon approval
604. Seminar in a Century of
French Literature (3) \(\mathbf{F S}\) S Prerequisiste: Corresponding 400/500 level century
 studies in one of the following: (a) Medieval
period, (b) 16th Century, (c) 17th Century, (d)
 Courses may be taken concurrently or repeatad
century studied is different. Each seminar gives century studied is ififferent. Each
three units of credit for a total of 18 . 688. Seminar in French Literature or Culture (3) F,S
Prerequisit:: Graduate standing in French.
Intensive study of a specific aspect of Fiench Intensive stucy of a speciric aspeot of Fiench
Ilterature or ulture. subjects to be announced in

696. Bibliographical Methods of Research (3) F
Prerequiuiti: Graduate standing in French.
Introcucution to methods of research, scholary Introcuction to methods of research, scholarty
writing. Required of all candidates for the MA. in writing. Required of al candidates ion
French. Same course as SPAN 696 .
697. Directed Research (1-3) F,S Prerequisite: Consent of deparment chair. Individual study under the guidance of a faculty
member. May be taken for a maximum of three units.
698. Thesis (2-6) F,S

Planning, preparation, and completion of thesis

Minor in Italian (code 0-6814) The Minor in Italian provides
academic recognition to students who academic recognition to students
have completed a basic course of studies and have achieved
competence in the Italian languag
Requirements for the Minor in Italian:
A minimum of twenty units must clude: Lower Division ITAL 201A-B, and
214. Upper Divic
and 314 .

Courses (ITAL)
Lower Division
01A,B. Fundamentals of Italian
\(4,4) \mathrm{F}, \mathrm{S}\)
ractice in grammar, reading, pronunciation, 101A For thooe who are beginning the study of talian or who have had one year of high school 10012. Prerequiste: ITAL 101A or two years of
high school taian. Continuation of TTAL 101A. 201A,B. Intermediate Itallian \({ }_{(4,4)}^{2014, \text { F,S }}\)
\begin{tabular}{|c|}
\hline \multirow[t]{5}{*}{of rep} \\
\hline \\
\hline \\
\hline \\
\hline \\
\hline
\end{tabular} 201A. Preverequiste: ITAL 101A.B or thee years of
high school thalian or equivalent.


\section*{(3) \(F, S\)}

Freequuisite: \(1 T \mathrm{AL}\) 101B. Should be taken oncurrenty with ITAL 201A or r2018. Designed to prepare for more advancod work in \(\Pi\) AAL 314 . Upper Division
312A. Advanced Italian I (3) F,S Prerequuiste: Upert division standing in lialian or
equivalent. Review of grammatical principles with logular exercises and composition work for the evelopment in language.
Advanced Italian II (3) F,S Prerequisite: Upper division standing in thallan or eguvare exexecisoes and compoostion work for the
deveromment of incroased mastery of the witter developpment
language.
314. Advanced Conversation (3) \(F, S\)
rerequisite: ITAL 214 or consent, of the
instuctor. Continuation of ITAL 214 . More
 strong basis for correct and fluent proficien
the oral idiom. 490. Spe

Preerequiste: Upper division standing in talian of consent of instructor. Study of a particular topil Specific topics to be announced in the Scheodue of Classes. May be repeala.
to a maximum of 12 units.
499. Directed Studies (1-3) F,S

Preerequisite: Consent of instructor and
department chair. Independent stuydy under the supenision of a a faculty member.
repeated to a maximum of six unit.

\section*{German and Russian \\ college of Humanities}

Department Office: McInto Huma
809
Telephone: 985-4317
Faculty: Professors: Robert P. Bareikis, Jutta Birmele, Harvey L Schefski.
meritus Faculty: Irmgard
Bartenbach, Johanna Roden
Graham K. Spring
Karen Fawson
The Departmen
Students desiring information should contact the department office or referral to one of the faculty Undergraduate Advisor, Graduate ddvisor Russian offers the following courses of study:
Bachelor of Arts degree in
German: Master of Arts degree German: Minor in German; Concentration in German, B.A Liberal Studies; Single Subject
feaching Credential, German; Russian, Concentration in Russian, B.A. Liberal Studies. The need for a knowledge of oreign languages and cultures is growth of internationalism in business, politics, travel, and The Department of German and The Department of German and ecognize the changes in world elations. Course offerings and course content are periodically students' future professions. The department seeks to develop the tudents language skills and cultura iteracy in German and Russian, study, overseas experience, careers in teaching, business, government service, and various other situations. The Department maintains a City of Bielefeld in the Federal Republic of Germany. In alternating ears the city hosts about twenty of
summer with extended excursions
Berlin, the GDR, Cologne, Bonn. avallable. In odd-numbered years we host a similar number of young people from Bielefeld, for whom Address inquiries to the Department of German and Russian.
Student and faculty exchanges of Essen, Oldenburg, and Bielefeld of Essen, Oldenburg, and Bielefeld
have been established recently and are actively supported by the
Bachelor of Arts in German The program in German is designed to meet the needs of
several types of students, including those who seek a liberal-arts education with an emphasis on the German language and its literature elementary, secondary, or the college level; those who plan to use German in professional careers or in program promotes competency program promotes competency
the use of the language and understanding of German literature and culture
The department offers graduate
study leading to the degree in German. Teaching Assistantships are available. In a upper-division and graduate-leve
courses, German is the languge courses, German is the language
used in class discussion and written work.
Requirements for the Bachelor of Arts in German (code 2-6813) Lower Division: One year of Sudents who have completed sufficient high-school German may
take upper-division courses as soon as lower-divisison requirements have been met. Native speakers of German may not e
\(101 \mathrm{~A} / \mathrm{B}\) or \(201 \mathrm{~A} / \mathrm{B}\).
Upper Division: A minimum of 30 units of upper-division courses in German, which must include GERM
\(301,302,315,316\), six units of 401 and six units of 400 -level literature and culture courses.

Departmental Requirement: Two years of a second foreign language majors.
Recommendations: Courses
should be selected in consultation with the major advisor. The department strongly recommend studies or internship in a German-speaking country and will German-speaking co
assist in such plans.
Single Subject Teaching
Credential, German
Requirements are the same as for
the A . plus German 303 and 410 . Minor in German Minor must include: GERM \(301,302,315\) 316, and 401.
Minor in Russian (code 0-6818)
The purpose of the Minor in
Russian is to provide interested students with a focused program of
studies in the Russian language studies in the Russian language. Russian
Prerequisites: RUSS 101A (4),
101B (4)
101B (4)
12 Twits must be tak units, of which 12 units must be taken in upper-division course work: RUSS
\(201 \mathrm{~A}(4), 201 \mathrm{~B}(4), 310\) (3), 312 (3) 314 (3), 410 (3).
Master of Arts in German (code 5-6813)
Prerequisites:
(1) A bachelor of arts degree in
German or: German or
(2) A bachelor's degree with a
minimum of 24 units upper-division courses in German These courses must be comparable to those required of a major in German at the University.
Deficiencies will be determined by the department.
Advancement to Candidacy:
Advancement to Candidacy should take place upon completion of at least six units, preferably no
more than nine units applicable to more than nine units applicable to
the program, with at least a 3.0 GPA . The candidate may file for advancement to candidacy only
atter she/he has filed a transcript
redits or a change-of-objective form, completed the prerequisite and successfully completed the Writing Proficiency Examination The,
The student graduate program
must be approved by the graduate must be approved by the graduate
advisor, departmental committee, and the College of Humanities ssociate Dean of Graduate Studies. Requi
Arts
(1) Completion of a minimum of 30 units of approved upper-division and graduate courses with 24 units Germa
(2) A minimum of 18 units in the
(3) A reading knowledge of

French, Italian, Latin, Russian, or Spanish. Another language may be substituted onl
(4) A comprehensive examination (4) A compress department permission is granted to substitute a thesis.

German Courses (GERM)
Lower Division
101A-B. Fundamentals of German ( 4,4 ) F,S 101A: For those who are beginning the study of
German. 101B: Preerequiste: GERM 101 A or one year of high.ochool Germ
Continuation of GERM 101A.
201A-B. Intermediate German \((4,4)\) F,S
German grammar review with turther
 GERM 101A-B or two years of tigh.school German or
GERM 201A.
204. German for Reading

Knowledge (3) F
Prerequisites: GERM 101A,B or equivalent of consent of instructor. Concontrates on
essentials for translation and it designed chiefly for students in any freld who are
preparing for reading exams in German. 250. Cultural Landscape of Germany (3) F
History and culture of specifio areas in
Germany. Leoturediscussion with audiovisual Germany. Lectura digoussion with
presentationo. Taught in English.
Upper Division
301. Advanced German I (4) F,S Prerequisite: GERM 2018 or equivalent Intense pracatice and the consolidation of the
compostion, and converatation. Emphasis on and idiomatio usage.
302. Advanced German II (4) F,S
Preerequisite: GERM 2018 or equivien
Intengive practice
 compoostion, and conversation. Emphasis on
composition, oral reponts, and discussion. 303. German Phonetics (3) F,S Preerauisite: Upper-division standing in
German or consent of instuctor. General
 applied to the study and teaching of the
German language. Ariciulatory phonoticios as a

05. German Conversation
305. Ge, S

Prerequiste: Upper-division standing in erman. Intensive practice of spoken Geman with stress on vocabulary building.
oronunciation,
intonation,
oral

306. Translating German to

\section*{306. Translating German to
English (3) F,S}

Prerequisiste: Upper-division standing
Prerequiste or copesent of instructor. The
German or
preparation of translations from German texts wide-ranging subiject matter.
309. Business German (3) F

Prerequisites: GERM 101A,B on equivalent on
 Convirsational and wirten approaches and corporate organizations, transportation banking, management. protection, marketimg
Not open to students with credit in German 307 o a 308.) 315. Survey of Germ Culture I (3) F Prerequisist: Upper-division standing in
Serman. German Iterature from the Middle gees to the time of Goethe as related to the other arts, to philosoophy, and 316. Survey of German Literature and Culture il (3) Preerequiste: Uppet davision standing in
German. Geeman lieratur fiom Romaniciom
 Philosophy. and to the
nostutuions of the time.
3701. Wagner's Operas in

Perspective (3)
Prereauistes: ENGL 100 and upper divison
status. The texts of the Wagner operas, their status. The texts of the Wagner operasa, their
 Wagner's
Englioh.
3801. Contemporary Germany,
Society, and Culture (3) \(F\) Prereaulistes: English 100 , upper-division
standing of consent of instructor. The FRG and the GDR present two opposing modelis of a modern state. Within ititulock of alliances, each is viewed as a valued patrner. They are
separated by a heavily guardod borde. The separated by a heaviy guarded be the other
main topics of the ccurse are
. elements that separate these two German
states. The course also examinese these bonds states. The courre also examinines theoe bonds Readings are taken from the social sciencees
and iteraray genres to create a broad basis of anformation and dritical view of the many facets of both societies and oultures.
English. Traditiona grading unl.
398. Topics in German (3) F,S Prereauisite: Upper division standing in
German or consent of instructor. Exploration of Geman or consest of instructor. Exploration
topicics in language, cuturure, and literature.
Sin Specificic topicics to be announced in the
Schevie of Classes. May be repeated with
dite different topics to a maximum of six units. 401. Advanced German Sy
and Composition (3) F,S Prerequisites: GERM 301, 302. Practioe in developing a style and vocabulary suitable for the witing of reports and essays on cuituraa
and literary topics May be repeated to and ilterary topics.
maximum of six units.
410. German Civilization (3) S Prevequisite: Upper-divilon standing in
German. Historical development of importan instrutions, customs and thought. 430./530. German Poetry (3) F Prevequisite: Upper-division standing in
German. German poetry from the Barocue to the present.
51. German Novella (3) F Prerequiste: Upperadivision standing in Iiterary genre, represented by Goethe, Tiec Kleist, Keller, Meyer, Stom, Spielh
Kafka, Themas Mann, and others.
454./554. German Literature of the 18th Century (3) S
Preerequivite: Uppor-division standing
German. Literaray trends of the 18 ch century \(y\) ith Geemman. Literary trends of the 18th century w omphaile on Lessing. Weland, Klopstock
Herder, Goethe, Schillef, and the authors of the
. Herser, Guatine, Schnt:"
458./558. Nineteenth Century Literature (3) S
Preerquiste: Upper-division standing in "Biedermeier." F Jungees. Deeutcochland" and "Poetscher Realimus", against the back
ground of the historical., philiosophical, and cultural movements of the times. 459A./559A. German Literature rereauishe: Uoper-divisio
 Soerman. Maior German prose, drama, and
prom Naturalimm to the end of World Wa
\begin{tabular}{|c|c|c|}
\hline 459B./559B. German Literature from 1945 to Present (3) S & 559A./459A. German Lh from 1890-1945 (3) F & Russian Courses (RUSS) \\
\hline Prerequisite: Upper-division standing in German. Significant contemporary German witers of prose, drama, and poetry. & Prerequisite: Graduate standing in German. Maior German prose, drama, and poetry from Naturalism to the end of World War II. & Lower Division \\
\hline 470. German Literature in English (3) S & 559B./459B. German Literatu from 1945 to Present (3) S & 101A-B. Fundamenta Russian (4,4) F,S \\
\hline Study of significant German writers, German literary movements, or a specific literary genre in English translation. & Prerequisite: Graduate standing in Germ Significant contemporary German writers prose, drama, and poetry. & Practice in grammar, reading, pronunciation, writing, and corversation. 101A: For those who are beginning the study of Russian. 101B: Pre- \\
\hline 98. Topics in German (3) F,S & \multirow[t]{2}{*}{\begin{tabular}{l}
590. Approaches to the Study of German Literature \\
(3) F, Even Years
\end{tabular}} &  \\
\hline requisite: Senior standing in German or & &  \\
\hline in the schedule of Classes. be announced in Scill May be repeated with different topics to a maximum of six units. & \multirow[t]{3}{*}{Preerequisite: BA. in German or equivalent. Evaluation of various methods in interpreting a literary work of art; different levels of interpretation; concepts of literary movectent; literary appreciation; introduction to bibliographical aids. May be repeated with different topics to a maximum of 9 units.} & Oral and witten practice with grammar review. 201A: Prerequisites: RUSS 101A-B or two years of high-school Russian or equivalent. 201B: \\
\hline 499. Directed Studies (1-6) F & & \\
\hline Prerequisite: Consent of instructor. Independent study undertaken under the & & Russian \\
\hline Graduate Division & 599. Directed Studies (1-3) F,S & \\
\hline 508. Topics in German Language Studies (3) S & & Upper Division \\
\hline \multirow[t]{2}{*}{Prerequisite: B.A. in German or equivalent. intensive studies of etymological, phonological, morphological, and syntactical aspects of the
German language. May be repeated to a maximum of 12 units with different topics.} & units provided subject matter is distinct each enrollment. & 310. Russian Literature in English (3) F \\
\hline & 652. Seminar in Medieval German Literature (3) S, Even Years & he \\
\hline \begin{tabular}{l}
511. Selected Topics in German Culture and Civilization \\
(3) F, Even Years
\end{tabular} & \begin{tabular}{l}
Years \\
Prerequisite: B.A. in German or equivalent. Reading and analysis of Middle High German
\end{tabular} & major themes of Russian life as seen through eliterature of the nineteenth and twentieth enturies. \\
\hline \multirow[t]{3}{*}{Prerequisite: B.A. in German or equivalent. Intensive studies in special topics of the artistic, intellectual, social, religious, economic, and political development of the German-speaking countries, as announced in the Schedule of different topics, to a maximum of 9 units.} & texts with an introduction to Middle German grammatical forms and structures. open to students with credit in GERM 505 . & \begin{tabular}{l}
312. Advanced Russian (3) F \\
Required background or experience. Ability to \\
read general material in Russian and to
\end{tabular} \\
\hline & 653. Seminar in a Century & ate non-technical material into the \\
\hline & \multirow[t]{5}{*}{Prerequisite: Corresponding 400/500-level century course or consent of graduate adierary
Topics dealing with literary trends, literary genres, or individual authors. Intensive studies in one of the following: (a) 16 th century, (b)
17 th century, (c) 18 th century (d) 19 th century, (e) 20 th century. Courses may be taken concurrently. A century may be repeated once ied is diflerent.} & tings, review of grammatical principles, and general consolidation of the four language \\
\hline 530./430. German Poetry (3) & & reading, orver \\
\hline  & & 314. Russian Conversation (3) F \\
\hline 541./441. German Novella (3) & & Prerequisite: Upper-division standing in Russian or consent of instructor. Intended to meel specific, everyday situations and to provide \\
\hline \multirow[t]{2}{*}{Prerequisite: Graduate standing in German. The German Novella as a separate literany genne, represented by Goethe, Tieck, Kleist, Keller, Meyer, Storm, Spielhagen, Hesse, Kafka Thomas Mann, and others.} & & help to those who intend to use Russian for travel, work, or classroom instruction. \\
\hline & \multirow[t]{2}{*}{\begin{tabular}{l}
697. Directed Research (1-3) F,S \\
Prerequisite: Consent of graduate advisor. Required of all candidates for the master of arts in German who do not choose to write a thesis.
\end{tabular}} & 399. Directed Studies in Russian Language (1-3) F,S \\
\hline \begin{tabular}{l}
554./454. German Literature of the 18th Century \\
(3) S
\end{tabular} & & A Directed Studies course designed to meet the individual needs of students. \\
\hline Prerequiste: Upper-division standing & \multirow[t]{3}{*}{\begin{tabular}{l}
698. Thesis (1-4) F,S \\
Prerequisite: Consent of graduate advisor. Planning, preparation, and completion of a thesis. Does not count toward 30 units required for the M.A. degree.
\end{tabular}} & 410. Introduction to Russ Civilization (3) S \\
\hline German. Literary trends of the 18 th century with emphasis on Lessing, Wieland, Klopstock, Herder, Goethe, Schiller, and the authors of the "Sturm and Drang." & & erequisites: ENGL 100, upper-division stand or consent of instructor. An examination of characteristic features of Russian culture \\
\hline 558./458. Nineteenth Century Literature (3) S & & with special attention to the study of art, architecture, folklore, music, poetry and religion. \\
\hline & & 499. Directed Studies in Russian
\[
(1-3) \mathrm{F}, \mathrm{~S}
\] \\
\hline  & &  \\
\hline
\end{tabular}

459B./559B. German Literatur
from 1945 to Present (3) S
Prerequiuite: Uper-division standing in
German. Significant contemporand German werman. Significant contemporay.
(3) © Literature in English

Study of significant German witiers, German iterary movementit, or a specifici literary gen 498. Topics in German (3) F,S onsent of instuructor. Exploration of topicis in obe announced in the scheduie of Classes. (1-6) FS

Prerequisite: consent of intractor.
idependent study underaken under the Graduate Division
508. Topics in German Language
Studies \((3) \mathrm{S}\) requitei 1 A

German or equivale tensive stucies of etymological, phonological. eman lenguage. May be repeated to a
11. Selected Topics in German Culture and Civiliz
(3)
Prerequuisite: B.A. in German or equivalent.
intensive studies in special topics of the artistic, hetelectual, social, reigious, economic, and countries, as announced in the scheocealing of
Classes. May bo repeated tor credite with 530./430. German Poetry (3) F frerequisite: Graduate standing in German.
German poetry fom the Baroque to the
541./441. German Novella (3) F rierequiste: Graduate standing in German.
the German Novella as a separate ilterary

554./454. German Literature of th Century (3) Preerequiste: Upper-divion standing in
Geman. Literary trends of the 18 ith century with mplesis on Lessing, Wieland, Klopstock,

Iterais. Nineteenth Century
Prerequisiste: Graduate standing in German. "Biedermeier", "Junges Deutscchland" and
"Poetischer
Realismus" against
the backround of the historicical, philisosophical, and

559A./459A. German Literature
Prerequisite: Graduate standing in German.
Maior German prooes, drama, and pootry trom 59B./4598. German Literature m 1945 to Present (3)
Perequibiste: Graduate standing in German.
significant contemporary German witers of 90. Approaches to the Study of German Literature
rerequiste: BA. in German or equivalent Evaluation of various methods in inteppreting a
verary work of art; different levels erpretation; concepts of ilierary movemente bibliographical alds. May be repeatied with 599. Directed Studies (1-3) F,S Prerequisites: Graduate standing. Consent of
nstructor and ohairperson or graduate advisor. Selected topics in German to be pursued
depth. May be repeated for a maximum of ach enroliment.
52. Seminar in Medieval Years
 German grammatioal forms and structures. 1 Nat 653. Seminar in a Century of Corequiste: Corresponding \(400 / 50-1\)-evel opics dealing with itierary, trends, Ilterary one of the following: (a) 16th century, (a) b) 2 ath century. Courses may be take
oncurrently. A contury may be repeated onc 997. Directed Research (1-3) Perequiste: Consent of graduate advise 98. Thesis (1-4) F

Prerequiste: Consent of graduate adviso
Planning, preparation, and completion of hesis. ODes not con
or the M. degree.

Russian (4,4) Fstals
Practice in grammar, reading, pronunciation,
writing, and corveratation. 101A: For those who
 shool Russian. Continuation of Puss 101 A .

Oral and witten practioe with grammar revien
Oral and witten practico with prammar review.
201A: Prerequistes: RUSS 101A-B or two year of high-chool Russian of equivilent. 201 . chool Russian or equivalent review fundamental skills of beginning Russian Upper Division
310. Russian Literature in Prerequisites: ENSL 100 or equivalent and or Taught in English, this course examines the maior themes of Russian life as seen throug
the literature of the nineteenth and twentiet
312. Advanced Russian (3) F Required background of experienco. Ability to
tead general materiad in uussian and to
translate nontechical transate . .on-techical material into the
language. Etennice reading of Russian
witings, review of grammatical priniples, and witings, review of grammatical principles, and
a general consolidation of the four language
314. Russian Conversation (3) F Consent ofperdinsion standing in Russian specifif, everyday situations and to provid help to those who intend to use
99. Directed Studies in Russian

Language (1-3) \(F\), \(S\)
410. Introduction to Russia les
or consent of instru, upper-division stand
 99. Directed Studies in Russian ierequiste: studert Reacings in areas of mutual intere nay be eequired.

Department Chair: Frank W. Wylie Department Chair: Frank W.
Office: Social Science and Pub Affairs (SSPA), Room 024 Telephone: ( 310 ) 985-498 Garvey, Wayne F. Kelly, Larry Garvey, Wayne Fye Kelly, Lary Professors: Jack Heeger, Whitney Mandel, William A. Mulligan; Assistant Professor: Victor Valle
Emeritus Faculty: James H. Bliss, Ben Cunningham, Dixon L. Gayer, Robert A. Steffes, Rober Cherie Dougan
The Department
Students desiring information
should contact the department office for referral to one of the faculty Journalism Option, Head of Magazine Option, Head of Newspaper Option,
Head of Public Relations Option the Head of Photojournalism Option, or the Head of Journalism Education Option, Publisher of the Daily
orty-Nine
The Journalism Department offers
six career areas. The Newspaper Option prepares students to work as reporters and editors on newspaper training for employment on consumer magazines, trade journals, and company publications. The
Photoiournalism Option prepares students for careers as
photojournaists for newspapers and magazines and freelance
photoiournalists. Broadcast Journalism students learn to gather and prepare material for radio and option prepares students for careers in all phases of public relations and public affairs areas including: media public relations writing and publications, government and community affairs, and for work in The Journalism Education Option curriculum meets the requirements for a single-subject California seconday teaching credential. Journaism
Education Option students, by taking courses in journalism in conjunction with courses in Education and reland
advise high
publication
The Accrediting Council on Education in Journalism and Mas
Communications writes on the education of a journalist: The traditional arts and sciences rema the solid basis of professional
education for all of journalism an mass communications." In applying this philosophy to the course work ACEJMC asserts: The spirit of liberal education has been expressed through a formula - that students tak a minimum ourses outside the major area of journalism and mass
ommunications, with no fewer than
6.... semester hours in the liberal arts
and sciences." Students can have more than 34 Journalism and Communication units unless they
already have 90 units in Liberal Arts \& Sciences and "other" category.
The Journalism Department's daily laboratory newspaper, the Dail Forty-Niner, serves a campus
community of nearly 35,000 students aculty and University staff. Magazin ption students produce University Magazine, a a oubliceation. Broadcast Jurnalism students work at KLON-FM 88 which produces daily Angeles and northern Orange Count Students also work with University elevision to produce a monthly cable options are eligible for internships on various media outtits and in publi lations or corporate PR on-profit organizations throughout outhern California. The department helps grad
find jobs. Requirements for
Programs leading to a Bachelor of Arts in Journalism are: Broadcas
Journalism, Magazine Journalism Journaism, Magazine
Newspaper Journalism
hotojournalism, Public Relations, and Jurnalism Education options All journalism majors and students expected to be able to word-proce

\section*{Journalism \\ Colege of fummanties} at least 40 words per minute.
Students should be familiar with Word Perfect program before enroling in
JOUR 120. Magazine students should aso be familiar with Microsoft Word. Photojournalism students should be
familiar with Aldus Pagemaker. JOUR 20 is the basic writing and reporting course for all journalism majors. ludents who have been granted English 100 on another campus must ake the English Placement Test at CSULB and receive a score of at least
55 to enter JOUR 120 . New students must pass the university's Witing roficiency Exam before taking JOU 20 (effective Fall 1991). Transfer university test during their first emester on campus and before JOUR 110). For all Journalism majors, a grade of 'C' or better in
OUR 120 (or its equivalent), and passing the WPE, are prerequisite for
courses with a 120 requirement. nglish 101 is required as a 12. 418,498 , and 499 (except PR and photojournalism students). Journalism majors must have a minimum grade of 'C' in all journalism lasses. A major can repeat one
ourse within the Journalism
maj oly once: a " D " or or F " " grade on the econd attempt or in a second course disqualification of the student as a journalism major. In the event of special circumstances, a student may aculty board. Transfer students mu complete at least 50 per cent of their pper division journaism courses on
is campus. Transfer courses are ubject to evaluation for acceptance \(y\) the option heads. To assure Accrediting Council on Education in Journalism and Mass
Communications, community colleg which have articulation agreements which have articulation agreements
with CSULB) may transfer no more than 12, usually 9 or less, semester ACEJMC rules also require that al ournalism majors must complete at east 90 units of course work in
non-communication courses, of which a minimum of 68 units must be in
traditional Liberal Arts and Scien areas. The term "communication" as journalism units plus units for a other courses whose primary focus is the development of communication
skills. Check with the Head of your option or the department chairman \(\frac{\text { before registering for classes. Majors }}{\text { must obtain the approval of a }}\) must obtain the approval of a
jounalism faculty advisor each semester before making out a class
schedule. ACEJMC divides courses into three basic categories: liberal art and sciences, journalism and
communication, and "other." classes not specified as liberal arts
and science (anthropol logy, etc.) and apurnalism and communication are isted in the "other" category. These include, but are not restricted to,
recreation, marketing, sports, recreation, marketing, sports,
business, finance, industrial arts an other professional courses. To meet
the ACEJMC requirements a student the ACEJMC requirements, a student
must have a minimum of 68 liberal arts and science units, a maximum of 34 journalism and communication
units, and a maximum of 22 " other units, and a maximum of 22 "other"
units. Example: A Marketing minor requires 18 units; if a student brings in 6 business units and 4 P. E. units, he/she has a choice: (1) take a minor
in liberal arts and sciences or (2) be prepared to take more than 124 units o qualify for graduation. All majors will special circumstances an area of specialization) outside of journalism designed to aid in reaching the Students whoals
prerequisite and have not taken 101 English 101 on this campus must have certification from the CSULB
English Department that a course Engisen on another campus is
taquivalent to English po1.
equivalent to English 101 .
All entering students must see
All entering students must see a journalism advisor prior to preparing
class schedules in their first semester on campus. Transfer students must bring their community college/college/university transcripts Specific Requirement meeting Bachelor of Arts in Journalism Please note requirements differ for
each option Option in Broadcast Journalism (code 2-6460)
A minimum of 33 communication units (27 journalism units of which 21 units must be upper division and 6
RTVF units) to a maximum of 34
communication units. The required RTVF courses are RTVF 220 and and RTVF courseq take up 33 of the into a minor or an area of concentration on at least 15 units of
study outside of journalism designed study outside of journalism designed
to aid in reaching their professional to ad in reaching their profess
goals. Students must have a minimum of 90 non-communication units with at least 68 of the 90 in the
traditional Liberal Atts and Science areas. No more than 22 units can be in areas that do not fall into the into
the Liberal Arts and Science or the Liberal Arts and Science or
Lower Division: JOUR 110, 120,
RTVF 220, RTVF 230, SPCH 271. Upper Division: : 0 UR 319, 321 ,
325, 882 A , and B, 430 and following: 312, 315, 412, 418, 431, the
494 , 498 , 494 , or 498.
Recommended additional courses:
Jour 320,420 and 490 .
Option in Journalism Education (code 2-6836)
A minimum of 24 journalism units o which 15 must be upper division selected in consultation with an advisor
Lower Division: JOUR 110 and 120 323, 331 Division: JOUR 319, 320

Recommended
JOUR 115 280, JOUR 115, 28 ,
490 and 499 .
To qualify for a credential that will To quality for a credential that will California Public schools, a student
must complete the journalism must complete the journalism requirements specified above and the
following core of 31 units of Enalish courses: ENGL 184, 310, 363, 482; either ENGL 320 or 325; and three
courses from ENGL 250A, 250B, courses from
370 A or 370 B .
Option in Magazine Journalism
(code 2-6465) (code 2-6465)
A minimum of 29 journalism and a
maximum of 34 communication units of which at least 18 must be upper division. Students will be advised into a minor or an area of concentration of
at least 15 units of study outside of journalism designed to aid in reaching journailsm designed to aid in reachin
their professional objectives. Students must have a mines umum of 90
non-communication units with at least non-communication units with at leas
68 of the 90 in the traditional Liberal Arts and Science raceas. No more than 22 units can be in areas that do
not fall into the Liberal Arts and Science or Communications categories.

Lower Division: JOUR 110, 120,
Lower Division: JOUR 10,120 ,
Und 262 . 430 and two or more of the following OUR \(315,350,412,418,431,455\) -
Recommended additional courses
OUR \(115,180,280\) and 499 . option in Newspaper Journalism code 2-6461)
A minimum of 29 journalism and a
maximum of 33 communication units, of which at least 21 must be upper dision. Students will also be outside of journalism designed to ad in reaching their professional objectives. The department requires
Newspaper Option majors take ENG 320, English Grammar, prior to taking JOUR 331, Advanced Copy Editing and Make-u. A foreign language is so recommended for majors in the have a minimum of 90
non-communication units with at leas
68 of the 90 units in the traditional 68 of the 90 units in the traditional
iberal Arts and Science areas. No more than 22 units can be in areas that do not fall into the Liberal Ar
and Science or Communication categories.
Lower Division: JOUR 110 and 120. Upper Division: ENGL 320, JOUR
\(316,319,320,323,331,420,430\), and one or more of the following: \(31,494,498\), or 499.
Recommended additional courses Option in Photojournalism

A minimum of 29 units as specified Aelow, of which at least 21 must be the upper division. Students must
have a minimum of 90 on-communication units with at least 68 of the 90 units in the traditional biberal Arts and Science areas. No hore than 22 units can be in areas
hat do not fall into the Liberal Arts and Science or Communication ategories. Students will be concentration of at least 15 units of study outside of Journalism designed aid in reaching their professional goal. Lower Division: JOUR 110, 120 and Upper Division: JOUR 316, 319,
324A,B, 331, 380, 430, and 480.

Option in Public Relations (code 2-6837)
A minimum of 30 and a maximum of 34 journalism/ communication units, of which at least 27 must be upper
division. Students will also be counseled into a minor or 15 units of study outside of Journalism designed to aid in reach hing their academic and protessional objectives. The preferred
minor is Marketing. Students should take one research methods course before they graduate. It is strongly
recommended that students in this option take as many English writing courses as possible and transter in, or take, at least a year of foreign language, and take advantage of the
ethnicity classes offered at CSULB. Students must have a minimum of 90 non-Communication units with at lea
68 of the 90 units in the traditional 68 of the 90 units in the traditional
Liberal Arts and Science areas. No more than 22 units can be in areas and Science or
Journalism/Communications
categories. ENGL 320 is required for all PR majors.
Uwer Division: JOUR 110, and 120 Upper Division: ENGL 320, JOUR
\(370,374,375,376,430,478\) and JOUR 470 or 471 , and one of the following:
and 499.
Minor in Journalism (code 0-6835) A minimum of 21 units including:
Choose one area of concentration Broadcast: JOUR 110, 120, 319, \(1,325,430\), and 431
Magazine: JOUR 110, 120, 237 ,
362 and 9 additional upper division units to be selected by student and advisor.
News/Editorial: JOUR 110, 120,
\(316,319,331\), and six units from 312 , \(316,319,331\), and six units from
\(320,323,412,422,430\) and 431 . Photojournalism: JOUR 110, 120 180, 324, 331, 380, and 430 . Public Relations: JOUR 110, 120 ,
\(370,374,375,376\) and 471 or 478 .

\section*{Courses (JOUR)}

\section*{Lower Division}
110. Introduction to Mass
Communications (3) F,S

Oigins, development and contemporayy rote of newspopers, magazines, radio, television, books,
and filims, and such related felds as advertising


\section*{120. News Writing and Reporting}

\section*{(3) F ,}

PTerequubites: Ability to type and a 'C' or better in
ENGL 100 . Stury of newe sources, reporting and
 axd responsibitites of the reporter. Practical
exercies in reporting and wition nexs and
prepaing copy tor publication. (cAN Jour 2)

\section*{180. Introduction to}

Photography for the photopiounalist, witier a
editior. Course covers operational techicues of producing pictures for newspapers and magazines. Skills are developed through practical exercisese in news coverage with
laboratory instrution. Materials fee. Activity, A
hours.)
237. Magazine Making and Editing \({ }_{\text {(3) }}^{237 .} \mathrm{F}, \mathrm{S}\)
rerequisite: JOUB 120 with grade of 'C' eetequisere: Fundamental principles of periodical mablication and methods of editin

 Writing. Proontreading. makeup and headine
witing. Attention also is given to production problems of the modern-day magazine
251. Feature Writing (3) F

Prevequiste: JOUR 12 with a grade of ' 'C' or
seter or consent of instructor. Feaeture Witing covers the feature articlut tor both newopspapist and meapaines. It discussese styte, organization,
human interest. the use of quutes, leads, and human interest, the use of quotess, leads, and Matcone
Majorsminors.

\section*{aiors Minor \\ (2) F Magazine Production} erequistes
Perequistes: JoUR 120 with a grade of 'C' or nagazine and pubbications experiencen inn
 adhertiong and ppocuution. Superivised wation
The Univerithy Magaine. Course may be The Unveraty Magazine. Courre may
repeated for a maximu of 4 unit. TTaditional
grading ony for MajorsiMMinar. (Laboratory 3 grading onl
hourss)

\section*{80. Intermediate}

Photo-journalism (2) F,S
 echniques of photociournalism as os instructor.
 emphasis on the news and communication
values in pictures. Experience with various typeso

 demonstrations, foll tripe and \(p\)

\section*{Upper Division}
312. World Press (3) F,S

Prereauliate: ENGL 101. An analysis of the
world's news media with emphasis on their tructure oumership, wocial and pootical roles
and the degies of govennent pressure and
control. Particular attention is patid ro the posstion of the media in developing nations. Examination
of the methods and problems of the American foreitn corroespondent.

\section*{(3) S}

Prerequisiste: ENGL 101. Sets cirteria for defining
 Stephen Crane, Mencken and Caums to to E.B.
Ehite, Updike, Didion and Tom Wolfe - which have earned a placace in iterature.

\section*{19. News Reporting (3) F,S}

Prerequisites: Journalism 122 and Journaliom
316 for Newnpaper option students. Course couses on news reporting and indoctuseses stury of reporting and witing dififerent types of stories.
Students woik as staff witers on the Daily FortyNiner. Course may not bot taken simutaneocusly with Journalism 323 or 422. Laboratory 9 hours.
Not open to students receving crodit in Jour
322. Tradtional grading only for Malors Minors.

\section*{20. Reporting Public Affairs}
3) \(\mathbf{F , S}\)
eews coveras JOUR 120 or consent of instructor. News coverage of police, courts and dity, county.
tate and Federal government. Study and ractice in methods of investigative reporting. repoting and wititing practice 3 hours.) 32). Tele
(3)
reerequistes: JOUR 122 with a grade of 'C' or
beter and RIV 230 or consent of instructor. It is Setter and RIV 230 or consent of instructor. It is
 323. Advanced Newspaper 323. Advanced Newspaper
Writing and Reporting (3) F,S Prerequivites: Journaliam 319 and 320 . Course
tocuses on advanced news eparting and witing
and includues study of interiewewng technicues. and includes study of inteviewing techniquess Foty-Niner. Course may not be taken
simultaneousty
with
Journalism 319 or simultaneously with Journalsm 319 or 422
Lebocratory 9 hours. Traditional grading only for MajoratMinors.
324A,B. Photography fo
Publication ( 3,3 ) \(\mathbf{F , S}\)
Prerequisictes: JOUR 1220,180 or equivielency test
 ohsent or instructor. Students with quallining
photo skills will comprise staft of the daily Forty-Niner newspaper. Stafters will be campus news and teature events tov daity and special edition use. Photographers swill practici techniuaes of newspaper photorocraphy theroug asigned stoties as well as persocnally developed
 weekly photo conterence. Students must provide
own camera. Materiads fee. (Laboratory 6 hours 325. Radio News Writing and Reporting (3) F,S
Preerquishes: JOUR 120 with a grade of 'C' on
petter and RTV 220 or consent of instructor setter and RTV 220 or consent of instructo
Techniques of gathering. Writing and edting Techn
news.
\begin{tabular}{ll} 
331. Advanced Newspaper Copy & 380. Advanced Photojournalism \\
(3) \\
(3)
\end{tabular}
494. Research Methods in Mass

Communications (3) S
Prerequisiste: Consent of instructor. Basic
techniques of research in mass communication lechniquess of research in mase commuulication
and mase media vorview of theory building and hypothesis testing procodures as applicable to
current problems in the field. Scientifiem methocts, survey and experimenta design, Interd studies, anayyis of
Prerequisites: ENGL 101 (excopt PR and
 facuity recommendation, with consent of
department chair. Work of an editorial or wrting department chair. Work of an editorial or writng
nature at least one tull day \({ }^{2}\) wek. with
cooperating organizations in the Los

Angeles-Orange County area. Work edited and evalated by supenisiors of the participating public relations and media firms. Regulas reports
to faculty supenisor and regular scheduled to fatuity superivor and regular schediuled
meetings with superisoor on-campus to disusus progress and problems. N.B. Students must
obtain prior witten peemission from their option obtain prior witien permiession from theif option
head to take this course. Such permision must be granted at east fout (4) weeks beforer the end
ot the perious semester CRNC grading only. of the previous semester. CRNC grading only Prerequisteo: ENGL 101 (excopt PR majors)
 megazine, publicior relations, acvertising or other related fields. Open to journalism maiors ont

\section*{Colloguis of tumantics}

Director: Stephen B. Ross Department Office: Mcintosh
Humanities Building (MHB), Rm 311 Humanities Building (MHB), Rm
Telephone: 985-4210; \(985-4223\) (msg.) Faculty: Professors: Robert H .
Berdan (Educational Psychology), Beverly J. DeLong-Tonelli
(Spanish-Porto (Spanish-Portuguese), Robert C. Hertz (English), Stephen Knafel (English), Walter B. Moore, Jr. Communicative Disorders), Eonsuelo Nieto (Teacher (Teacher Education), Fernando Peñalosa (Sociology), Stephen B.
Ross (English), Sara Smith Ross (English), Sara Smith (Psychooghy), G.A. Spangler
(Philosophy), Lynn Snyder (Communicative Disorders)
Lindsay Thomas, Jr. Lindsay Thomas, Jr. French-htalian), John Williams
(English), Fathi Yousef (Speech Communication; Associate Professors: Edward J. Borowiec (English), Pamela Bunte McCullough (English), Akir Miyazaki (Asian and Asian-American Studies), Carolyn Disorders), Terrence wiley Educational Psychology Assistant Professors: Terry
Ballman (Spanish-Portugese) Ballman (Spanish-Portugese), Pusavat (Asian and Asian American Studies).
Students
Students desiring information should contact the program office
or referral to one of the faculty advisors.
Baccalaureate Minor in
Linguistics (code 0-6833)
inguistics (code 0-6833)
A minor in Linguistics consists of
a minimum of 21 units, with at least one course selected from each of five subject area categories. Athough not required for the mino foreign language courses are recommended. In selecting courses
students should be aware that some courses have prerequisites,
including language proficiency Courses which are counted for a
minor, but students who have taken course from any category as a pa heir maior may substitute an of the Interdisciplinary Program in inguistics.
Requirements:
Select one course from each Category I-Introduction: ANTH
170, ENGL 325, HUM 363IC. MEXA 402:
Category II - Phonology: CD 303, SPAN 425;
Category III- Syntax: ENGL 421,
FREN 411, GERM 401, SPAN 426; Category IV - Psycholinguistics
and Neurolinguistics CD 329,361 . V4, PSY 438, Category V - Language, Culture
and Society: ANTH 4121C, 413, SOC and Society: ANTH
485IC SPCH 451;
Electives to a program total of 21 units selected from: any course isted above, ANTH 470, CD 380 403, PHIL 484, SPAN 412, 427, SPCH 448, and variable/special opics courses on linguistics
subjects offered through the participating departments. These opic courses are shown on an approved list available in the Master of Arts in Linguistics Master of Arts in Linguistics
(code \(5-6833\) )
The program for the M. A. degree \(n\) linguistics is interdisciplinary in nature to accommodate a variety of needs of students within the program. The program is esigned
both for students who wish to pursue further graduate study and seoke seeking a terminal degree. It applied aspects of linguistics, both in the overall curriculum and in most of the individual courses.
The M. A. in Linguistics offers fou
concentrations [1] General Linguistics;
[2] Language and Culture;
[3] Teaching English as a Second Language; and [4] a Special Concentration, through which a student, in
consultation with a designated faculty member, constructs a concentration which has not been formally listed here, using existing courses. For all four
concentrations, there is a core of
classes (15 units) which must be taken by each student; the remaining units for the degree are to contain the courses taken in the concentration.
eaching assistantships are sometimes available to qualified
students. tudents.
rerequisites
(1) A bachelor's degree which follows:
(a) Twelve units in linguistics (descriptive linguistics, historical or linguistics, psycholinguistics, ethnolinguistics). (b) Six units, either in linguistics or in a related area (cross-cultura studies, TESL and foreig
language instruction symbolic logic, artificial and sign languages, literature, etc.)
(2) A GPA of 2.50 on the last 6 units. (3) Passing of the CSULB Writing
Proficiency Examination Examination.

\section*{Advancement to Candidacy:}

\section*{(1i) Satisfaction of the general} university requirements for including prerequisites, the Writing
Proficiency Examination, and GPA.
(2) Completion of the foreig
anguage requirement, either:
(a) two courses of a foreign language at the upper division
level, or the equivalentit or (b) two curent, or (b) two courses of an
Indo-European language and two courses of a non-Indo-European language, or equivalent.
(3) Completion of six units of course work within the program, exclusive of any classes used to neet prerequisites
(4) Approval of the candidate's graduate program by the Program nstructional Programs of the College of Humanities, and any relevant university policy.
(5) Advancement must take place
o later than the semester before the student graduates
Requirements for the Master of Arts:
(1) A minimum of 30 units of graduate courses for the thesis option or a minimum of 33 units of approved upper division
graduate courses for the
comprehensive examination option
including
(2) A minimum of 21 units at the
500 or 600 level. (2) A minimum
500 or 600 level;
(3) The completion of the five
degree;
(4) The completion of the
equirements of one of the concentrations designated in the ogram
(5) Completion of one of
(a) A thesis and its accompanying
(alminater oral defense and oral examination. (b) The comprehensive accompanying graduate paper.
(6) A GPA of 3.00 on all courses included in the program.

\section*{The Core:}
(1) Two courses from the
following three: LING 633.-
Discourse Analysis (3): LING 620 Seminar in Syntax (3); or LING 625 - Seminar in Phonology
(2) One course of the following wo: LING 540 - Sociolinguistics (3) or LING 621
Linguistics (3).
(3) One course of the following
three: PSY 539 - Language Acquisition, or SPAN 524 Language Acquisition: Theory and (4)
(4) One course of the following (w). ANIN 5ING 596 - Research Methodology (3).

\section*{The Concentrations:}

General Linguistics Concentration 12-15 units), including all courses in he core except only one course fom Category 3: and approve language and Gender (3), ANTH 597 - Directed Readings in Anthropology (3), ANTH 630
Seminar in Anthropological Seminar in Anthropological
inguistics (3); CD 5818 Neurolinguistics (3), CD 665 Seminar in Language Disorders in
Adults (3):
DD
\(573-\) Intercultural Adults (3); EDP 573-Intercultural 672 - Lan guage and ducational Policies (3); ENGL 523 -Semantics (3), ENGL. 524History of the English Language (3),
ENGL 620 - Bilingualism (3), ENGL NGL 620 - Bilingualism (3). ENGL 23 - Seminar in Dialect Study (3); FREN 490 - Special Topics in rench [Linguistics]] (3): LING 575 iteracy and Linguistics (3), LING ING 698 - Thesis (3- \(\mathbf{6}\) ): PHIL. 570 Symbolic Logic II (3), PHIL 584 Philosophy of Language (3), PHIL
590 G - Special Topics: Logic and 90G - Special Topics: Logic and sycholinguistics (3): SPAN 525 History of the Spanish Language; PCH 551 - Intercultural 600 Seminar in Nonverbal
ommunication (3).
Language and Culture
Concentration ( (12-15 units). ANTH inguistics (3), and LING 540 Sociolinguistics (3) and approved selections from ANTH 413- anguage and Culture (3), ANTH ANTH 570 - Field Methods in inguistics (3), ANTH 597 irected Readings in Anthropology
(3): ED P 578 - Literacy and (3): ED P 5 Inguistics (3), EDP P672Language and Educational Policies 3); ENGL 523 - Semantics (3).
ENGL 524 - Applied Linguistics (3) ENGL 524 - Applied Linguistics (3) 623 - Seminar in Dialect Study (3): LING 515 - Literacy and Linguistics 1-3). LING 698 - Thesis (3-6): SPCH 309 - Language and Behavior (3). SPCH 551 . itercultural Communication, SPCH Communication (3).

Teaching English as a Second anguage Concentration (12-15 Linguistics (3), LING 561 - Second Language Curriculum Design (3), and either LING 575 - Literacy and Linguistics or EDP 578 - Literacy and Linguistics (3); and approved
selections from ANTH 421Education across Cultures (3); \(C D\)
560 - Lancuage Assessment of the 560 - Language Assess, LEP Child (3); CD 590-Teaching 454 - Development of Communication Skills in Bilingual Intercultural Communication in Education (3): ED P 672 Language and Educational Policie (3): EDEL 558 - Linguistics for
Reading Teachers (3): ENGL 528 Reading eachers (3); ENGL 528-
Applied Linguistics (3), ENGL 529-
Language Strategies Applied Linguistics (3), ENGL 529 -
Language Strategies for B Biingual/
TESL Classrooms (3): ENGL 620 TESL Classrooms (3): ENGL 620--
Bilingualism (3): LNG 460 - TESL Composition (3), LING 562 Second Language Testing and VESESLIESP. LING 697 - Directed Research (1-3), 698 - Thesis (3-6) PHIL 584 - Philosophy of Language (3): PSY 438/538-
Psycholinguistics (3): SPAN 527 Contrastive Analysis: Spanish/ English (3), SPCH 551 Intercultural Communication (3). Special Concentration (12-15
units). Students electing this concentration must [1] consult with the Program Director or Graduate Coordinator about their proposal; [2] course of study they wish to take. including [3] a list of the classes which are proposed to meet the objectives of this special program.
Both the witten justification and the course list are subject to approval. Other requirements of the program (e.g. a five course core, GPA, cannot be waived or altered by use of the special concentration.
Students wanting graduate credit for certain 400 -level courses must consult witrolling.
Courses with an I suffix are not vaiable for graduate credit. Note: Graduate students are ( 500 -level to register for the higher course has a double number Students may not repeat courses by
taking them under different numbers
or titles unless the course
Certificate in Teaching Englis Certificate in Teaching
as a Second Language
(code 1-6050) (code 1-6050)
The Certificate in Teaching
English as a Second English as a Second Language
(TESL) is open to students from an field who desire training for teaching English to speakers of other
anguages. While the program may be begun as an undergraduate, at a post-baccalaureate student.

\section*{Recommendations:}

Students are strongly urged to
include foreign language sudy as include foreign language study as urriculum, particularly those he Language Development Specialist Certificate in addition the TESL Certificate. Students pannis (K-12) must also include appropriate credential requirements Prerequistes:
Prerequisites
(1) A baccalaureate degree with
(2) Passing of the CSU B Writing

Proficiency Examination.
(3) One course in basic English

Requirements
(1) Twenty-four units, including
(a) 20 taken in residence
a) 20 taken in residence;
(b) 18 taken as a graduate
(c) 12 taken at a \(500-600\) leve

NOTE: Categories (a-c)
ombined need only equal 24 units.
(2) A GPA of 3.0 on all work
luded in the program.
(3) Eight courses, one each
(a) One course in basic ESL

Methodology, selected from
NaL 429 or \({ }_{\text {Strategies }}^{\text {ENGL }} 529\) in

(b) One course in cross-cultural communication, selected from ANTH 421 - Education across
Cultures (3) or ED P \(573-\) Intercultural Communication in Education (3);
(c) One course in Language
Acquisition, selected from CD 329 , Acquisition, selected from CD 329 ,
LING 329 or - Intron anguage Acquisition (3) or ED P
454
ommunication Skills in a Bilingual (d) One course in intermediate English linguistics, selected from NGL 420/520 English English Syntax (3):
e) One course in testing and \(\begin{array}{ll}\text { assessment, } \\ 460 / 560 & \text { selected from CD } \\ \text { Language }\end{array}\) Assessment of the LEP Child (3)
or LING 562 - Second Language Testing and Assessment (3); (f) One course in curriculum, ducational Linguistics (3) or ducational Linguistics (3) or LING Curiculum Development (3); (g) One course in specialized 590 - Teging Accentilie Change (3), LING 460 - TESL omposition (3), LING 475/575 or D P 578 - Literacy and Linguistics (3), LING 570 -
VESLIESP (3) or ED P 576 VESL/ESP (3) or ED P 576
ducation and Diversity: Historica and Contemporary Perspectives (3);
) Three units of a practicum either LING 592 - Internship in
ESSLTEFL \((1,2)\) or \(\operatorname{LNG} 593\) racticum in TESL (3).
Students who have taken quivalent courses in the above categories but need units to
complete certificate requirements may elect to take courses from the bllowing: ANTH 4121 - Culture and Language and Culture (3); CD 330 Speech and Hearing Science (3) CD 361 - Language and Speech in Normal and Exceptional Children
3), CD 363 - Language and (3), CD 363 - Language and - Teaching in Cross-cultural Settings (3), ED P 454 Skills in a Bilingual Context ( 3 ) EDSE 401 - Principles of Adult ducation (3), EDSE 402 Education (3), EDSE 435-U.S Secondary Education/ntercutura Education (3), EDSE 436 nstruction and Evaluation in a Cross-cultural Setting (3), ENGL
\(423 / 523\)-Semantics (3), ENGL 28/528- Applied Linguistics (3 LING 650 - Apliied Lualism (3), PS \(438 / 538\) - Psycholinguistics (3),
SOC 4851 - Sociology of Languag (3). SPCH 309 - Language and

Contrastive Analysis of
Spantrastive Analysis of
Techniques of
Och Iectniques of Occupational
instruction (3), VE 405 - Instruction and Evaluation
Students wanting graduate credit or 400 -level courses which have no been approved for graduate credit by the home department must Graduate Advisor before enrolling Courses with an -I suffix are not available for graduate credit, but may be used for the Certificate if was an undergraduate. Courses (LING)
329. Introduction to Language
Acquisition (3) S,F Alroduction to the study of the acquisition Ist and seccond languages. Linguisto
serspectives on the development phorpoctivese
pheal, syntactio, develonment
pemantio, and pragmatio aspects of language. The infuenco
of developmental stages, and social and of duvelalopmental tatages, and social and
cutcors on the individual. Same cours
as C 322.
433. Survey of Discours Anaiysis (3) S
erequilities: ENGL 325, an introductor o discourse analysis, the study of languag structure trom the viewpoint of its context
production. The place of discourse analysis eocretical and appolied finguistitco. structure of genres: conviersation, narative
expostion, and others; language in specie expotition, and others; language in specic
setings: pragmatios
and
discours
 grading only.
460. TESL Composition (3) S Prerequistes: Passing of the Witin Petcric and composition of students whe mited English profficienoy. Attention to both the general pinciniles of composition, and the
specific issues that face students and teachers an ESL context. Traditional grading only. 475./575. Literacy and
Linguistics (3) F,S Prerequisite: Six units in linguistics the field of Iteracy studies fom in linguis and iscococuturual perspeotive. Among the rajor topics presented are the relationship
 relationship between literacy, and
sociococomomicssociouturar factors; and the
innect impoact of societal expectations, regarding
literacy.
Pedagogical implications of thees itesacy. Pedacogiogal implications of thee issuen are explor
Ior MaiorsMinor
486. Foundations of Language This course instruction: Practice (3) his course provides a genereal introduction to atruction and provides backoround minority historical development and use of current nethods and techniquess for language learning strategies. Classtoom obseovations in offi-
campus or On-campus bilingual and Englifh \(a-\)-asecond-language classrooms. Tradtion ading ont.
(3) F

Prerequiuites: Nine units of inguistics of itrocuction to the role of language and Inguistics in contemporary education; analysin
 hich set guidelines and expectations fo anguage acauiation. ading only
540 . Sociolinguistics (3) F Prerequisite: Nine units of linguistics of
consent of instructor. Stucy of the linguistic and social antecocents, correlates, and
consequences of language variation in the sonsequences of language variation in the
ndividual and sociery. Integition of theoretical modelst and practical fifildwork. (Two hours

\section*{561 . Second Language}

Curriculum Development (3) S
Preerequisite: ENGL 522 or permision of the
hatructor. Stury of the content of second language instruction, from nongrammatioal. instuction. The course will look at both K.
and adult language instruction
562. Second Language Testing

Preceavisite: ENGL 421/522
Prerequisite: ENGL 421.522. Testing and neluding both standardzad tests and
leacher-developeed modes of assesment: Traditional grading only.

\section*{570. VESL/ESP Pr}

Program and
Instruction (3) F
Prerequistee: Admission to the TESL Certificate Program or consent of instructor. \(A n\)
oxamination of the integral role of tailored anguage instruction to the succoess of nonand limited-English speaking trainees and
workers. This course will deal with vocational English as a second Language. English for peocific Purposeses, and English tor Science and
Pchnology. Key topics include language echnology. Key topics include language cochiciauses, and testing in specififd settings.
Semininar) Traditional grading only. Same Seminer). Tradition
575./475. Literacy and
inguistics (3) F,S
Preerequisite: Six units in linguivitise of permission of instructor. This course provides a
genear introduction to the field of literacy
studies from a linguistic and
perspective.
Among the
perspective. Among the mexicuculural Presented are the relationship betaveen oral and
witten language; the accquistion of theracy
 mpact of societal expectations regarding Iteracy. Pedagogical implications of thes issene
for Malors.
590. Special Topics (3) F,

Prerequisine: consent of instuctor
Investigation of topics of current interest and Concem to students in linguistics and allio
 units may court toward the master's degree in nits mustics.
93. Practicum in TESL (3) F,S Prerequiste: ENGL 429,529 . Experience in Teaching English as a second language
supplementind by reading. revoeach
adving. Students must be avaliable to be supplementied by reading. research, an
adving Students must bee vaiale to o
assigned to regularty schedued courses in assigned to regularty scheduled courses in Wit the instututor. CredieNo Credif grading only. Cour
of 6 units.
595. Qualitative Research Methods (3)
This course provides an introduction to the heory and application of ethnographic and qualiative methods in edcucational setings with
Sepicil omphasis on applicationn
inouistics. inguistics,
ducational
entropotion language ants instruction. th sunvess the basi ationale for qualitative/ ethnographic inquivy well as basic concopts and methods th
applications in teacheres.-researche
approachos and for action tesearch Tpproashes and to ate ation reseach
Trational grading ony. Same course Es ED \begin{tabular}{l} 
Tradition \\
595. \\
\hline
\end{tabular}
596. Research in Linguistics
(3) S

Preerquisine: Advarcement to candidicacy to
the MA. in Linguistcs. Principles and practice enayivitatand reporting. Accosss to sourcee valuation of published research, application
ractional graaing only.
597. Directed Study in

Lingusics
Prerequisise: Permision of instructor and
adicoor. Diected study on issues and topicio in adisuot Ditected study on issues and topics in
inguiticce. Not intended to teplace avalable
courses. Course may be eepeated to courses. Course
maximum of 3 units.
610. Historical Linguistics (3) S Freequibtes: ENGL 520 and 522
 change, language tamilies, and language
elationships uing the methods of comparative inguistics. Two hours seminan,
620. Seminar in Syntactic Theory and Analysis (3) S 1991 every third semester thereafter Prerequisiste: ENGL 421/522. Theories and
practices of selected views of syntax in pracicess ory
contemporar linguistics. Topic may vary from semester to semester. (Seminar, , hours;
Laboratory, 2 hours) Traditional grading only. 625. Seminar in Phonetics and 625. Seminar in Phonetics and
Phonology (3) \& 1992, every third semester thereafter Prerequisist: ENGL 420,520 Theory and
practice of selected views of phonetics and
 (Seminar, 2 hours;
Tradtional grading ony
633. Discourse and Grammar (3) Her 12152 ar (3) nstructor. This graduate course situates method, and focusses on the the theronstio and melhod, and focusses on the relationship on
discoure and grammar. Examined are (1) the relationship on mammorosyntacticied devices and and
dicourse contex: (2) information flow and it discourse context: (2) information flow and it
eelations 10 orammar: (3) the pragmatio motivation for grammatical systems: and (4) the
relationshio of relationship of grammar and
(Discussion) Traditional grading only. 645. Seminar in Dialectology
(3) F 1991, every third semester thereafter
Prerequistes: English 420, 421 or equivalent. History. development, and coctemporary
thought in the study of geographical and social
dialect dialects. Regional locus mill aryy by sementer.
Education and social implications of dialect Education and scial inplications of
diferences. Tradtional grading onty.
650. Seminar in Bilingualism (3) F1991, every third semester
thereafter thereafter
Prerequistes: ENGL 520,522 or equivalents Advanced study of the degrees and kinds of
Blingualism and bilingual situations which exist. Implications of such distinctions to
linguistics and education will be covered linguistics and education
Tradtional grading only.
697. Directed Research (1) F,S Preerequiste: Advancement to candidacy to
the M. A. in Linguistic. Research in linguistics on a topic connocted with the Comprobensiche Examination for the degiee. Tradiononal grading
only. Course may be fepeated tor a maximum Examination
ont. Cours
of 3 units.
698. Thesis (1-6) F,S

Prereauiate: Consent of graduate cormmitite Planening. proparatio
thesisi in inguistica.

\section*{Mathematics}

all levels beyond high school computational and analytic skills needed for a variety of majors, as or specialists in mathematics. Its various degree options are intended o provide the student with the knowledge and techniques needed statistical applications, as well as the heoretical understanding needed or teaching, graduate study and lifelong protessional growth. Beyon
these, it hopes to instil a spifit of curiosity and healthy skepticism owards mathematical statements "is this true?" and "why?", and to try to find the answers.
Undergraduate Degree Programs The Mathematics Department offers four undergraduate degree Bachelor of Science in Bachelor of S
Mathematics
The student in this program is equired to take a selection of
undamental courses in algebra analysis. It is the most flexible program, in which the greatest
number of electives may be chosen by the student. Elective upper division mathematics courses are avaiable which meet the needs of
students preparing for a variety of goals, including careers in industry and government, secondary teaching and graduate study
Students who do not wish to complete the requirements for formal option in applied mathematics or statistics may wish to elect courses in one or all of these
areas as part of this degree program. Requirements for the Bachelor of Science in Mathematic (code 3-6666)
Lower Division: ENGL 101 or 300 247; CECS 242; and any one of the following sequences: PHYS 151 and 152; or PHIL 170 and 270 ; or eight units of a foreign language. Upper Division: A minimum of
units of approved upper division
mathematics courses selected in consultation with a major advisor, to
oclude MATH 341 or \(347,361 \mathrm{~A}\). clude MATH 341 or 347, 361A, 318, 364A and 444A but not 311, exibility, only 15 of the required 27 units are specified. Students should choose the remaining 12 after discussing career goals and additional information and to obtain an advisor, contact the Department iffice.

\section*{achelor of Science in} Applied Mathematics:
The student who is most interested in the applications of mathematics has a choice of two he applications in engineering and science while the second concentrates on the applications to management. In both suboptions areas of applied mathematics and in the field of application. This option repares students for careers in ousiness, industry or
Requirements for the Bachelor of Science in Mathematics Option in Applied Mathematics
(code 3-6608)
code 3-6608)
Suboption I: Area of Application
Lower Division: ENGL 101
L17: MATH Dision: ENGL 1231 or 53 or 154 or \(\operatorname{FE} 211\), 152; PHYS 205.

Upper Division: MATH 323,
\(361 \mathrm{~A}, 361 \mathrm{~B}, 364 \mathrm{~A}, 364 \mathrm{~B}, 380,470\) A minimum of 9 units from the Allowing: MATH 381, 382, 423, of 9 units from one of the following three groups:
1. PHYS \(310,311,340 \mathrm{~A}, 340 \mathrm{~B}\),
410. 450 : 410, 450
2. EE \(310,370,382,411,460\)

82;
3. CE \(335,359,437,438,458\),

Suboption II: Area of Application in Management.
Lower Division: ENGL 101 or
317; MATH 122, 123, 224, 247; CES 242. ECON 201 2 , 247 ; ECON 300
Upper Division: MATH 323, 361A 361B, 364A, 380, 381,382 ; MATH inimum 6 Units ollowing courses: MATH 423,463 , 79, 480; a minimum of 12 units fom the following courses: MGMT 10, 410, 411, 412, 413, 414, 415,
achelor of Science in

\section*{Bachelor of Science in
Mathematics - Option in}

\section*{Statistics}

This option provides students with a foundation in statistical methods. The courses required insure that the
student understands both how the echniques are mathematically derived and how they are applied. tatistical analysis is an essential is a vital tool in monitoring the quality of products and services and in orecasting. This option prepar warding careers and for graduate study in statistics and other quantin in stative fields.
Requirements for the Bachelor of Science in Mathematics -
Option in Statistics (code 3-6008) Lower Division: ENGL 101 or Lower Division: ENGL 101 or
317. MATH 122, 123, 224, 247; CECS 242; and any one of the following: PHYS 100A-B, or PHYS
151 and 152; or PHIL 170 and 270 : or 8 units of a foreign language, or 6 ower-division units in a field in which approved upper-division
ares are also taken.
nits of approved upper-division
nathematics courses to include
MATH \(323,361 \mathrm{~A}, 380,381,382\) and 480. MATH 3618 is recommended. fields outside mathematics; these must be approved by a
mathematics advisor. The following courses are approved statistics
option electives: BIOL 456, 465 option electives: BIOL 456, 465;
ECON 481, 486; GEG 400; GEO 373; PSY 315, 411, 412; IS5 460, 463: MICRO 420; SOC 455. In addition, any student plataniate studies in nathematics should take MATH mathem

\section*{Bachelor of Science in} Mathematics - Option in
Mathematics Education This option is for students
preparing to teach mathematics preparing to teach mathematics the secondary school level. al course requirements for the Single-Subject NTE Waiver Program hematics. Thirty units of also required for the Clear Single-Subject Teaching Credential in Mathematics (see Single Subject Graduate School of Education for more specific information about
courses and other requirements.) Requirements for the Bachelor of Option in Mathematics Education (code 3-6609)
Lower Division: MATH 122, 123 224, 233, 247; one of the following:
MATH 278*, CECS 174, 442 one Mhe following: ENGL 101, 300, 317; one of the sequences: PHYS 151, 152; PHIL 170, 270; or eight units of a foreign language; to a
to 32 lower-division units.
Upper Division: MATH 310, 341
361A, \(380,444 \mathrm{~A}\); either MATH 350 or \(355^{*}\); either MATH \(364 A^{*}\) or 38 DSS 300M; and a minimum of 6 Mathematic courses
* indicates preferred courses among choices Requirements for the Minor in Mathematics (code 0-6666) MATH 122, 123, 224, 247 and 9 ourses to include MATH 361A, but not 370A.
Requirements for the Minor in pplied Mathematics
The student must complete 28
The student must comple Lower Division: MATH 122, 123, Lower
224,247
Upper Division: MATH 323, 364A or \(370 \mathrm{~A}, 380\) and one course
selected from MA
382,423 or 470 .
Master of Science in
Nathematics (code 6-6666)
Prerequisites:
(1) A bachelor's degree in college or university; or
(2) A bachelor's degree with a minimum of 24 upper division units in mathematics
(3) Courses must include MATH
\(247,361 \mathrm{~A}-\mathrm{B}, 364 \mathrm{~A}\) and 444 A or their equivalents. Deficiencies will be determined by the graduate adviso after consultation with the studen
and study of transcript records. Advancement to Candidacy:
In addition to University requirements, the student must have completed all prerequisite courses listed above with no grade less than
'C'. Students should have passed the Writing Proficiency Examination (WPE) and file for Advancement upon completion of at least six units
(and no more than nine units) of the (and no more than nine units) of th.
Program, with at least a 3.0 GPA . Requirements for the Master of Science
(1) A minimum of 24 graduate and approved ( \(*\) ) upper division
units in mathematics including
(a) One of the sequences 561A-B, 562A-B;
(b) Two additional courses selected from 540 A , \(561 \mathrm{~A}, 562 \mathrm{~A}\); (c) A minimum of 18 units at \(500 / 600\) level, including at least 15 units of graduate courses in 697 and/or 698;
(2) Six units of approved (*) upper division or graduate electiv (3) Furs deree either Alternative A or Alternative
(a) Alternative A - pass a a) Allerehensive written examination:
(b) Alternative B - subject to
he approval of the Graduate
Committee of the Department
Mathematics and defend it
orally.
Master of Science in Mathematics - Option in \({ }_{6-6608)}\)

\section*{Prerequisites:}
(1) A bachelor's degree in mathematics, physics, or
engineering from an accredited engineering from an
(2) Credit in the following courses 380, or their equivalents. Defifiencies will be determined by
the graduate advisor. the graduate advisol
Advancement to Candidacy In addition to University
requirements, the student requirements, the student must have
completed all prerequisite courses listed ebove, with no grade less than " C '. Students should have passed the Writing Proficiency Examination
(WPE) and file for Advancement upon completion of at least six units (and no more than nine units) of the
Program, with at least a 3.0 GPA . Requirements for the Master of Requirements for the Master of
Science in Applied Mathematics:
(1) A minimum of 30 approved graduate and upper division units including:
(a) MATH 562A, 479, and 576;
(b) At least 12 units, of which at least 6 units must be at the 500 level selected from MATH \(364 B\),
\(381,382,423,463,470,472\) \(381,382,423,463,470,472\),
\(480,485,495,560,570,575\), 585 , and 590 as approved by the graduate advisor; (c) At least 18 units of graduate mathematics courses including at least 15 units other than MATH 697 or 698.
2) Complete one of the following: (a) Pass a comprehensive
written exam on Applied Whithematics;
(b) Subject to the approval of (b) Subject to the approval of Department of Mathematics, write a thesis in applied mathematics and defend it orally.
Courses (MATH)
For students entering the
university Fall 1983 and thereate satisfying the Entry-Level
Mathematics Test (ELM) requirement (see p. 78 ) is a
prerequisite for all mathem courses except MATH 001.007, and courses except MATH 2001, 007, and
010 A score o \(350(25\) correct) is required for MATH 010 Lower Division
001. Elementary Algebra and
Geometry (3) F S Prerequisint: An ELM score between 0 and 3 course for the Entry Level Math Exam covering arithmetio, elementiary algebra and goometry.

This course may not be taken for credil toward only. 007. Math Without Fear (3) F,S Prerequiuite: permision of instructor. This
course may not be taken for credit toward a cuurse may not be taken for credit toward a
univerity degree. The course will help students
und strengthen thee. problem mosk wing hep abilitues while
developing their quantitative skills. A broad developing their quantitative skillas. A broad
range of topics in mathematics will be coverd
with emphasis being placed on recocrizing wanti emphasisin being placoed on reccovinizing
pattems, analyzing probleme and generalizing patterns, an
conceopts.
010. Intermediate Algebra (3) \(\mathrm{F}, \mathrm{S}\) Prerequisite: An ELM score between 350 and
470 or permision of the ELM achisor: 470 of permission of the ELM accisisor.
Polynomial, rational and radical expressions Poynnomia, rational and racical exxressions
and equations rational exponentsi solutions
and graphs of in inear and and graphs of linear and quadratici inequalitioe
systems of linear equations: operations systems of linear equations; opeatations,
Inversee, and graphs of tunctions:
and egithmic exponential functions;
aninomial Theorem: and exponential ftunctions; Binimial Iheorem:
arithmetio and geometric secuencoes. Thie arthmetio and yeometric sequences. This
course may not be taken of ceodt towar a
university degree. CreditiNo Credit grading universí
only.
101. Trigonometry (3) F,S

Prerequistes: MATH 010 or two years of high
school algebra. Trigonometric functions and
 applications. Complex numbers. Not open to
students with credit in MATH 117 or 122. (CAN students \({ }^{\text {MATH }}\) )
103. Mathematical Ideas (3) F,S Prerequisites: Three years of high school mathematics including alageba, geomety and
intermediate algebra (or MATH 010), of the intermediate algebay (o) MATH OMO), of the variety of concepts in undergraduate
mathematics. Topics will include elementary logic, algebra of sets, numeration systems,
rational and real unibers, modiuar number systems, elementary combinatorics, probability
and statistics. Not open to students with credi and statsicics. Not open to studentis with creain
in any MATH curse umbed greater than
103, or the equivalent. (CAN MTATH 2) 110. Mathematics for Elementary 110. Mathematics for
Teachers I (3) F,S Prereauisites: Three years of high school
mathematics including algebra. geometry and Pererequisites: Three years of high school
mathematics induding algebra, goometry and
intermediate algebira (or MATH Molot, of the intermediate algebra (or MATH O10), or the
equivalent. Problem solving and anayyis of the equivalent. Problem solving and analysisio of the
structure and operations of the real number
syster; comparisons with other numeration system; comparisons with other numeration
sysums. are induved Not open for crodit io
Mathem systems are inclujed. Not open for or
Mathematics majors. (CAN MATH 4) 111. Mathematics for Elementary
Teachers || (3) F S Teachers II (3) F,S
Prereauistes: MATH 110 and one year of high
school geometry. Problem solving with intormal school geometry. Problem soling with intormal
goometry in two and three dimensions
measurement measurement, similarity, temsellations,
constructions, trigonometry and an introcuction to Euclidean and non-Eucididean geometries Not open for credit to Mathematics majors. 112. College Algebra (3) F,S Prereauistres: Three years of high school
mathematics including alabera, geometry, and
intermediate algebra (or MATH OiO). or the
equivalent. Study of algebra including linear and quadratic equatitions and and systems; equations; polynomial., exponential and equationsi polvnomial, exponential and
logarithmic functions and their grahhs;
peemutations and proability. Desigioned tor permutations and probability. Designed for
students maioring in a life oo social science. students malioring in a life or or ocial science.
Not poen to students with credit in MATH 117
114. Finite Mathematics (3) F,S Prereauistes: Three years of high school
mathematices inoluding algebra, geometry, and mathematics induding aligebra, geomenty, and
intermediate algebraa (or MATH 010), or the equivialent. Combinatorial techniques and
introcuction to probability. Equations of lines and syytems of linear equations, matrices,


115B. Calculus for Business (3) F,S

Prerequilites: Three years of high school mathematios including glaebsa, goomentry, and
intermediate algebra (or MATH 010), or the equivelent. Functions, dervivatives, optimization problems, graphs, partial derivatives. Lagrange
mutitiliers, intigaration of functions of one mutitipiers, integration of functions of one economics. Emphasis on probiliems-skling MATH \(115 S\), 120 o oren to 122 ( (CAN MAN MATH 34) 115S. Survey of Calculus
(3) F,S

\section*{(3) F,S}

Prerequisiste: MATH 112 or it equivalent. Real
numbers and functions; IImits and continuty: numbers and functions; ilints and continuity;
differentiation and integration of functions of one variabio with applications to phyyical, life
and
social
sciences.
Emphasis and social sciencos. Emphasis on
problem-solong techniques rather than theory.
Not open to students with credit in MATH \(115 B\), NPot open to students with crad
120 or 122 ( (AN MATH 30 )
116. Survey of Calculus II (3) S
116. Survey of Calculus II (3) \(S\) Preverequisite: MATH 115SS. Further topics in
differentiation and integration of tunction sof
one variable induding numerical integration one variable incurdigng numerical intiogration,
use of tables and improper integrals: use of tables and improper integrals;
introcuction to calculus of several variables and elementary differential oquations. Not open to 117. Precalculus Mathematics
(4) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: Three and one halt years of high
 O10), and one-halt year of trigonometry (or
MATH 101), or the equivalent. Polynomials,
 tunctions. Complex numbers, mathematical
liduction. binomial theorem. .onis setios.
Not topen to students with creofit in MATH 122 .
120. Calculus for Technology
(4) \(\mathrm{F}, \mathrm{S}\)

Prereauistes: Three and one-half years of high
school mathematics including one year of
school mathematise ind incuridig one years of high of
opometry, two years of algebba, and one geometry, two yoers of algobra, and one
semester of tigionometry, ot the quivalent.
Real and Complex numbers and functions. Real and Complex numbers and tunutions;
limits and continuity; differentiation and

Itegration of tunctions of one variable pplications to science and technology. No open for credil to students with credid in MAT
15B, 1155 or 122 . (Leoture 3 hours, probler sosion 2 hours.)
22. Calculus I (4) F,S

Prereculiste: A grade of \({ }^{\text {C } C \text { ' or better in MATH }}\). 17 or four years of high schbol mathematio 1 incuding two years of algebobra, one year of eoometry, one-half year of trigonometry and one additional senior-tevel course. Dervaritive nd applications of integration. Analytio geometry. (Lecture 3 ho
hours.) (CAN MATH 18)

\section*{123. Calculus II (4) F,S}

Prerequisist: A grade of 'C' or better in MATH
12. Transcendental functions. Techniuues 122. Transcendental functions. Techniques of
Integration. Further applications of the integral Itegration. Further applications of the integral
nfinite eseies. (Leoture 33 hours, probler ession 2 hours.) (CAN MATH 20)

\section*{180. Elementary Statistics
(3) Fs}
reerequistes
Prerequisites: Three years of high school intermediate algebra (or MATH O10), or the
squivalent. Nature of statistics and probability equivalent. Naturre of statisticis and Probababily campling, normal disistribution assumption and to consequences; teots of hypotheses and

hours. (CAN STAT 2
224. Calculus III (4) F,S

Preequivite: A grade of ' \(C\) or better in MATH
123. Vectors and parametric equations. Solid analyic geometry. Muttiple integrats. Line and urface integrals. Green's Theorem. Stokes hours, problem seession 2 hours.) (CAAN MAT
22) 233.
233. Fundamental Concepts for
Advanced Mathematics (3) F,S Preerauibite: A grade of C or better in MATH
123. Fundamentals of set theory, Counting Principles, functions and relations, Induction and Recursion, introduction to probab 247. Introduction to Linear Algebra (3) F,S
rerequiste or corequisite: MATH 224 . Martix algebra, solution of systems of equations,
detemminants vector spaces includuing furction paccos, inner ppocuct spaccos, lineal transtormations, eigenvviues, eigenvectors,
quadratic forms and applications. Emphasis on computational methodsi. Not open to studdents
with creditin MATH 345 or 346 . (CAN MATH 26) 278. Computer Applications in 278. Computer Applications in
Mathematics for Teachers (3) M,S
Prerequisise: MATH 110 or higher. Course designed for pre-ensice or in-esinice teachers.
htrocuuction to Logo and BASIC computer

evaluation; geometry concepts and problem open to computer sciencen program matiemematics majors.
\({ }_{(1-3)}^{295} \mathbf{F , S}\)
Prerequisitit: Consent of instructor. Topices in
mathematics for students interested in
mathematicse education or in pure or applied mathematics education or in pure or appion
math. Spocifif topics will be announceat in the
Scheocuie of Classes. May be repeated with Scheduie of Classes. May be repeated with
different topics for a maximum of six units of different
credit.
297. D
297. Directed Study (1-3) F,S Prevequisite: Consent of instructor. Designed
for students who wish to undertake special tor students who wish to underake special
study, at the lower division level, which his not part of any regular courres. , undert the diriection
of a taculty member Indiviual investigation
studies or sunveys of selected problems.
Upper Division

\section*{310. History of Mathematics}
(3) F,S

Prereauistes: MATH 116 or 123 . Designed to t mathemation thuyghty and develiopmen primitive origins to the present. Fundamental concoposs, methods and developments are
studied; evolution of areas in mathematico is raced. Recommended for all mathematicich maiors and minors preparing
311. Topics of Enrichment in Mathematics for
Teacher (3) F
Prerequistes: One year of high school algebr one year of high schhool scomooretry and conseston of instructor. Enrichment topics in mathematics so the the elementiar teacher, such as theory of arithmetic, numeration systems,
elementary logici, mensuration, metric system, lomentary logic, mensurution, Metric system, tatistics and network theory. Not open for
317. Introduction to Abstra Mathematics (3) \(\mathrm{F}, \mathrm{S}\)
Prereauiste: MATH 123 . Introduction to topics
which form a background tor the study of wich form a backround to the study of abstract mathematics wth emphasis of Topics will include set theory, complex. xumbers
and abstract algebra Students will be asted and abstract algebra Students will be asked
0 wite valid mathematical proots. Not open for crevidit to anyone with a grade of 'C' of bettic
in MATH 444 or 444 .
323. Introductio
Analysis (4) F,

Prerequistes: MATH 224 and a course in compiter programming. Numerical solution of onlinear equations, systems of lineas
 Computer implementation of thesee methodis. Lecture-discussion 3 hours, problem session
330. Introduction to Mathematical Logic (3) F
Prerequisite: MATH 1115S or 122 . Symbolio
methods of propositional calculus, genera theory of inference, , transition trom formmel to
intormal prooss, theory of defintion, elementar intormal proofs, theory of defintion
seet theory and axiomatio method. 333. Discrete Structures and Combinatorics (3) F
Preerequisites: MATH 233 and 247. Advanced counting techniques, generatitg Aduantions,
graph theory, coding theory, additional topicic graph theory, ocoding theory, addititional topicias
in combinatrocs. Students will be asked to 340.

Equations (3) S
Prerevuuisite: MATH 116 or 123. Complex
numbers, general theorems on alsebraio numbers,
equations,
, the approximation of roots of equations, solution of
the cubic and quatric equation: determinanta the cublic and quartic equation: determinants
and their application to simutaneous linear and their application to sim equations, yymmetric functions
341. Number Theory (3) F,S Prereauisites: MATH 123 and at least one of
MATH 233, 247, 310, 317; recommended, 233 or 247. Divisibilit, congruences, number of 247. Dikibibily, congruencos, number
theoretic
punction, Diophantine
puimuations prinitive roots, continued fractions. Studento
will be asked to write valid mathematical proofs. 347. Linear Algebra (3) F,S Prereauisites: MATH 224, 233, and 247. An
indeopth stucy of linear transtomations, veotor Preequisites: MATH 224, 233, and 247. An spaces, inner product spaces, quadratic forms
similarity and the rational and Jordan canonical torme. Students will be asked to wite valid
mathematical proofs. mathematical proofs
350. Projective
350. Projective Geometry (3) S \begin{tabular}{l} 
Prereauiste: \(\begin{array}{l}\text { MATH } 224 \text { or consent of } \\
\text { instructor. } \\
\text { Homogeneous coordinates }\end{array}\) \\
\hline
\end{tabular} Propectivities. Holmogeneous colineations and corrinatateon
Pations Polartites. Projective properties of conices
Linear and quadratio transtormations Applications to comarauter crapantios mation be be
included. Students will be asked to wite valid included. Students 3
mathematical proofs.
355. College Geometry (3) F,S Prerequisite: MATH 116 or \({ }^{123}\) Transtormations,
geometric objects,
motions,
congruent
similiarities, axioms of goometry, and selected topics in advanced Euciridean geomety. Students wil 361A. Introduction to

Math insis! (3) FS Preerequistes: MATH 22 and 247. Rigoroun
suty of calculus and is foundations. Structure
of the ceal of the ceal number system. sequevonues and
seieses of numbers. Limits, continuity and differentiability of functions of one real variable
Students will be asked to wite valic Students will be
3618. Introduction to Mathematical Analysis II (3) F,S


\section*{364A. Ordinary Differentia
Equations I (3) Fs \\ quations I (3) \(\mathrm{F}, \mathrm{S}\)}

Preerequibites: MATH, 224, pretequisite or
corequiste MATH 247. First order differential quyations, undetermined coofficients and variation of parameters for second and higher
order differential equations, series solution of ordor aifienertial equations, series solution of
second order linear differnial equations:
syetems of linear differentiol syotems of linear difierertial equations;
applications to science and engineering.
*364B. Ordinary Differentlal Equations II (3) S
 difference equations; nonlinear ditiferential
equations; stability, Sturm Liouvile theory: Pplications to science and enginneering. 370A. Ap
Prerequivitit: MATH 224 . First order ordinary
 olution of intial value problems, Laplace
ansforms, matrix algebra, eigenvalues, digenvectors, apopiciations. Not open for credit
1omathenatios majis. mathematios malors.
370B. Applied Mathematics II (3) F

Preerequisite: MATH 370A. Arithmetic of variable, numbers, functions of a complox Conformal mapping: Fourier series, Fourier ranstorms; seperation of variables for partial diferential toquations. Appiliations. Not open
380. Probability and Statistic (3) F,S

Preerequiste: MATH 224.
interperation of probability. \(\begin{gathered}\text { Frequency } \\ \text { Axioms of }\end{gathered}\) Probability theory. Discrete probability and and density. functions. Moment geonerationg
tunctions and moments. Sampling theory and unntions and mact
381. Mathematical Statistics (3) S

Prerequistes: MATH 247 and 380 . EEtimation and hypothesis testing. Maximum Ilikelihood unbiasedness, and asymptoticio distribution of
enstimators.
Neyman-Pearsion Lemma.
 regression. Experimental design and analysis
of variance. Non-parametric methods. *382. Random Processes (3) F Prereaquistes: MatTM 247 and 330 . Further
fopics in probablity. Markev processes. Renewal theory. Random waks. Queveing
theory. Poisson processes. Brownian motion. 423. Intermediate Numerical Analysis (3) S
Prerequisites: MATH 247 and 323 . Numerical
soltitions of systems of equations, calculation solutions of systems of equations, calculuation
functions, solution of partial differerntial equations. Computer implementation of these *430. Mathematical Logic (3) S Prerequisite: MATH 330 . Introduction to formal
logical systems. Formal proofs in propositional giiaal systems. Formal proofs in proposition theorems and problems related to consisiten
and decidability. and deocidability
4ige. Introduction to Highe
Al (3) FS Prerequisises: MATH 233 and 247 and at least ne of MATH 341 or 347 . Groups, subgroup yclic groups, symmetric groups, Lagrange
heorem, quotient groups. Homomorphism and isomorphisms of groups. Rings, integral domains, ideals,
homomophisms of tings.
quotient
Further topices in
 athematical proots. Algebra II (3) S
Terequisite: MATH 444A. Continuation of opics presented in MATH Contunuation of
actorization Domains. Polvmemial Unique Modulues, Finitely generated abelian groupe and elements of Gaicis Theory. Recommend io students platnning to do graduate work in pure mathematice. Students wite valid mathematical proofs.
\({ }^{*} 451\). Differential Geometry (3)
Prerequiste: MATH \(364 A\) or 370 A (oither can be taken concurrently. Structure of (urneses and ance cunsac: incuoding Frenet formulas of space cunves: trame frelds and connection
orms: geometry of surfaces in Euclidean three asms: geometry of surfacess in Euclicioan three
space: Geodesics and connections with
eneral theory of reatativity eneral theory of relativity
45) \(F\)

Prerequisiste: MATH 361A. Introduction to the
Prerequisise: MATH 361 A. Introduction to the
 compactness, and metric spaccos
Recommended for those who intend to tury
analysis. complex analysis or differential eometry. Not open to students with credit in
ATH 5 SOA.
461. Introduction to Complex

Analysis (3) S
Preequuiste: MATH 361 A . Theory and applications of complex variables. Analytic
functions, intiogralas, power series and
 MATH \(562 A\)
\({ }^{\text {46 }}\). Multivariable Calculus (3) F

Preerequisites: MATH 247 and 3613. Topology Detivatives as spoacas transtormatiolion. diervatuerse. and implicit function theorems. Jacobiame vector calaculus, Gree
470. Introduction to Partia rrequite: MATH 3704 or 3 (34 Fivet
 Cauchy probiems, ellipitio, hyperbolio. and Pabablic equations. Introcuction to the applications
*472. Fourier Analysis (3) S Prerequisite: MATH 364 A or 370 A . Theory of
Fourier series and Fourier transtoms with Fourier series and Fourier tranatorms \(w\)
Oplications to Physics and Engineering Spuare integrable functions and Pargeval's and
planherels identities. Convoltition. The Plancherel's identitites. Convolution. The
Fourier transform in one and severa dimensions, with applications to portia differential equations: Introduction to to
distribution theory,
transtorm and tast Fourier transcoreme. 479. Mathematical Modeling (3) s

Prerequisites: MATH 247, 364 A or 370 A an
consent of instructor. Application consent of instructor. Application on
mathematics to develop modeds of phenomena
n science, engineering buin In sciencce, engineeving, busuiness and otome
discipinines. Evaluation of the beneftis and discipitines. Evaluation of the be
imitations of mathematical modeling
480. Regression Analysis (3) S Prereauisites: MATH 247, 380; prior concurrent enrollment in MATH 38 recommended. Simple linear regression esidials, dotection of oution, us, use annstormations. Multiple linear regresion variables, simultaneocus estimation and hterence, validation techniques.
485. Mathematical Programming (3) F
terereuisistes: MATH 247 and MATH 32 inear and nonlinaert programming: simplox
nethods, dualty theory, theory of graphbs,
Kuhn-Tucker theon, gradient methocis and nethods, duaily theory, theory of graph
Kuhn-Tucker theory, gradient methods and
ynamaic procramming. namic programming.
495. Topics in Modern

Prerequisite: Consent of instructor. Topics
curcent interest trom mathematics literature. *497. Directed Studies (1-3) F,S Tierequisites: Junior or senior standing and年sent of instructor. Readings in areas ant not a part of any regular course. A witter eport of project may bo revirired. May bo Graduate Division
540A. Higher Algebra I (3) F
Frerequiste: MATH 444A. Group theor hcluding symmetric groups: grovp actions on abelian groups; Ring theory includin
polynomial tings, division tings, Euciidean comains, principal Ideal domains and unique

40B. Higher Algebra II (3) S Prerequisite: MATH \(544 A\). Modules; Field xxtensions; Finte fields; Spiliting fiedds, Galdis
heory. Commutative ring theory including chain condition
current interest.
550A. Topology I (3) S
Preerequisite: MATH 361 B . Fundamentalas of point-set topology: metio spaces and contrinuous functions; subspacees, product spaceses and quotient sipaces;
properibes,
countability \(\begin{gathered}\text { sepparation } \\ \text { properties, }\end{gathered}\) couperties,
countability
properities,
compactreses, connectedness; corvergance of ompaenceses, nets and fifters
500B. Topology II (3) F

 metrizability; Baire category theorem;
homotopy and the tundamental group. Topicics
 spaceses, topological groups or topics trom
aigebraic topology.
560A. Functional Analysis I (3) F Prerequisites: MATH 3618 and MATH 247 . inear spaces, metric and topological spacos,
nomed linear
spacess; four principles of Unctional analysis: Hahn-Banach, Open

 560B. Functional Analysis II (3) S
rerequisites: MATH 560A or consent of ormed spacess: special operatcr; elemenentan heory of Banach algebras; selected topicics theory of Banach algebras;

561A. Real Analysis 1 (3) S
Prereaquisite: MATH 361 B . The theory of
measure and integration, focusuing on the Lebesegue integral on Euclidaan on space particuluary the real line. Modes of Convirgence. Fatou's Lemma, the monotonn convergence theorem. Fubbin's theorem.
Treq. Real Analysis N ( 3 ) F . Hestrauiste: MATH 561 or consent of coquality. Minkowsk's inequality. Non P. Further topics trom corvergence of Fourim ries, measure- theoretio probability, the adon-Nikoxym theorem;
562A. Complex Analysis I (3) F Perequiaite: MATH 3618 . (MATH 461 ie and complex. numbers; ; elements of point sof and complifx numbers; alememist of point sens classical integral theorems; Taylo's series
singularties, Laurent series, calculus of golarties
562B. Complex Analysis II (3) S ferequibite: MATH 562A. Mutipiple valued notions: Riemann surfaces; analyic continuation; maximum modius theorem functions; gamma
570. S
rerequisites: MATH 361 A and \(\mathrm{B}, 364 \mathrm{~A}\), an
ne of \(370 \mathrm{~B}, 470,472\). Cauchy's problem asasifcation of seccond order equation nd elliptic equations
75. Calculus of Variations (3) S Prerequistes: MATH 3 VhAA or 370 A , and MATH sufficient conditions tor extrema of multip Itegalal. Hemition Nacacobit theory. Application Pontyagnalin maximum pindiple. Principile optimality.
576. Numerical Analysis (3) F Preveruuisites: MATH 323,3618 and 364 A . error analysis, convergence, and stability of numerical algorithms. Topics may include patrial differential equations, syytems of lineaa and nonlineare equations, and optimization 585 Advanced Mathematica 585. Advanced
Statistics (3) F

\section*{Prerequisiste: MATH 381. The general decisision} problem; Neyman-Pearson lemma; uniformly invariant testis, uloneral, and similiar testsis Principles of sufficiencral, and efficiency of estimates, properties of maximum likellion oo
 regions. t.
methods.
590. Theory of Approximation
(3) S

Prereauisite: MATH 361 B . Recommended
MATH 561 A Math 561 A . The approximation problem. LLea
squares and CCebyshey approximation
 analasia. The Weierstrass approximation
theorem. Rate
computaional methods convergence and 695. Seminar in Mathematic 695. Fe, S
(3) \(\mathrm{F}, \mathrm{S}\)

Prereacuiste: Consent of instructor. Presentation
and discuasion of advanced work, induduing original research by tacuity and stududents. Topics to be announced in the Sol
Classes. May bee repeated for credit.
697. Directed Studies (1-3) F,S

Prerequisite: Consent of instructor. Resoarc on a specific area in mathematics. Topic too
stuudy to be approved and directed by advioo study to be approved and dir
698. Thesis (2-4) F,S


\section*{Medieval and Renaissance Studies \\ College of Humanities}

Philosophy

Director: Anthony Battaglia
(Religious
\(985-5234\)
Program Office: Education 1 Room 50 , Sharon Olson Telephone: \(985-4546\)
Faculty: Professors: Dor Faculty: Professors: Dorothy deF Axelrad (English), Anthony Battaglia (Religious Studiess), A Robert Bell (English), Donna Boutelle ( (History), David Cressy
(History), Robert H. Eisenman (Religious Studies), Kristine \(K\) Forney (Music), Helen C. Gilde
(English), Edward A. Gosselin (English), Edward A. Gosselin
(History), J. Charles Jernigan (Comparative Literature), Stephen R. Knafel (English), Lawrence S. L. Martel (Art), Gail Shoup (Theatre Arts); Associate Professors: Conrad Barrett (Classics), Clorinda Donato (French//talian), Frank Fata
(Comparative Literature); Assistant Professors: Faya Causey (Art), Stanley Jones (Religious Studie Julia Miller (Art), William Smith
The Program
The Center for Medieval and activities that explore sponsors culture of the Middle Ages and the Renaissance. It sponsors a regular
lecture series featuring speakers from on- and off-campus as well as an annual event, usually lasting several days, to commemora significance from these perio significance from these periods;
recent topics have included Richard III, Florence and Rome 1200-1600,
The Sensual Culture of Venice 1066 The Sensual Culture of Venice, 1066
And Atter That, and La Felicissima Armada. The Center also offers courses on a wide range of
medieval and Renaissance is medieval and Renaissance issues,
supports faculty research both heri and abroad, and is associated with most of the local and national societies relev
these fields.

In addition, the Center has established an interdisciplinary
program which offers students integrested in these periods the opportunity to pursue a course of study leading to a Certificate in
Medieval or Renaissance Studies. Courses which are used to meet the certificate requirements may be counted, where applicable, toward the General Education requirements, Interested students should apply to the Director, MHB-618, or to members of the supporting faculty for further information Requirements for the Certificate Studies (code 1-6010):
(1) A bachelor's degree with an
approved major. (Certificate may be completed prior to the campletion of
the B.A. requirement or while in the process of working toward an
provess of working
(2) Consultation and approval of
the program with a faculty advisor. (3) Intermed a aculty advisor proficiency on the college level incticiency on the college level, Renaissance literature of the language. It is expected that the language selected will be Latin, bu with the consent of the advison
Anglo-Saxon, French, German Italian, Spanish or Greek may be substituted.
(4) Twenty-four units selected from the following courses. Students
should elect to concentrate in either the medieval or Renaissance period (a) Required courses ( 12 units). one of the following sequences for six units: HIST 316, 317, or 317, 332
or 332,333 . One of the following literature courses for thriee units:
C LT 431, 432; ENGL 451, 452. On of the following Art history courses 424. 425 .
 697, SPAN 697. THEA 694
*Within an approved medieval or Renaissance topic only certain
special studies topics may be special studies topics may be
repeated for credit with approval.

Department Chair: Paul C.L. Tang Department Office: MCIntosh
Humanitities Building (MHB), Rm 917 Telephone: 985-433 Faculty: Professors: Shane Andre, McGowan, Edward Quest, G.A. Spangler; Associate Professors: Cheryl Clark, Steven Davis, William M. Johnson, Paul C.L. Tang, Roger
Wertheimer; Assistant Professors: Julie Van Camp
Undergraduate Advisor: Paul Tang Graduate Advisor: Steven Davis Emeritus Faculty: William Bonis, G. Strickler.
Carolyn Dersch
Bachelor of Arts in Philosophy
The undergraduate Philosophy program challenges students to think
about some of the most profound about some of the most profound most important in a human life?"; "What can I know";" "Does God exist?"; "Do human beings have free
will?"; "What are the guidelines for morality?"' "What is the soul', or 'the mind"?". No aspect of our lives is immune from philosophical scrutiny. in courses in special areas of philosophical concern such as logic,
theory of knowledge, ethics theory of knowledge, ethics, philoshophy of science, and aesthetics They are also raised in their historical
context in courses which focus on great philosophers such as Plato, Aristotle, Kant, "the great "Rationalist and the great "Empiricists". In encourages students to examine our contemporary situation (with such courses as Existentialism, Lenguagenolagy, Conflicts in Political Philosophy, and to extend their thinking with the philosophies of oth
cultures (such as those of China, Japan, and India)

Requirements for the Bachelor of Arts in Philosophy (code 2-6807) A minimum of 36 units in philosophy divided as follows Lower Division: A minimum of 12 units in philosophy, incluaing
100 or \(160,270,203\) and 204. Upper Division: A minimum of 24 units in philosophy, incluaing PHI,
\(342,363,382 ; ~ a n d ~ d a t ~ l e a s t ~\)
6 \(342,363,382\) and at least 6 units 424; and at least 3 units chosen from
\(416,417,418,419\). The required 6 \(416,417,418,419\). The required
units remaining are to be selected units remaining are to be selected advice and consent of the student's departmental advisor

\section*{Minor in Philo
(code \(0-6807\) )}

The minor in philosophy provides a structured yet flexible program for the student majoring in a different philosophy either as an adjunct to the degree major or as a foundation for the student's future intellectual A minements for the Min A minimum of 21 units in
philosophy, of which at least 15 are upper division and include: (a) at lea three units chosen from PHIL 342 , 363,382 ; (b) at least three units
chosen from PHILL 413, 414, 421, 422 423,424 ; (c) at least three units selected from the list given in (b), but in addition to the units required in (b)
or selected from PHIL 416, 417, 418, or sele
419.

\section*{Master of Arts
(code 5-6807)}

Requirents for entrance to the program:
(1) A bachelor's degree with a major in philosophy; or
(2) A bachelor's degree with a minimum of 24 units of upper division
philosophy courses. These courses must be comparable to those required for the B.A. in philosophy at his University. (Deficiencies will be
determined by the Graduate Adviso after consultation with the student an atter study of transcript records.) Students who do not meet these
conditions may enter as provisional onditions may enter as provision tudents must see the Graduate

Advisor for assessment and to plan and departmental reader positions are sometimes available for qualified persons. A graduate assistant wor but is not responsible for instruction. Application for these positions can be made to the Chair of the Philosophy Department.
Advancement to Candidacy: (1) The graduate student will be
expected to demonstrate proficiency expected to demonstrate pro logic. (A grade of ' \(B\) ' in a semester course in each of these areas is a standard way of demonstrating proficiency.)
expects to become a candidate for expects to become a candida
Philosophy will be required to pass a
Basic Qualifying Examination (BQE). asic Qualifying Examination (BQE). his examination early in graduate tudy.
(3) Students should attempt to be Advanced upon completion of 6 units (peeterably no more triting Proficiency
Exam (WPE) is
Advancement.
(4) Although there is no formal anguage requirement, the Philosophy demonstrate a foreign language roficiency whenever - at the epartment's discretion - a anguage proficiency is appropriate to of study.
(5) The student's graduate program Advisor the Department Chair ande Advisor, the Department Chair, and
he College Associate Dean of Graduate Studies. Requir
Arts: must consist of not less than 30 units radueptable upper division and nits must be in philo which at least 24 emaining six units must be chosen conference with the student's faculty advisor, and may be taken either in philosophy or in another field of study educational objectives. The program
must include a minimum of 18 units of graduate courses, with a minimum of sx units from the 600 series. PHIL 697
and 698 may not count toward fuffilment of the 600 series minimum equirement.
(2) A thesis or set of comprehensive
examinations. Courses (PHIL)
Courses (PHIL)
Lower Divisio
100. Introduction to Philosophy
(3) F,S
cope, bas
Soope, basic principles and a brief analysis of
the major r pobolems of philiosophy. (CAN PHIL-2) 160. Introductory Ethics (3) F,S Concepts of right and worgh, good and bad, and the application of moral Prin
everday life. (CAN PHILL4)
170. Elementary Logic (3) F,S Elements of clear, straight, orderly and valio easoning and the accurate use of language
This course explores practical applications of ogic. (CAN PHIL6)
203. History of Early Philosophy
(3) F,S

From Thates to the Renaisancos including the
systems of Socrates, Plato and Aristotele, and their infuencee on Eurotopean philosophy through the
(3) F,S

From the
Including the devevolomement of modern Cocienturifio processeses, and the philisoophical
empiricism, ationalism, idealism, etc.
270. Symbolic Logic I (3) F,S
introduction to the formal techniques
Uvaluaing argumenti
NoTE: The philosophy upper division courses tall
into
Early Philosophy
306. Philosophies of China and Japan
307. Philosophies of India
421./521. Plato
422./522. Aristotle

490A./590A. Special Topics - Early
Modern Tradition
413./513. Continental Rationalism
14./514. Biritish Empiricism
423./523. Kant

490B./599B. Special Topics - The
Modern Tradition
Twentieth Century Philosophy
416./516. Pragmatism
18./518. Existentialism

419/519. Analytic Philosophy
\(490 \mathrm{C} / 5900 \mathrm{C}\). Special Topics
Twentieth Century Philosophy

Metaphysical Studies 330. Philosophy of Religio 342. Metaphysics 483//583. Philosophical Psychology 4900./590D. Special Topics
Metaphysical Studies Epistemological Studies 381. Philosophy of Science 382. Theory of Knowledge 490F//590\%. Special Topics -
Epistemological Studies Studies In Logic and Semantics 470./570. Symbolic Logic II
484. Philosophy of Language Studies in Value and Evaluation 305. Philosophy in Literature 351. Conflicts in Political Philosoph 352. Philosophy of Law
360. Ethics and Ecology 361. Philosophy of Art and Beauty 363. Ethical Theory 5. Philosophy in Literature \({ }^{305}\) (3) F,S Intensive exploration of philosophical ideas in
selected literature. 306. Philosophies of China and Japan (3) F,S
Historical and aritical study of the philosophical
thought of China and dapan. thought of China and Japan.
307. Philosophies of India
(3) F S S (3) F,S

Historical and critical survey with emphasis on 330. Philosophy of Religion (3) \(\mathrm{F}, \mathrm{S}\) Nature and function of reiligion and of
fundamental religious concepto sand ideand 342. Metaphysics (3) FS Prerequisist: Three units of philosophy oc consent Preerequiste: Three units of philosophy or consent
of intatuot. Probems of ontology and
cosmoltogy induduing esch concopts as matter cosmology induring such concepts as mantee
and energy, time and space, evolution and and energs.
351. Conflicts in Political Philosophy (3) F,S Intensive study of the philosophies undertying
Communism, Socialism, Fascimm, and Communism, Socialiam, Fascilem, and
Democracy, in partiour, the origis of diftering
veiews of fustice, treedom, individualism, and the views of
State.
352. Philosophy of Law (3) F,S Study of the historical development of philosophy of law and examination of the
problems in the fied ranging fom general
theocies to analysis of fundamental theories to analysis of thin
concepts and nomative isues.
360. Ethics and Ecology (3) F,S Philosophical look at ecologyical problems
suviey of a number of ethical positions held by Survey of a number of ethical positions held by
the great phiosohers silbe made and current
ecological problems will be looked at from the
points of view of the ethical positions studied. 361. Phillosophy of Art and Beauty Discussion of central problems in aesthetics,
such as the possibility of oofjectivity in oriticism, modern and trasitition, definitions of a work of st, truth and meaning in the fine arts, natural beauty and its rel
architecture, etc.
363. Ethical Theory (3) F,S
 81. Philosophy of Science (3) F,S
oblems, methods and fundamental conceppts of the sciencees, includuing the erealaionsonipo of the
sciences to each other, to mathematics and to philosophy
382. Theory of Knowledge Prerequisth Prerequiste: Three units of philosophy.
Invesigation of such cincopts as knowedge,
belief, cortainty. Cititioal stury of theories belieft certainty. Cutitiol study of theories
concerning usch issues as our knowidedge of the
external world, the past, other minds. external world, the past, other minds.
\({ }_{\text {(3) }}\) F,S . Continental Rationalism (3) F,S

Prerequisities: Six units of plilisoophy to indude
PHHLL 204, or consent of instructoror. Coosestuy of
such maior figures as Doecartes, Spinoza and such maj
414./514. British Empiricism (3) \(\mathrm{F}, \mathrm{S}\)

Preerequisites: Six units of philosophy to include
PHHLL 204, or consent of instructor. Close study of such maior figures as Locke, Berkeley, Hume.
416./516. Pragmatism (3) F,S

Prerequisite: Three units of philosophy or consent
of instrutor. Devevoloment of pragmatism as
exemplifed of instructor. Development of pragmatism as
exemplifid in the philosophies of Peirce, James,
Dewey and Mead.
417./517. Phenomenology
(3) F,S

Prerequisiteo
Prerequisites: Six units of philosophy or consent
of instuctor. Suty of one of the maior movements of contemporary philiocophy. Themes
treated may inducte krowidge, meaning. treated mal inclicere knowledge, meaning,
emotionality, embodiment, language, sociality,
treedom and religion. Philionher


418./518. Existentialism (3) F,S Prerequistes: Three Units of philosophy or
consent of instrutor. Intensive stuyy of such

 and aesthetio dimensions. PPilisoophers treated
may includ Kierkegaard, Nieczache, Marcel,
Jaspers, Satrte and Camus. 419./519. Analytic Philosophy (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: Six units of philosophy to include
PHIL 270, or consent of instructor. Citicical analysis of maicor movements in the development
certury, such as logical atomism, logical
positivism and ordinary language philosong
litensive setury of Intensive study of the contributions of ouch
philosophers as Moce, Ruseell, Witgenstein
 421//521. Plato (3) F, Prerequiuites: Six units of philosophy to includ
PHIL 203, or consent of instructor. Close study of Plato's's thought, based primarily on readings trom his works.
422./522. Aristotle (3) F,S

Preeraquistes: Six units of philiosophy to indude
PHiL 203, or consent of instrutor. Close study Aristotet's thoughent, bosed nodrtuctor. Climasily on streadings of
trem his trom his works.
Prerequistes: Six units of Ph
Prerequisites: Six units of philooophy to indlude
PHIL 204, o consent of instructor. Intensivive study of Kant's Cititicue of Pure Reason
424./524. Hegel (3) S

Preerequisises: Sx units of philosophy to indlucd
204, or consent of instructor. Study of Hegel Philosophy of Mind and Logic, and selected witings by Hegel and
(3) F,S

Preerequisite: PHILL 277 or MATH 330 or consent of Instructor. Phil
deductive systems.
483./583. Philosophical

Psychology ( 3 ) F,S
Prereauistes: \(S\) un units of
Preerequistes: Six units of philosoophy or consont
of instrutor. Nature of the mind. Peychological conseptso such as in intention. consociousneses
action, motvei imagination, belief and purpose 484./584. Philosophy of Language (3) \(F\)

Preerequisites: Sx units of philosophy or consent
of instructor. Philosophical thought about of instructor. Philoso.
language and meaning.
490A./590A. Special Topics Early Philosophy (3) F, Prerequisites: Six units of philoophy or consen
of instructor. Detailed and intensive study of instrucior.
figures, periods or issues in ancient or medievel tigures, pericicd or issues in ancieition oredion be announced in the Shedule of Classes
Siample tites:
Pre-escratic Philosoph Poot-Aistotelian Philosophy, Medieval maximum of nine units with different topica 490B./590B. Special Topics
Modern Tradition (3) F,S
Preerequisites: Six units of philosophy or consen
of instructor. Detailed and intensive study of of instructor: significant philosoopher or of some issue or theme
 Specific tities will be announced in the Scheduia
of Classes. Sample titles: Hobbes, German of Classes. Sample thtes: Hob bes. Germa
Idealism, Nietzsche. May be repeated tor crea to a maximum of nine units with different topica 490C./590C. Special Topics F,S
Prerequisites: Sx units of philiosophy or consent
of instructor. Dotatied and intensive study of a
movement of the twentieth century. Specilic iut Sample thtes: Wittoenstein Heidegger, Russe
 to a maximum of nine units with differerent topice: 490D./590D. Special Topics_-
Metaphysical Studies (3) F,S Prerequivites: Six units of philosophy or oonsent
of instrutor. Seminar study of a selected metaphysical topici. Sample topicis: Tim,
 Specific topic will be announced in the Scheocule
of Classes. May be pepeated for cerifit to a
maximum of nine units with differenert toppla. 490F./550F. Special Topics Epistemological Studies (3) F,S Prerequisistes: Six unitit of philosophy or consent episitemological topic. Sample topica Philosophy of History, Philosophy of Perception.
Specific topic will be announced in the Scheodua of Classses. May be repeated for credin to maximum of nine units with different topics \(490 \mathrm{H} . / 590 \mathrm{H}\). Special Topics Prerequisites: Six units of philosophy or consent of instructor. Seminar study of a selected topio value or evaluation. Sample topiss: Theories off
value, Freedom and Determinism. Specifi Value, Freedom and Deterninism. Specific
topies will be announcod in the Scheovie of Coplsses. Mey be repeated for credit to
Clasximum of nine units with different topics.
499. Directed Studies (1-2) F,S Prerequiste: Consent of instructor. Independent stucty of special topicis under superision of a taculy mem.
of six unta.
Graduate Division
513./413. Continental Rationalism (3) \(\mathrm{F}, \mathrm{S}\)

Prerequiultes: Sxi units of philosophy to indude
PHIL 204, or consento of instructor. Close stucy of such maior figures as Descatres, spinoza and such maje
Leibni.
514./414. British Empiricism (3) F,S

PHIL 2 204, or consensit of philosophy to indude PHill 204, or consent of instructor. Cloes study
uuch majof fiures as Locke, Berkeley, Hume. 516./416. Pragmatism (3) F,S of instructor. Development of pragmatism as of instructor. Development of pragmatism as
exemplified in the philosphies of Peicce, James, exemperifend int Mead
517./417. Phenomenology
3) \(F, S\)
prerequistes: Six units of philosoophy or consent
of instucto. Study of one of the maior
 treated may include knowedge, meaning.
emotionantily. emboomenent, language, sociality, emotionality, embodimment, language, sociality. include Husserl, Sc sch
Merleau-Ponty and Ricour.
518./418. Existentiailsm (3) F,S consenti of instructor. Intensive stuccy of such issues as self-abexistence, treedom and reeponsibility in their ethical. religious, politioal
and aesthtio dimensions. Philiosophers teaeded
may indulut may include Kierkegaard,
Jaspera, Sartre and Camus.
519./419. Analytic Philosophy (3) F,S

Prereaquistes: Six units of philosophy to include
PHIL 270; or consent of instructor.
citical analysis of major mevemements in the theor. Covelopment
of Angl. Ameican philogaty in of Anglo-American philosophy in the twentieth
century, such as logical atomism, logical century, such as logical atomism, logical
 Ayer, Pyle, Austin, Strawson, Quine
521./421. Plato (3) F,S

Prerequiuites: SXX units of philosophy to indude
PHHLL 203, or consent of instructor. Close study of PHIL 203, or consent of instructor. Close study of
Platoos thought, based primarily on readings from his works.
522./422. Aristotle (3) F,S

Preerequisites: Six units of philosophy to include
PHHL 203, or consent of instructor. Close study of PHIL 203 , or consent of instructor. Close study of
Aristotede's thought, based pimaril on readings trom his works.
523./423. Kant (3) F

Prerequisites: : Six units of philosophy to indude
PHLL 20 consent of instructor. Intensive
study of Kant's antion of
 524./424. Hegel (3) S

204equisites: Six units of philosophy to include
consent of instructor. Stucy of Hegel's Phibsophy of Mind and Lopic, and selected witings by Hegel and other topics.
570./470. Symbolic Logic II

Preequuiste: PHLL 270 or MATH 330 or consent of
Ierequyiste: PHIL 2 270 or MATH 330 or conenent of
Philosophical consideration of oductive systems.
583./483. Philosophical
sychology (3) F,S
terequisite: Six units of philosoophy or consent of
nstructor. Nature of the mind. Paychological concepts such as intention, consciousness,
action, motve, imagination, belief and purpose. 584./484. Philosophy of Language \(584 . / 48\)
(3)/F
Prerequin

Prerequisites: Six units of philosophy or consent
of instructor. Philosophical thought about of instuctor. Philios
590A./490A. Special Topics Early Philosophy (3) F,S Preerequisites: Six units of philosophy oc consent igures, periods or issues in ancient or medieval philosophy. Spececific issues, periodid or figureses will Samnouncod in the Schedive of Classes
 hhilosophy. May be reposeted for crodit to

590B./490B. Special Topics
Modern Tradition (3) F,S
 theme of the modern (1600-1900) philosophical era. Spoeific tithes will be announced in the
Schedule of Classes. Sample tithes: Hobbes, German Idealism, Neotsche. May be repeated
for creadit to a maximum of nine units with different topics.
\(590 \mathrm{C} . / 490 \mathrm{C}\). Special Topics Twentieth Century Philosophy (3)
F,S
Prerequisites: \(S i x\) units of philosophy or consent
of significant philcosopher or of a school of movement of the twentieth contury. Specific titie
will be announced in the Scheoduie of Classes.
 Proceses Philosophy. May be repoeated for reodit
toa maximum of nine units with different topics. 590D./490D. Special Topics-
Metaphysical Studies (3) F,S Preerequisites: Six units of philisoophy or consent
of instructor. Semina stucy of a selected of instruytor. Seminar stury of a selected
metaphysical topoci.
Pample
toppics:
Time,
 Specifio topio will be announcoed in the Soheopuly. of Classes. May be repeated for crodit to
maximum of nine units with different topics.

590F./490F. Special Topics erequisitee of instructor. Seminar stucuy of a selected eppitemolosical topli. Sample topics:
Philosophy of History, Philsosohy of Per poecific topic will be announcoed in the Scheoducue of Classes. May be repeated for creditit to a \(590 \mathrm{H} . / 490 \mathrm{H}\). Special Topics - -
Value and Evaluation (3) \(\mathrm{F}, \mathrm{S}\) Prereacuistes: Sx units of philosophy or consent value or vevaluation. Sample topices: Theocies of Value, Freedom and Determinism. Speoific
topioss will be anouncod in the Schedue) of
Classes. May be repeated for credit to a

599. Graduate Tutorial (1-3) F,S Prerequivite: Consent of the instructor.
Superaisod independent study. Seniors wita a
GPA of B or better may enroll with consent of
 Department. May be
620. Seminar in History of
Philosophy (3) F,S Prorequisite: Consent of instructor. Cliose study of selecied subijects in the history of philioosphy.
The orignan linguag may
repeated repeated with
nine units.

\section*{630. Seminar in Philosophy of} Religion (3) \(F\)
Trerequisite: Pill. 330 or consent of instructor

680. Seminar in Epistemolog (3) \(\mathbf{F}, \mathbf{S}\)

Preraquisite: PHIL. 382 or consent of instructor.
May be fopeated for a maximum of six units. ubbect to suitable variation in courre content. 681. Seminar in the Philosophy of
Science (3) F,S
\[
\text { nce (3) } \mathbf{F}, \mathbf{S}
\]
cience (s)
 o suitable variation in ourrse content.

\section*{Current Interest (3) F,S}

Presentation, dilsoussion and cititical evaluation
advanced work (which may indudue orioina reveancod of work (turyich and may indulude origininal phibsoophers. If demand for more than on Subject exists, mutiple sections may be given in any one semester. May be repeated for a of course content.
697. Directed Research (1-3) F,S

\section*{698. Thesis (1-6) F,S \\ 98. Thesis (1-6) F,S}

Prerequisite: Consent of graduate advisor
Proparation and completion of a thesis in
phiosoophy

Radio, Television, and Film

\section*{Department Chair: \\ Robert G. Finney}

Department Office: University
Telectmmunications Center (UTC), Room 208
Telephone: 985-5404
Faculty: Professors: Robert G. Finney, J. David Viera; Associat Professor: John T. Calcwell
Saundra McMillan, Micheal C Pounds; Assistant Professors: Sharyn Blumenthal, Jose Sanchez
H., Maria Viera; Emeritus Faculty: Dan F. Baker, Howard S. Martin, Dan F. Baker, Howard
Hubert P. Morehead.
Premajor Advisor: Robert Finney Department Secretary: Karen Burman
The Department
Radio, Television, and Film is an
innovative ecademic program which innovative academic program wh
emphasizes both professional education and liberal arts, both theory and practice. Focusing upon the our information society, as well as upon the impact of tecchnology on our
culture and the media themselves, the culture and the media themselves, the
curriculum is designed to assist the student major in becoming more future-oriented while developing a sound founc
The faculty includes a diversity of expertise and interests which cross traditional media lines, resulting experimentation while integrating traditional audio, film and video production modes. Theory and part of the development of communication and production skills, Part-time lecturers include a variety highl-qualified Los Angeles area
media professionals. Leaders in the information and entertainment industries serve on the Department's The Professional Advisory Council
The responsibilities of the
Professional Advisory Council to the Radio, Television, and Fill Department are to evaluate the
curriculum of the department and to suggest changes in policicies, course content and curricular structure to
relevant to the profession as a whole Alist of the membership of the
Advisory Council may be obtaine Advisory Council may be of
from the Department office Admission under Impaction The number of applicants to the
major in Radio, Television, and Film major in Radio, Uelevision, and Film
exceeds the number that can be accommodated by the Department's facilities and resources. For this
Film program has been designated as impacted by the California State Universitiy. Applicants for admission to
the University with a maior in Radio. the Universty with a maior
designated as pre-majors and assigned a pre-major code.
Acceptance into the pre-maior Acceptance into the pre-major
category does not imply or assure subsequent arceptance into the
maior. Similarly. acceptance into the major. Similarly, acceptance into the
pre-maior is not a prerequisite for pre-major is not a prerequ
admission into the major.
Admission into the major (code
-6846 ) is determined solely on the \(2-6846)\) is determined solely on the
basis of meeting all of the following basis of meeting all of
supplemental criteria:
1. Completion of minimum of 56 semester units of college-level cours竍 2. Completion of RTVF 200 with
rade of 8 ' or higher: 3. Completion of one of the ollowing production courses, taken at CSULB, with a grade of ' B ' or higher
either RTVF 220 , RTVF 230 , or RTVF entir
240
4. Successful completion of either
he CSULB Witing Proficiency Examination (WPE) requirement of, grade of ' \(B\) ' or higher.
5. International student applicants are required to complete the Test of English as a Foreign Language
(TOEFL) with a score of 550 or higher 6. Priority admissions will be given legal residents of the State of California
To apply for admission to the Radio, elevision, and Film major, atter meeve above, a matriculated (fully accepted and enrolied) student must compled horm obtainable from the departmen ffice, sign it, and attach official
transcripts of all previous college work for applications to the University for the Fall semester is November 30 of
the preceding calendar year, and for the preceding calendar year, and for
the Spring semester August 31 of the preceding calendar year. Admission the maior is competitive, and
ose applicants iudged by the hose applicants judged by the qualified will be accepted.
The Curriculum
The lower division core emphasizes
principles, aesthetics and procedures of the production process common to all film and electronic media while providing the student with a upper division level. Upon completion of the lower division core, the student elects either an electronic media or film upper
division track, and may seek one or more areas of speccialization, including theory, critical studies, wititing,
production, and management. production, and managemen
Enrollment in specific course sequences (e.g., writiting, production) is competitive and progressive, relying
upon student achievement in previous coursework and experiences. A rade of ' \(C\) ' or higher is required in all the degree.
In keeping with the Department's abiding concern with visual literacy, oral and witten communication, and the liberal arts, in addition to
completing the the lower- and upper-division University General Education interdisciplinary breadth equirements, and the maior, students felevision and Film interdisciplinan readth requirement.
Requirements for the Bachelor of Arts in Radio and Television (code -6846)
Lower Division: RTVF 200 and RTVF 202 taken concurrently. These courses must be completed with a
or better in each course BEFORE advancing to any Upper Division course except \(310,312,314,316\), or 3181. Upper Division: Students must
complete one of the following 15 unit tracks:


\section*{S} berequisites: RTVF 222 with grade of 'B' or procuccing origininal programs of tor broandcaast and sther means of dulive
325. Radio Station Activity (2) F,S Ferequiste: RTVF 220 or consent of instrutor. University radio station. CreaditNo Credin grading . 326. Intermediate Electronic Cinematography (3) F,S Prerequistes: RTVF 230 with a grade of 'B' or better and consent of instructor. Theoory and
practical experience in directing. shooting, and practical experienco in orirecting. Empownais on only.
327. Production Management (3) F,S Prerequistes: RTVF 200 and 202 with grades of -oby-step proceass. of buxamoting and
 Studeding will eature methon mots and prococoturues of
breaking a script down, analyzing production breaking a ascript down, analying production
elements, preparing a procuction board sheoculing prepacining photography, and preparing comprehensive budget.

\section*{(3) F,S}

Preerequistere: RTVF 230 or 240 or consent of the instucutor. Examination of the basio aesthetio and echnical principles of film and video lighting
Students
will explore varius creative lighting yles and techniques thrush lectures and practical exercises.
330. Film into Video (3) F,S Censent of instructor. \({ }^{230}\) introduction to the principese and paratices of norative
image-making for video. Topics induce:


\section*{335. University Television Activity} hours.)
335. Un (2) F,S

Experequisites: RTVF 330 or consent of instructor video projects at the University Televivision facility Hours to be arranged. May be repeated once tor a maximum of 4 units. (Activty hourss to bo arranged) CreditiNo Credif grading only.
(3). S

Prevequistes: PRVE 240 with a grade of 'B8 or
better and consent of instructor. Preparation tor better and consent of instructor. Preparation tion
the advancod veve of fim procuction thrugh
then
 easential il.
340. Advanced Film Production
(3) \(\mathbf{F}\)

Peerequisites: RTVF 240 with a grade of ' \(B\) ' or
 on narrative short fims resuuting in a pububic performance. Fee required to cover production expensees. Production laboratory 9 hours. (May
be
epeated for a maximum of 6 units.) 42. Advanced Film - Post production (3) S
Preerequisite: RTVF 240 with a grade of ' B ' or
344. Advanced Directing (3) S

Prerequistes: RIVF 340,342 , of consent of

 actores in in fic
aranged.)
355. Audio-Video-Film Activity (1) Preerequiste: Consent of instructor. Group and Dolvidual experiencos in areas of aucio-video-film production, and broadcast education sistructor. (Actrity hours to be arranged.). May be CoditiNo Criedin grading only. 363. International Electronic

\section*{Media Systems (3) S}

Prerequistes: RTVF 301 or 302 with grade of 'C' or beter. Compratatervanayyisio of itrinemenal and xdenal electronic media systems with emphasis
on their motives. origins, technologies, and on their motves, originis, teconnologofes, policical, Proconomic, regulatory constraints,
potential impact of new technologieg. 375. Media Advertising (3) S Prerequistes: RTVF 204. Theory, role, regulation
 media Study of legal, ethical, commercial and
creative priniples
which the
studer cteative pirinciples which the studern
demonstrates knowedge of by deigning acverisising strategy, campaigns and F
376. Broadcast Sales (3) \(F\)

 Theory and application in media rescarch. 380. Documentar
Theory (3) F,S Theory (3) F,S
Prerequistes: RTVF 200 and 202 with grades of Bor better in each. A A titical study of the history
methods, and Aesitheicos of documentary media methodes, and A assthecicifo focus on oprobolems representation, obiectivity, and persional stylve in
both theory and practice. Traditional grading both theory asd prach
only. Course fee: \(s>0\). 385. Children's TV Programming (3) \(F\)
Preerequibete

Preerequibites: RTVF 200 and 202 with grades of
' 8 " \(\circ\) b beter in each. Study of the lierature an " 8 " ob better in each. Study of the liferature and
research on the impact of television procarams to chidron. Consideration of
392. International Cinema (3) F,S Prerequisite: RTVF 305. Variable topics course
tich explores the domain of international
 Japanese, Latin Amearican, Post Collonoiaipan
Arican, Spanish, and German cinemas. Traditional grading only. Course may be repeated for a maximum of 6 nitits with dififerent
topics. Toppice will be announced in the Scheoule 394.

\section*{F,S}

Prerequisite: RTVF 305 or consent of instructor Histotical and critical examination of Hollywood
film genres. Places genne analysis and theory within a sociocultural perspective including ssuuse of gender and ethicity. Gencres to be
covered indude the Western, film noif, science fiction horror, detective/gangster, the musical, wal
fims, screwbell comedy, and family melodrama ilims, screwball comedy, and family melodrama
taditional grading only. May be repeated tor Traditional grading only. May be repoeat.
maximum of 6 units with differenent topics.
401. Film Critical Theory (3) F Preerequisite: RTVF 300 or 305 . A study of the
classical theoretical models for the anaysis and classical theoretical modelts tot the anayysis and
evaluation of films. Topics to be examinect
 gente, structuralism, and narratate stccies. Aimg
 contemporaray yiritiquese of ol clasical film the
Traditional grading only. Curse fee: \(\$ 355\). (3) S

Preerequisites: RTVF 300 or 305 . Examines
 distinnctive ways that teleotision provicuces ho
meanings, as well as the ways that cotitic meanings, as well as the ways that critical
analysis differs
torm quantiative mas communications approaches. Topics to be
covered include semiotics, postmodernism, and covered include semiotics, postmodernism, and
feminism, as well as narative, ideoclogical, an feminism, as well as narative, IIdocological, and
psychoanalytic theories of citicism. Trational grading only.
403. Electronic Media in Education and Industry (3) F,S
Preerequistes: RTVF 200 and 202 with grades
' 8 ' or beter in each or consent of instucto. Development and utilization of radio, telewision and fim in education and industry with emphasii
upon instruction, training and public relations. 404. Advanced Scriptwriting for
Film and Electronic Media (3) Prerequite: RTVF 204 Media ( 3 ) \(F\),S
 comedic screenplays and teleplays. Incluoe creative procesess. (May be repeated for credin to creative procuess. (may
412. American Television and African Americans (3) F,S Preerequibites: RTVF 316,402 with grade of 'C. or
betert. Comparative examination of the depiction botter. Comparative examiniason onthe depplion syndicated telicisison in a variety of types of
progarams. Traditional grading only.


\section*{Religious College of tummenties}

Department Chair:
Robert H. Eisenman
Department Office: McIntosh
Humanities Building (MHB), Rm 619
Telephone: 985-5341
Facuilty: Professors: Robert
Eisenman, Anthony Battaglia;
Assoclate Professors: Jeffrey L Broughton, Peter M. Lowentrout; Assistant Professors: Edward J. Hughe
Emeritus Professo
Alexander Lipski
Bachelor of Arts in Relligious
Studies
The program in Religious Studies critical understanding of the forms of eligious phenomena in their cultural nd historical contexts and a
ensitivity to different value systems.
he program provides students with n introduction to the major religious raditions and to religion in the places special emphasis on relating he religious dimension to the
umanities and social sciences.
Sudents interested in the degree in Department Chair, MHB-619.
Requirements for the Bachelor of (code 2-6011)
Core Courses: 15 units selected from the following: R/ST 100, 152, 291, 301,
PHILL 330.
Area courses: Fifteen additional Area courses. Fifteen adational
upper division units from three of the ollowing five categories:
(a) Jewish Studies: R/ST 311 3121,3
\(495^{*}:\)
(b)
(b) Christian Studies: R/ST 3121, 322, \(324, * 75,3766,43 * 3\),
(c) Asian Studies: R/ST 3411, 343
\(344,351,487,490^{*}, 494^{*}, 495^{*}\);
(d) Biblical Studies: R/ST 311, 312
\(322,375,3761,490^{*}, 494^{*}, 495^{*}\);
(e) Contemporary, Religious Studies

RST
\(494^{\star}, 4931,395^{*}\). Six additional units are to
be selected from either religious
studies courses, or AIS 335, C IT 342 PHIL 306, 307, 313, 442. Six to eight
units of Hebrew, Greek or Sanskrit units of Hebrew, Gre
\({ }^{*}\) When subject matter of special opics course is appic.
course may be used. Minor in Religi
(code 0-6011)
A minimum of 21 units in religious tudies courses or courses from oth departments approved by the
Religious Studies Committee. Lower Division: A minimum of six units selected from R/ST 100, 11 .
\(112,152,291\), or the equivalent. Upper Division: A minimum of 15 of the following groups: (a) Western Religious Thought: R/ST 311,3121 , 314, 2151, 316, 322,
3761,4251, 4711, 4721: (b) Eastern, Religious Thought: R/ST 3411,343,
\(344,351,487\). Remaining units are to 344, ,351, 487. Remaining units are to ourses and the following electives: AIS 335, ANTH 406, AlS 380. B/ST \begin{tabular}{l}
\(353, \mathrm{C}\) \\
3 l \\
\hline
\end{tabular}
Requirements for
Religious Studies Religious Stud
(code \(1-6011\) )
(1) A bachelor's degree with a major a traditional discipline *A minimum of 30 units in religious departments approved by the Religious Studies Committee.
Lower Division: A minimum of nine 112, 152, or 291.
Upper Division: A minimum of 21 units including one course from each of the following: (a) Biblical Studies
R/ST \(311,3121,322,375,3767\); (b) Western Religious Thought: RST 314 , 3151, 316, 331, \(4711,4721,485 ;\) (c)
Easter Religious Thought: \(R / S T\) 341], Eastern Religious Thought: R/ST welve upper division units from the preceding courses and the following electives: R/ST 3831, 396; 482, 406; ASAM 380; B/ST 353; CRT 342; HIST ASAM: PHIL 313, 330 .

\section*{ourses (R/ST)}
oduction to Religion 3) \(\mathrm{F}, \mathrm{S}\)
rigin, natare, and function of reigion in the dividual and culture with emphasili upon and ioferences to outstanding peraonalitios, sacried
witings, and basicic featurues of the wordris's leading ailigions.
11. Introduction to Western a survey of representative figures, themes, the
 112. Introduction to the Bible

\section*{(3) F,S}
an overiew of the Sacred texts of Jews and Chistians. Inspiration, Creation, Savation, an hey persons and events, such as Moses, Joesue, to. Not avalablie to students with credit in RST
152. Introduction to As
152. Introduction
Religions (3) F,S

A survey of Incian, CCinnese and Japanese
religious thought. Emphasis will be on original religious thought.
texts in translations.

\section*{291. Relligion and Society}
(3) \(\mathrm{F}, \mathrm{S}\)

Rolicious and socular views of man in rolation to
 problems of personal and tocial
responsiblity and social stucture. Upper Division
301. Approaching Religion (3) F,S

Study of the methodology of reilijius studiee
 and phenomenonogical stuvy of reiligions, textua
anticilimm, exegesis, research methods and echniques
Oid Testament (3) F,S The Odd Tostament as a religious, historical and
Iherary document with emphasis on the eligion and culturu of the early Heberews. Solected book will be read each term, but prime emphasis
be put on Geneois, Exocous, the early prophe lseiah. The period of the concuust and 3121. Intertestament Literatur Palestine History, and Early Palestine History,
Christianity (3)
S
Prerequistes: ENGL 100 and upper divion status. Historical development of Jewish religion
and cuiture in the Second Templeperiod from th and curture in the Second Templep period trom the

Chistianity with emphasis on the rise of the
Jewish

314. History of the Jewish Religion (3) \(F\)
From the end of the Second Temple period to the
close of the Middle Agee. Development trom close of the Middrie Ages. Development from
Hellenistio Judaism to Rabbinic Judaism to philosophical theology will be gone into in some
detari. Readings from Saadya, Halevi and
Maimonides.eto.
3151. Modern Jewish Thought/ Zionism (3) F,S
Prerequisites: ENGL 100 and upper division
status. The course will deal with the develoment of Jewish thought from the enlighterment and emancipation from the ghettos, through attempts
at asaimilation, the Holocaust and the bith of the at assimilation, the Holocaust and the bith of the
Jewish State. The development of consenvative,
reform and othodox Judaism will also be discussed.
316. Jewish History (3) F Survey of Jewish history from eary times to the
present. Subijects such as the Babyionian

 andi-Sesitism, Jemish community and inteleactual
Ifie in the Middile Ages, Emancipation trom the
Gheito political Ghetto,
lstrael.
318. Biblical Hebrew I (3) S Biblical Hebrew 1 imparts the basic grammatical
infections, coniugations, and structures of elementary biblical Hebrew and starts the student
on the path of mastering the specifio vocabulan of biblical Hebrew. It introcucces the history and
particularity of this language as well as the paticularity of this language as well as the
standard efeference tocols employed in reading
319. Biblical Hebrew II (3) \(\mathbf{S}\) Prerequiste: RNST 318 . Biblical Hebrew il
completes the instrution in the grammar of biblical Hebrew and introduces the student to the maior syntatical constructions of this language.
It futher increases the student's biblical Hebrew vocabulary, hones skills in the use of referencee books for biblical Hebrew, and allows an intitia controntation with sel
322. New Testament (3) F,S

The emergent Christian community, seen through the missionary and pastoral letters, the synoptio
gospels, the radical theologies of Paul and John gospels, the radical theoogogies of Paul and Jo
and the cramatio visions of the Appocalypse. 324. Christianity (3) F

Introduction to the common doctrines of of the division of Christianity into many churches. Similartites and dissimiliarties in the doctrine and practice will be discussed in terms of present day
Chistanity
3311. Isl
(3) F,S reerquisise
 Islam as a cosmopolitan faith. The development
of Musim Cinization, including ilteratue of Musim Cxilization, including literature
theocogy, philosophy and Sufiem (myyticicm).
3411. Buddhism (3) F,S

The Buddaza eary Buddhism; the great velicle;
and the vehicle of incantations. The tranemissaion
 Asia and TTbet.
in translations.
343. Religions of China (3) F,S Ancient Chinese religious thought; the
penertation of Indian Buddhism and Ch'an (Zen);
 scholar- official.
in translations.
344. Relligions of Japan (3) F,S The transmisesion of continental coilizzation to
Japan: shinto, Buddhism and Tokugawa Noo-Confucianism; Genroku culture; and the Now Reliligins. Emphasis will be on original texts
in translations.
351. Hinduism (3) F,S

Survey of ancient, classical and medieval
Hinduism. Empheasis on anaycyis of Upanishacis,
 375. The Historical Jesus (3) F,S The life and person of Jesus of Nazaretht through

 will be used in an autempt to reconstruct the movement centering around the person of the
Messiah. The consequent messianic thrust of eary Christianity both on a aecular and religious early Chistianty both on a secular and reigious
basis will be treated fully. Readings fom
josephis and the New Testament. Josephus and the New Testament.
Prerecuisites: ENGL 100 and (3) F, status. A consididration of Crrosisian opirigins insion the
firist century and atterward. first contury and atarewwars.
considideration of the two factions in the a
a consiceration of the two factions in the earty
Church in Papeostine, one following the Aposte to the Gentitases and the other following the tamily
line of Jesus in a natio Palestinian messianic Way. Faith vs works. Readings from primary
sources like the Book of Acts. Pauls eleters,
Eusebius, and apocryphal literatue, and other Eusebius, and ap
new discoveries.
3831. Christianity and Marxism (3)

Prerequisites: ENGL 100 and upper division status. An examination of the encounter between
Christianity and Maxism, both in the past and in the present. The simiarities and differencess and of the modern world, and their underotandings of appopopitiate human action will
be compared and contrasted. 3911. Religion and Science (3) \(\mathrm{F}, \mathrm{S}\) (3) F,S This course This course examines the occasionally
hammoniuss often acrimonious
between relligion and betweon reiligion and science. Using the
methods of the history and phenomenonology of
meligion religion and the history and philosophy of
science, studunts examine beyond science, students examine, beyond the
particulars of the course, the fundamental particulars of the course, the fundamental
iniohts and claims of both religion and science,
moving beyond the tiequenty moving beyond the frequenty sharp preiudicoes
they intially bring to their stucy, to a more they intialy bing to their stucy, to a more
reasoned understanding of each alone and in
relation to each other.
396. Religion and Humanities
396. R
(3) S
Examinat

Examination of the religious dimensions of man's
existence as these are expressed in the humanitiese, including liteareutue, mussis and the
fine arts. May be repeeted up to a maximum of fine arts. May be repeated
six units. Topicses will vary.
4251. Religion and Modern
Literature (3) FS Literature (3) F,S
Prerequisites: ENGL 100 and upper division
status. The role of the witer and poet in status. The role of the wititer and poot in the
secular modern world as religious thinker. The
themee of en themes of alienation, angolish, aboundrity, evil
hope, despair, mystio vision, and savavaion will bo hope, despair, Mystic vision, and salvation will be be
among thooes treated. (Not open to students with credit in R/ST 396.)
4711. Early Christianity and
Society (3) FS Society (3) \(\mathbf{F , S}\)
Prerequistes:
ENGL
Prereaquisites: ENGL 100 and upper division
status. Development of Christianity from the New
teata Testament period to the Renanassanco wew emphases on the growth of doostrine, church
institutions and the role of Christanity in ancient and medieval society. (Same course as HIST
4111.) 4721. Formation of Modern Christianity (3) F,S
Prerequisites: ENGL 100 and upper division status. Restructuring and renewal of Chrisisianity
form the Reformation through the dawn of modern consociousuntions through the the dawn oflenge of 2ath century secular life. Same course as HIST 4344 . 482l. American Religious
Prerequisistes: ENGL 100 and upper division American religious major thememe in the unique significance will incluce the adaptation of European Chistitanity to to novel Ametation
 485. Contemporary Religious Thought (3) F
Critical examination of the current trends in
feligious understanding against a background of eligious understanding against a background of
rapid soccial change. New movements and issues apld sociad change. New movements and issues
on the refigious scene will be considered and a
variety of authors repereesting boot East and variety of authors representing both East and
Weest will be studied in order to reveal the merging patterns of elifious thought. 487. Mystics West and Eas (3) \({ }^{\text {Anyyis }}\) Anaysis of the nature and methods of mysticism.
Comparison of Christian, Jewish, Mosilem
 Christian mystics, esp
St. Therese of Avila.
490. Special Topics in Religious Studies (1-3) F,S
Topicis of current interest in religious studies of nine units with different topics may be used in of nine units with dififerent topicis may be used in
the maior. Topise will be announced in the
Scheodule of Classoss.
494. Religious Classics (3) F,S Examination of selected religious classics
indududing an analysis of religious themes in inignificant works of world literature. Speceifio works will vary. The course may be repeat.
creditit up to nine units with differenen topices. 495. The Religious Personality (3)
F,S \(\underset{ }{\mathrm{F}, \mathrm{S}} \mathrm{P}\)
Preerequistes: These units of relligious studien or
consent of instructor. Study of the cultural consent of instructor. Study of the cultural
infuunce and peraonal characteristics of fellifious
ind
 perssonalities will vary. May be repoeated
up to \(\begin{aligned} & \text { nine units with different topics. }\end{aligned}\). \({ }^{\text {and }}\). 499. Directed Studies (1-3) F,S Prerequisite: Consent of instructor. Directed
studies to permit individual studertit to purueue topics of special research inte.
repeated up to a total of \(s\) six units.

Director: Harold Schefski German and Russian) Department Office: McIntosh Telephone: 985-8525, 985-4317 Administrative Secretary: Karen Fawson
ould stacting information should contact the German and
Russian Department office for referral to one of the faculty advisors. Certificate in Russian and East European Studies (code 1-6040) Russian and East European
Studies has an interdisciplinary Studies has an interdiscipininary interested in this field the opportunity to pursue courses leading to a
Certificate in Russian and East硅 meet this certificate requirement may be counted also, where applicable oward the General Education eaching minor requirements of the cooperating departments.

Interdisciplinary in concept, it covers the fields of anthropology, economics, geography, history, philosophy, political science and the Russian language.
The expanding opportunities for careers and public sevvice in foreign rganization, international business organization, international business or intercultural understanding, mak it useful to organize studies leading o a certificate in this ever important
part of the world. This will tend to enhance the student's possibility fo a career in business, education or of understanding. broaden the scop
Interested students should apply the Director, Russian and East chefski, Department Harold and Russian.

Requirements for the Certificate Russian and East Eurtificate Itudies:
(1) A bachelo
approved majo
(2) A minimum of two semesters of a Slavic language
(3) 18 units selected from four of consultation with the student's advisor.
No more than six units of any one discipline
critificate
ANTH 331,490 *. ClT 349,428 449; ECON 368, 490*: GFOG 318 , HIST S41A, 341B, 441, 490*, 495*; 356, 357, 484, 497; RUSS 101A-B, (4) Cumulative GPA of 2.75 in all courses in the student's approved certificate program.

Mark is applicable to tussian and work is applicable to Russian and with director of the center is required.

Department Chair: Shirley Mangini Department Office: Mcintosh Humanities Building (MHB), Rm 820 Telephone: 985-4317
Faculty: Professors: Harold L
Cannon, Beverly J. DeLong-Tonelli,
Shirley Mangini, Grinor Rojo, John H. Schmilt; Associate Professor: Juan Hernandez; Assistant Professor erry L. Ballman, Clairr E. M
Archuleta, Francis Donahue, Raul
nostroza.
Administrative Secretary
Karen Fawson
The Department Students desiring information for referral to one of the faculty advisors: C Cedential Advisor, Graduate
Advisor.
A major in Spanish is a treasured possession. Even a second major or a minor in Spanish opens many
doors, but no matter what field a student plans to enter, be it health services, business, teaching, government, law, medicine, engineering, or entertainment, a amiliarity with Spanish will be ivaluable. Bilingualism is almost an well as many other parts of our
country, and the Department of Spanish and Portuguese is ready to aid al students to succeed
vocations and avocations.
In addilition, the program provides preparation for those who plan institutions. It also provides a liberal education for those who wish to expand their knowledge of the Hispanic literature and cultures. The Department of Spanish and Portuguese offers courses in and translation leading to the following degrees and centicaes Bachelor of Arts and Master of Arts Teaching Credential in Spanish. Concentration in Spanish for the Bachelor of Arts in Liberal
oncentration for B.A. in Liberal tudies, B.A. and M.A. degrees in the nguistics.
All students are urged to consult the Departmental Student Handbook, in formation regarding the curriculum programs, requirements and faculty
Bachelor of Arts in Spanish
To prepare for a program of student is advised to keep in mind the pper-division options noted below as vell as the Basic Core and that all options will satisty the single-subject credential
equirements. For all options, at least
ne year of a second foreign anguage
Prerequisites:

One year of intermediate Spanish at he university level, or equivalent
Students who have completed sufficient high school Spanish o equivalent may take upper division courses as soon as proíiciency speakers of Spanish who have nev and Mexican-American Studie Department in order to determine the nost advantageous manner by which to prepa
courses.
Requirements for the Bachelor of Arts in Spanish:
Upper Division Basic Core: A minimum of 30 units of upper-division
Spanish coursework, which must Spanish coursework, which must
include the Basic Core of 18 units
foll follows SPAN \(312,313,330,341\),
425 and either 430 or 445 . (Both 430 425, and either 430 or 445 . (Both 430 and 445 are requirec tor thil ande may be taken while completing work toward the B.A. degree
addition to the Basic Core, the student must complete one of the following Options Option in General Spanish (12 de 2-6816)
The option in General Spanish requires 12 upper division units in
addition to the Basic Core. A faculty
nember should be consulted to scertain the appropriate courses for

Option in Language/Linguistics Option in Language/ting (code 2-6801)
The Language/Linguistics option is
specially designed for students who wish to better understand the structure and workings of the language or who plan on graduate
study in Linguistics. A minimum of 9 units from the following courses is equired: SPAN 314, 410, 412, 426 Option in Literature/
The option in Literature and Culture is designed for students who desire a horough grounding in the literatur America, particularly those studen who ore planning on graduate study
in Spanish. A minimum of 9 additional Spanish. A minimum of 9 additiona upper division units must thncude a 445, 439, 441, 490 (Foiksong o Thought), 491, 49
Option in Translation (12 units) The Translatio
students to the translation per se and provides practical grounding in various types of translation which are to be found in any work setting. In addition, it will be of value to students planning graduate work in many ifiers,
including comparative literature and translation itself. A minimum of 9 units is required, selected from the
following courses: SPAN 412,413, following cours
\(414,415,427\).
Additional Requirements: \(A\) minimum of one year of a second foreign language at the un
is required of all majors.
N.B.: No course being used to satisty any requirement for the B.A. o minor in Spanish may be
CreditNo Credit basis.
Minor in Spanish (code 0-6816 Requirements: A minimum of 18
units in Spanish, at least 15 of which must be upper division and \(m\)
include SPAN 312,313 , and incluonsistration of oral fluency or 314 Students must file a Declaration of

Minor and receive counseling in the
Department Office. Single-Subject Te Single-Subject Teaching
Credential in Spanish
Requirements are same as for B.A.
in Spanish, but must include both 430 and 445 .
Adse Liberal Studies Core, under
Areal Group 2 sudunts should Are the Liberal Studies Core, under
complete ENGL students should
cio and in Area I, complete ENGL 310 and in Area I,
Group 3 , students should complete
ENGL 325 Under Area V Group students should have completed SPAN \(101 \mathrm{~A}, \mathrm{~B}\) or equivalent. Students
should seek early advisement trom should seek early advisement from a
professor from the participating professtor firm the participating
departments and be advised on the Lepartments and
Liberal Studios
Bilingual/Cross
Bilingua/Cross-Cultural Track. Master of Arts in Spanish
(code 5-6816)
Prerequisites:
(1) A bachelor of Arts degree in
Spanish; or Spanish; or
(2) A Bachelor's degree with a minimum of 18 upper division units in of the B.A. in Spanish at this University, with at least a B B (3.0)
average. Deficiencies will be determined by the Graduate Advisor atter consultation with the student and
study of transcript tecards. Advancement to Candidacy: Advancement to Candidacy:
(1) Approval of a graduate program Department Chair, and the Co Associae Dean of Graduate Studies (2) Requirements: All deficiencies
have been removed; the student has passed the Wititing Proficiency
Examination: the student has Examination; the student has
maintained at least a " \(B\) ' ( 3.0 ) GPA in maintained at least a " \(B^{\prime}\) ' (3.0) GPA
all work undertaken as a graduate all work un
student;
(3) The candidate may file for advancement to Candidacy after filing a transcript of credits or a change of
objective ofrm, completing
prerequisites, and completing at least prerequisites, and completing at least
6 units (preferably no more than nine 6 units (preferably no more than nine
units) on the M.A. program. The units) on the M.A. program. The
candidate must file not later than one semester or summer session prior to
completion of course requirements. completion of course requirements. Requirements for the Mast
Arts Degree in Spanish:
(1) Completion of a
(1) Completion of a minimum of 30
units of approved upper division and graduate courses, with a minimum of 24 units in Spanish, of which at least
18 units must be in the 500 and 600 series in Spanish. (Approved upper\({ }^{\text {senvision courses are shown with }}{ }^{\star}\).);
(2) Specifically required course
include: SPAN \(412,525,639,69\) include: SPAN \(412,525,639,696\),
and 697 (or, in special cases, 698) (3) The student must pass, with a
score of at least 550 , the Educational score of at least 550, the Educationa second foreign language. A maior or
minor in a second toreign language may be used to fulfill this requiremen upon approval by the Departmen
Consult the Graduate Advisor;
(4) The student must maintain a
GPA of at least ' \(\mathrm{B}^{\prime}(3.0)\);
(5) All students must pass three-hour examinations on the
Graduate Reading List in each of two areas to be selected by the student from the following: Spanish Literature
Spanish American Literature, Spanish American Literature, Advisor for the Graduate Reading List
and to set and to set up administration of the examinations. Students may take the
examinations (both areas) in either examinations (both
(6) The student must complete one
of the following MA Plan 1: Master's Paper plus
Plollowing
Comprenhensive examinations.
The Master's Paper is the project to
be completed under Spanish 697 be completed under Spanish 697
Directed Research, which normally takes two semesters to complete, with a 1 -unit enrollment in the first semester and a 2-unit enrollment in
the second semester. Spanish 696 is the prerequisite. See the Graduate Advisor.
Plan 2: Thesis plus 30 units and
oral defense of the Thesis. See the oral defense of the Thesis. See th
Graduate Advisor
(7) No more than six units of transfer
graduate credit are allowed subiect
graduate credit are allowed, subiect
to approval by the Graduate Advisor. to approval by the Graduate Advisor.
No more than six units of International Programs course-work may be credited toward the 24-unit Spanish requirement for the M.A. at this
University. International Program University. International Programs
units will be counted at the 400 -level.

\section*{Courses (SPAN)}

Lower Division
101A-B. Fundamentals of Spanish
concentration on oral compretenension and
speaking.
101 A For those who are beginning the study of
101A. For those who are beginning the study of
Spaanish of whe have had less than two years of
high school Spanish or equivialent. high school Spanish he equivalent.
1018. Prerequiste: SPAN 101 A or wo years of 1011. Prereavisite: SPAN 101 A o two yeara of
high scheo
of SPAPAN 101A.

201A-B. Intermediate Spanish \(4,4) F\),
Continued develipment of audio-lingual skills, reading and witing.
201A. Prerequilites: SPAN \(101 A-B\) or three years
of high school Spanish
 Upper Division
300. Hispanic Literature in
Translation (2) \(\mathrm{F}, \mathrm{S}\)

Translation (2) \(\mathbf{F}, \mathbf{S}\)
Study of a speoficic author, generation, genre or
work, to be announced each semester in the Work, to be announced each semester in the
Sochedie of Classes. Such topics as the
pollowing may be offered. Federico Iollowing may be offereded: Ferderioo Gararia Loroa,
 different, topicos quixorote. Maxy ber repeated. with applicable to 30 units of upper division work
required for the BA. in Spanish nor the minor in spanish.
312. Advanced Spanish I (3) F,S Preerequisite: SPAN 2P1B or equivalent. Extensive
 313. Advanced Spanish II (3) FS Prerequisite: Spanish 312 or equivalent. Sequel to SPA 312 . with continuing emphasis on
extensive reading of Spanish texts and extensive reading of Spanish textso and
periocicals, regular compoostion work based on these readings, and the development o
thereased master of the simken
language 14. Oral Communication (3) FS
 on smal-group diliscussion to impove on-native speakers.
322. Billingual Teacher (3) \(F\) Preerequistes: SPAN 313 or conseent of ingtructor.
Development and application of vocabular for teaching elementaryl/ secondary school subiect matter in Spanish; application in actual teaching
situations. (Not applicable to BA. in Spanish or situations. (Not applicable to A. A. in Spanish of
minor in Sparish. No reodit for students with edit in SPAN 320 or 321 .)
330. Literary Masterpieces: Spain
(3) F, (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: Upper division standing in Spanish
Citical analysis of masterworks of Spanish 341. Literary Masterpieces Spanish America (3) F,S Prerequisittes: Upper division standing in
Spanish. Critical anayysis of masterworks of poanish American literature. (No credit to 410. Introduction to Literary Analysis (3) S
Prerequisite: One 300 level courre in Spanish or
consent of instructor. Diccovery of terature Prerequisite: One 3 . 300 level course in Spanish or
Consent of istructor Discovery of fiereature as a work of att. Ditferent levels of interpetation;
*412. Art of Translation (3) F,S Prevequuisite: SPAN 313 with a grade of 'Bx' of
better, consent of instructor. Seminar in lexical syintactical, stylistio, cultural problems of
transtation, Spanish to English, English to transation, Spapish to English, English to

*413. Seminar: Literary Translation (3) \(F, S\)

Prerequiuite: SPAN 412 Seminar in the semantio and cultural Problems of literary transalaion
(Spanish to
English, English to
Sparish) Comporative analisyis of ilieraray translations
Practice in effective translation.
414. Seminar: Medica

Prerequiste: SPAN 412 . Concerted team effort in erequiste: SPPAN 412. Concorted ceam elfort in documents.
415. Seminar: Business/Legal Translation (3) F,S Prerequisite: SPAN 412 . Seminar designed to
develop marketable translation skills for business Correspondence and contracts, legal documents, rom English to Sparish and viceveresa. 425. Spanish Phone

Prerequisites: SPAN 312 and 313 or consent instructor. Atricilatory phonetics as a means to orm native Spanish pronunciation habits with emphasis upon the ditificutiee
spoakers of American English.
426./526. Spanish Morphology and Syntax (3) F
rerequistes: SPAN 425 or consent of instructor. introduction to transformationall spramman. (No credit for students with creadit in SPAN 513 .) 427./527. Contrastive Analysi
Spanish and English (3) S

Preerequiste: SPAN 425 or conssent of instructor. Study of the known points of similarity and differences between the two languages.
430. Spanish Civizalo (3) S Prerequisites: Upper division standing in Spanish Spanish culture with special antention to the configurations, and the ways of thinking. (MA. program may not include bath 430 and 445. No
arit or students with creati in SPAN
Narrative (3) S
Preequuiste: SPAN
Rierequisite: SPAN 330 or permission of
inatructor. Reppesentative 194 h and 2oth contury ovevists. (No ceredit for students with credid in
PA1/541. Mod
441./541. Modern Spanish
American Narrative (3) S

Preerequisites: SPAN 341 or permision of
instructor. Citical analysio of 2 ath century
Spanish American prose fiction. (No credit tor
ppanish American prose ifition. (No creal
students with creadi in SPAN 461.) (Seminar)
*445. Latin American Civilization
Prerequisiste: Upper division standing in Spanish or consent of instructor. Analysis of main currention in Latin American chilization. (1)
not include both 430 and 445 .)
446./546. The Politics of LIterature 446,/546. The Poiltics of Litera
in 20th Century Spain (3) \(\mathrm{F}, \mathrm{S}\) Preerequisite: SPAN 410. This course will examine
contemporay Spanish literature by focusing on
 to its development. Four basic periods will be
examined: (i) Introuution: the Post-Sparish examined: (1) Introduction: the Post-Spanian
American War Era. Topicios to be dicusused: the rise of the modern witer, the intellectual in the eaty 2ath century, (2) The "Roating 2 'rs's \(^{\prime}\) in
Spain. Lectures and readings will indude Spain. Lectures and readings win induct surrealst triangle of Garcia Lorca-Dali- Bunuel.
the vanguard aesthetio of the Generation of 27 . the vangurar aesthetic of the Generation of 27.
(3) The Spanish CMil War period. Topics to bo
ther

 athics vi, esthetics, cense
490. Special Topics (3) F,S

Stucy of a particular aspect of Spanish literature, language or oulture see Scheoduid of Classess of pocific topicis. May be repeated do riffert eam ime. Traditional grading only. (Hispanic Folksong ot applicable to MA
(3) S Prerequisites: SPAN 330, , 341 , or permission of
instructor. Citicial analyois of representative



492./592. Mode

Theatre (3) F instructor. Aeppesentative Sparish and Spanish
American plays of the 2oth century. (No creat for mencican piays of hin Ser 499. Independent Study (1-3) F,S Prerequivites: Consent of instructor and readings with a professor of the estudent's choice. May be repeated to a maximum of six units (Requites tutorial meetings and demonstration
of progreses as defined in a witten proposal). Graduate Division
524. Second Languag

Acquisition: Theory and Practice (3) F Preerequistese: Ablily to undertand spoken and
witten Spanish. Study of the history of second witten Spanish. Study of the history of secono
 emphasis on its implications for teaching
SSapinh. Evatuation and develoment
methods, materials and tests \(T\) Two hours of

525. History of the Spanish

Language (3) \(F\)
Preerequistes: One course in Spanish inguistics ar consent of instructor. Analysies of witten and
spoken Spanish from its inception through its sporken Spanish from it it inception through is
current uee in the Hispanic world. (No credit for surrent use in herlith with iedit in SPAN 505 .)
526./426. Spanish Morphology
and Syntax (3) F nd Syntax (3) \(F\)
Perequulitites: SPAN 425 or consent of instructor.
Morphemic and syntagmatio analysio of Sparish; Itroduction to tranastormationoal gorammar.) (No
credid to students with credit in SPAN 513.) 27./427. Contrastive Analysis of 527./427. Contrastive Analy
Spanish and English (3) S

Prerequisite: SPAN 425 or oronsent of instructor.
Study of the known poons of similiarity and
ditferences betwen
528. Romance Linguistics
(3) S , Odd Years

Preerauiuites: SPAN 525 or equivalent. Methods veed in Romances philology and linguistics: origin
and evovution of Romance languages. ave evoltion of Romance languages,
comparative ohacateristise of Romance
anguages. (No credit for students with credit in comparaive (and
SPAN 515.)
530. Contemporary Spanish 530. Contemp (3) S
Poetry

Study of the most significant contemporary
Spanaish poets. (No credif tor students with credit
in SPAN 585). 538. Spanish Poetry of the Golden Age (3) \(F\)
Study of traditional ballads, Renaissance and
Barcque poetry with emphasis on Garcilaso, Barcoque poetry with emp
Gongora and diher poets.
539./439. Modern Spanish

Narrative (3) S
Prerequivite: SPAN 330 or permission of
instructor. Representative 19th and 2at century instructor. Represeentative 19th and 2 ath century
notevista. (No credit for studentis with credit in
SPAN 459)
540. Modernismo in Spanis American Literature Origin and development of the Modemista novement in pootry and prose during the perio
tom 1880 to 1920 . No credin for students with trom 1830 to 19200 .
credit in SPAN 520 ).
541./441. Modern Spanish
American Narrative (3) S

Preerequibites: SPAN 341 or permisosion nstructor. Citical anaysis of 2 2ath cemturny
Spanish A Ameicion spanish American proes fiction. (No creadit for
tudents with creditit in SPAN 522) (Seminar) 543. Contemporary Span
American Poetry (3) \(F\)
study of reppesentitative Spanish American pootso
trom 1920 to the present. (No credif to students trom 1920 to the present. (No cread
with credit in \(\operatorname{SPAN}\) 521. (Seminara)
546./446. The Politics of Literatur in 20th Century Spain (3) F,S
 examine contemporary Spanish literature by
focusing on the osciohisitorical factors which
were essental to to tis develomenent were essential to its development. Four basio
periods will be examined: (1) Introduction: the Pootspanish American War Era. Topios to be discuseed: the rise of the modern writer, the
intellectual in the early 20 ath century. (2) The intellectual in the early 2oth certury. (r) The
"Roaring 2 2's in in ppain. Leotures and readings will include 'Orteg's ideas on the
dehumanzation of art' the surrealist triangle of Garcia Loraa-Dali--unuul, the vanguard aesthtictio Garclaa Lorea-D.al- Bunuel, the vanguard aesthetio
of the Generation of 27. (3) The spanish Civil War period.
autobligataph auttobiographies: history of fiction?, women in
the war, exile and literature. (4) The Franco
 590. Special Topics (3) S Study of a particular aspect of Spanish literature,
language or culture. See Schedivie of Classes for spececifi topio. May be repeated for a maximum of nine untits an long as topic is different each
(3) S

\section*{reerquistites: SPAN 330,341 , or permission of}

 (tudents with credit in SPAN 5844 ) Seminart
92./492. Modern Hispanic
heatre (3) F
Prerequuistes: SPAN 330 or permission of
instructor. Representative Spanish and Spanish merican plays of the 2oth century. (No creadit tor 599 Directed Studies (1-3)
rerequistec: Graduate standing, advanced to
 Graduate Advisor. Selected topics on Hispanic
Studies to be pursued in-depth. May be repeated or amaximum of 6 units, provided subbect mattel distinct for each enrollment. (Approval of
Graduate Advisor and Deparment Chair equired.
(3) s
concentration on a specific literary or linguistio
probiem. May be repeated once with a dififerent
lopic.
696. Bibliographical Methods of Research (3) F
Introduction to methods of research, scholary 697. Directed Research (1-3) F,S Prerequisites: SPAN 696 , ocnsent of dipartment
chair. Individual study under the guidance of a faculty member,
(Master's Paper).
698. Thesis (2-4) F,S Prerequisites: SPAN 696 , consent of Graduai Commitue and department chair. Planning, preparation and completion of thesis in spanisa
or the master's degree Does not count toward

Speech Communication

Department Chair: Craig R. Smith Department Office: McIntosh Humanities Building (MHB), Rm 717 Telephone: 985-4 Faculty: Professors: Karl W. E.
Anatol, Nancy E. Briggs Steven Anatol, Nancy E. Briggs, Steven
Buck, Luster E. Hauth, Owen O. Jenson, Patricia Kearney, G. Bruce Loganbill, Jerry Mandel, Timothy Plax, Richard E. Porier, Craig R. Professor: Fred Rogers; Assistant Professors: Terre Allen, Valerie C. Downs, Sharon A. Downey, Kas
Rasmussen, Andrew A. Sacks, James S. Sauceda; Emeritu Faculty: Earl R. Cain, Ottis L. Hays, John' L. Healy, Jack H. Howe James G. Powell, Joseph A. Wagne John W. Wills
Students desiring information about the speech communication program at CSULB should contact the department office for referral to undergraduate ad
graduate advisor.
Located within the College of Humanities, the Department of Speech Communication provides
students with a sound liberal arts education in communication arts and sciences with specialized training in the baccalaureate and gradua levels. The Department of Speech Communication maintains a tradition
of liberal education which traces the world's heritage of humanistic tradition in its multicultural diversity. The speech communicalion curricul creative thought, historical and scientificic inquiry, critical thinking, understanding communication phenomenon, aesthetic expression,
and the development of excellent human communication skills. To th end, the Department of Speech services to the University community. First, through specialized curricula, the Department stresses inquiry, analysis,
and critical evaluation to students who seek to apply a comprehensive background of communication theor and practice in business, industry,

Second, through its general education and sevvice offerings, the department rovides a variety of courses stressing rititen communication designed to ve all students experiences in the epare them for responsible ititzenship in a pluralistic society. The various degree options in the Communication are intended to rovide students with the opportunity oemphasize an area of speech eir personal and career goasts. Each student is required to consult with the epartment undergraduate or aduate advisor as appropriate for
achelor of Arts Degree in Speech Communication
ndergraduate Degree Programs The Department of Speech Communication offers three undergraduate degree programs in he Bachelor of Arts Degree in peech Communication, the Option in interpersonal and Organizational Thetorical Studies.
All maiors shall complete:
(1) 12 units of lower division course
work drawn from \(270^{\star} 220^{*}\), and 271 ;
210 is a pronequibite for 410 and 220 is a
pererauige for 420 prerequisite for 420
(2) complete an upper division core
consisting of \(300,301,305,306\), and consisting;
309,
(3) complete one of three upper division options.
ption in General Speech: The General Speech option, as its itte implies is concerned with all of he dimensions found in the spe communication field. It requires behavioral dimensions of the field and then permits the student to elect additional work in communication hhe communicative interpretation of literature, or interpersonal and

\section*{Requirements for the Bachelor of}

Arts Option in General Speech
code 2-6841)
(This major consists of 42 units of adich 30 are upper division.) In
ado complete
(a) three units required from SPCH \(331,333,334,335\), and 344 : (b) six* units required from SPCH
\(410,420432,449,450,451\), and 452;
(c) six* units required from SPCH \(433,436,437,441,442\). ether (0) \(\operatorname{Of}(0)\)
Or above) grades which adequate ('C' may be applied to have been earned division requirements in the maior lasses taken in which less than adequate grades are received must achieved.
Option in interpersonal and The Interpersonal and
Organizational Communication option prepare themselves for careers in public and private organizations equiring well-developed communication skise and and organization behavior. Students choosing this option will study the theoretical and applied aspectsol of
interpersonal and organizational communication as they function in
complex organizations. They will also complex organizations.
develop a wide range of communication skills useful in organizational environments. Six of
the lower division units may be the lower division units may be
applied to meet General Education requirements in oral communication and critical thinking.
Requirements for the Option in Interpersonal and Organizationa
Communication (code 2-6838) (This option consists of 54 units of which 42 are upper division.) In
addition to core above students mus addition to core above, students must
complete:
(a) nine units from 344,410 , and complete:
(a) nine units from 344,410 , and
420 420
(b) three units required from SPCH
331 or 335
c) three units required from SPCH
333 or 338
(d) six units required from SPCH
(e) six units in or 450
(e) six units from SPCH 334, 337,
\(405,441,442,449,451,452,490\),
or 492A-B.
Only courses in which adequate ( or above) grades have be earn division requirements in the major. Classes taken in which less than adequate grades are received must
be repeated until an adequate grade is achieved
Option in Rhetorical Studies:
The Rhetorical Studies option is designed for studens who wish to communication from a historical-critical perspective. In this option, students will give particular
attention to the historical development of rhetoric and to the study of great
speakers. Six of the lower division units may be applied to meet General Education requirements in oral
communication and critical thinking. Requirements for the Option in (This option consists of 46 units of
which 34 are upper division)
\[
\begin{aligned}
& \text { Hec Ten units required from. } \\
& \text { (a) TPCH } \\
& \text { (en en up }
\end{aligned}
\]

зз8.
(b) nine units required from SPCH
\(433,436,437,441,442\) and 449 Three units of SPCH 490 in the area of rhetoric and public address may category
category.
Only courses in which adequate ( \({ }^{\circ} \mathrm{C}\) ' or above) grades have been earned may be applied to satisfy upper division requirements in the major.
Classes taken in which less than adequate grades are received must is achieved.
Minor in Speech Communication (code 0-6841)
A minimum of 21 units in speech must be upper division, chosent consultation with the Department Undergraduate Advisor. Master of Arts in
Communication
The Department offers two options leading to the Master of Arts Degree. Studies offers course work in the core studies with the opportunity to further develop individual interest in
rganizational communication, small group communication, interpretive meatre, communication education's d training, forensics, persuasion, etoric and/or public address. ull-time management moxe years of lect the option in Communication and Information Systems.
Students who apply for the niversity and departmental meet al equirements for admission will be admitted as "classified" graduate students in the Speech
Communication Department. Applicants who are otherwise eligible for admission to the University with graduate standing but who do not will be admitted as "conditionally classified" graduate students, and moved their status will be changed oclassified" standing.
General Prerequisite
ooth options):
(1) Complete the Graduate Record Communication Department;
(2) Make application to the
(3) Mar post graduate work; Communication Department for ption selected;
(4) Consult with the Graduate Adisor about procedures, efore enrolling in the graduate rogram. Only enrolled students who con wilted with the Graduate ndbook
(5) Pass the Writing Proficiency xamination or its equivalent by end
(6) PLEASE NOTE: date of
determines catalogue which applies
Option in Speech Communication (
(1) A bachelor's degree with a major SPCH \(300,301,305,306\) and 309 or their equivalents; O
(2) A bachelor's degree and 24 units of upper division work in speech communication, including the cours
listed in (1) above.
Advancement to Candidacy: deficiencies;
(2) Completion of six units of 500
and/or 600 level courses including
695 OR 696 with a minimum GPA o 3.0) OR 696 with a minimum GPA of
3. (3) \({ }^{3}\)
(3) Approval of graduate progran
by the Graduate Advisor, Graduate y the Gritraduate Advisor, Graduate College Associatie Dean for Graduate Requirements for the Master
Requirements for the Master of
Arts in Speech Communication
(1) A minimum of 30 units in graduate courses approved by the Graduate Advisor and the Department (A) SPCH 695 OR 696 to be completed as early as possible in the graduate program and prior to
advancement to candidacy (B) SPCH 540, 546; one selected from SPCH \(635,636,637\), 638, or 641; one course selected
from SPCH \(600,610,611,620632\). 648,649 , or 651
(C) Fifteen elective units of 500 or the Graduate Advisor approved Department Graduate Committe
Elective units may include only ONE 3-unit \(400 / 500\) series course.
(D) SPCH 698 (4 units) if the thesis E)Students may
of six (6) units of APPROVED graduate work outside the Speech Communication Department
(student teaching and special (student teaching and special
methods courses do not apply). (2) Satisfactory completion of a hesis or passing a comprehensi
xamination (witten and oral). Option in Communication and \begin{tabular}{l} 
Human \\
\(5-6848):\) \\
\hline
\end{tabular}
Prerequisites
(1) A bachelor's degree in any at least 2.5 in the last 60 semester
units ( 90 quarter units) attempted; (2) A minimum of two years of experience in management or in
managerial-like positions in a public or manageria-like positions in a public or
private organization (as determined by the Department Graduate Committee)
(3) Completion of SPCH 305, 306,
309,510 , and 520 or their equivalents. Advancement to Candidacy:
(1) Satisfaction of all prerequisites
(2) Completion of at least six units of
500 and/or 600 level courses in the designated course of study including
SPCH 696 with a GPA of at least 3 .
(3) Recommendation for
advancement to candidacy by the Department Chair, and the College,
Associate Dean of Graduate
Requirements for the Master of Arts Option In Communication and Human Information Systems
(1) Completion of thirty units of
graduate course work composed of graduate course work composed of \(620,632,651\), and 696 ; (2) Satisfactory completion of and oral).
Courses (SPCH)
Lower Division

\section*{130. Essentials of Public}

Composition and dollivery of speeches to inform amp persuade. Logical organization is stressed.
(CAN SPCC 4)
31. Essentials of Argumentation Theory and practice of argumentation. Includes evidonce, proof, refutation in argumentative
6) Small Group Discussion

\section*{132. S \\ (3) \(F, S\)}
assic principles and techniques of diousein Relationship of diecussion tof diomossion.
troceses and contemporay sociery including a
 problem-solving teoc
discususion settings.
200. Nonverbal Communication 3) \(\mathrm{F}, \mathrm{S}\) Sasio characteristics of the norveribal elementit of human co.
210. Interpersonal
ommunication (2) F,S
ierequisites: Concurrent envollment in SPCH undertying the formation, maintenance and memination of interpersonal relationships; corretical and practical implications or these mmunication. (Lecture 2 hours.)
10W. Interpersonal Workshop
(1) F,S

Perequistes: Concurrent enrolment in SPCH Vevelop interpersonnal communication skile
Workhop 2 hours).
(Workshop 2 hours)
Communication (3) \(F\)
The role of communication in accieving
rganizational goals: theory and practicio of communication
in
in
private
236. Forensic Activity (1) F,S Prerequivite: Conesent of instructor. Participation
in intercoleciate forenenic actutities. Ary student who expeects to participate in such activities during the samester should enrol. The atydent's
specifio asaignments will be detemined in consultation with the staft. Maximum credit, four
271. Speech Communication, Voice \& Applled Speaking (3) F,S Application of spoaking clarity and proficiency, voice quality and pacing. and related
communication modification objectives. \({ }^{\text {The }}\)
 social,
skilis.

\section*{Upper Division}
300. Survey of Rhetorical Theory
(3) \(\mathbf{F}\), \(\mathbf{S}\) Maior thetocical contributions from the Classical the relationship between thetoric, history, and 301. Communication Criticism (3)

Prerequisite: SPCH 3 Soo. The analysio and
citicicim of pubblic communication venents
 and documen
305. Measurement in Not open to students with credit in SPCH 447,) terequisicie Education requirement in mathmatics. Application of the scientificmenemethod to the stury
 roie emp
communicatit
proceseses.

\section*{06. Studies in Communication}

Theory, (3) F,S
Preerquiste: SPCH 305 or consent of instruct
 meaning, thinking, intormation, and persuasion
within interpersonal. group and organizational contexts;
discipines.

\section*{09. Language and Behavior}
(3) \(\mathrm{F}, \mathrm{S}\)

Symbolio basis of human communicative

331. Argumentation and Debate
331. Arg
 echniques of debate program administration. 333. Interpretive Communication Detrvation of meaning in various itieray forme
and the communicative interpetation to specifo
334. Business and Professional

Prerequiste: SPCCH 130 or consent of instructor.
Skils and technologies realed to the
 somting.
\({ }^{335}\) (3) F,S
reeraquiste: Consent of instructor. Audience Lehervir: theories of motivation, attention, interosti an understanding and anaysis of types
of autieneces with methods of audience
336. Forensic Activity (1) F,S Proerequiste: Consent of instructor. Participation

 consultation with the staff. Maximum credit, four F,S ,S organization and diriection of professional
 and participation in
338. Ensemble Interpretive

Programming and presentation of prose, poetry Programming and presentation of prose, pootry
and drama by an ensemble of readers. Emphasis is placed on experimental presentations and on
the development of anaylical insight into itierary therme.
344. Theory and Techniques of
Interviewing (3) F,S

Theory and techniques of oral communication in
the proceess of interieving. Practical apppication in procososyment, intemewing. Practical application
52. Story Telling (3) F,S

Cultural heritiage in story tolling; analysis of stony
ypees for aral presentation; techniques of preparation, presentation and listening.
355. Forms of Speech
Communication (3) F,S

Principles of human and interpersonal
cominuication in pubtic speaking, oral reading communication in public speaking, cral reading,
 \begin{tabular}{l} 
requirement \\
cercential \\
\hline
\end{tabular}
358. Speech Arts for Children
3) \(\mathbf{F , S}\)

Use of creative dramatics, improvisation
 fiuncy. responstiveness anch imagination in curricular subbiects will be stressed. Opp
405./505. Computer Applications
in Communication (3)

Prerequisities: SPCH 305 or equivalent consent tof instruator. Ropeo and use of computers In communication research; data processing, elements of programming, statastical analyses;
elements of database files and systems,
information storage and retieval ifformation storage and retriev 410./510. Advanced Concepts in (3) \(F, S\) Preerequisites: SPCH 210 and SPCH 305 Systems and symboric interaction approaches io interpersonal needs, self disclosure understanding, interpersonal percoption
interpersonal altraction, and social conflict;
and
and

411./511. Communication in
Conflict Resolution Prerequisites: SPCH 210 and SPCH 305. anealyical investigation of the nature and yynamicics orinterpersonal conficict; approaches io the study and understanding of contilic
management as examined from intrapersonal management as examined from intrapersonal
iterpersonal , intragrop. organizational, and
international perspectives. 412./512. Male Femal
Communication (3) S Surey of theories and research literature with the bjective of increaasing students' understanding of, and familiarity with, maior issuues regarding
communication between men and women in vaious contexts.
420./520. Advanced Concepts in F,S
 the communiication systems of complox organizations; organizational communication-
neods aseesment methods for developing and
imoroving communication in organizations are improving communicati
421./521. Communication in Bargaining and Negotiation
(3) \(F\)
Prerequisites: SPCH 220 and SPCH 305 . Role of communication in the decision-making processe
of negotiation and bargaining. Emphasis on the functions of communication in resoking disputes
432/532 Co
Leadership (3) F
Deveviopment of leadership skills in
problem.sobing communication environments: problem-sooling communication environments; eadership theories, strategies and tech
433./533. Trends in Interpretive Communication (3) F
Trends and issues in the theoretical and historical
development of oral interpetation as applied to current times.
436./536. Communicatio Strategies of American Speakers
Preerequivites: SPCH 300 and SPCH 301. Comparioon and contrast of tamous American
speakers and their techniques, effects and speakers and their techniquues, efflectst and 437./537. Communication Strategies of European Speakers
(3) F,S (3) F,S Prerequisites: SPCH 300 and SPCH 301 .
Comparison and contrast of famous European speakers and their tecchiques, efflects and emurironments trim
441. Issues In Freedom of

Communication (3) S
Prerequisites: Upper division standing. An
examination of the evolution and impact of First examination of the evolution and impact of First
Amendment rights on American society and it political system. The course emphasises the colonial period to its adoption in 1791, significant Supere court cases intepperetig First
Amendment law, the First Amendment and Amendment law, the First Amendment and
electronio media, and the thetorio of social
protest. The course is recommended for pro-law protest. The course is recommended for pre-law
students.
Traditional
grading only students. \({ }^{\text {Min }}\) Traditional grading
MaiossMinors. *442. Campaign
(3) S Even Year
Prerequistes: Upper division standing. An examination of persuasive communirative
strategies in political campains indurive of stratagies in political campaigns inclusive of
campaign sppeoches, commerials, news media
cole coverage, image building, audience analysis 449./549. Studies in Ora Persuasion and Attitude Change
(3) FS (3) \(F, S\) Attiude formation and change through oral communication; factors in persuasion; problems
in determining the effects of persuasive messagess: sourcy crevilibility metssage veraiables:
and personality factors in the and personn
persuasion.
450./550. Communication Training in Organizations (3) F
Prerequisite: Maior of minor in speech
communication or consent of instructor. The nature and role of communication tratining in a
variety of variety of social, educational, and business
organizations are investigated and anateed, organizations ore investigated and analyzed.
Communication effectiveness programs are examined and stadied in terms of gools,
structure, and impact. Use of audionsual aids structure, and impact. Use of aucioinival aids
and communication training techniques are
451./551. Intercultural

Study of the relationship between culture and
Study of the relationship between culture and
comunication with mphasis given to social:
pred psychohlogical, inguistic and nonvertal variables:
problems in the practice of interulural problems in
communication.
*452. Communication in the Multinational Organization (3) F Study and analysis of communication patterns in muttinational and multicultural organizational
settings; the nature and impact of different organizational structures, value systems and relation to pormididered and examined in organizational obligatiotins and expexpectations. 490./590. Special Topics in Speech
\((1-3)\)
F,S
Topics of current interesas selected for intensive
stury in speech study in speech communication. May be
repeeated with different topics for a maximum of repeated with difiererent topics for a maximum of
sis units. Topies will be announced in the
Scheodite of Classses. 492A-B. Internship (3) F,S Prerequisite: Conssent of instructor, Open only to senior majiors in interpersonolal and Organizational Communication degree option. At least 120 hours with cooperating organizations. oft-campus. Work
to be directed and evaluated by the instructor in Consultation with superisiors of the participating
organizations. Aseingments will be varied. Crganizizations. A. Asiognments
(1-3) F,S S 499. Speci
(1-3) \(\mathrm{FS}, \mathrm{S}\)
Open to studen

Open to students with upper division or gracuate tanding and consent of instructor. Individualized
laboratory or library research selected in consultation with instructor. Witten report of the creadit toward the master's deggree. Graduate Division
503. Issues in Business ommunication (3) F Even Years Prerequisiste: Succosstrul completion of WPE.
Stucy and analysis of witten communication Study and analysis of witten communication procosses applicable to complex organizational
onviosmentsis consideration of such form as
eeteres, memoranda.

 505./405. Computer Applications 505./405. Computer Applicati
In Communication Research \({ }_{\text {(3) }} \mathrm{F}\)
Prerequibite: SPCH 305 or equivalent or consent
of instuctor. Role and uee of computers in communication research; data processing. communication reeaeach; data processing,
elements of programmin, statistiol analyes;
elements of database
flies and syytems, itormation storage and retrieval.
510./410. Advanced Concepts in Interpers
(3) \(\mathrm{F}, \mathrm{S}\)
Preeraquistes: SPCH 210 and SPCH 305 . Systems and symbolic interation apporoaches to
 tanding, interpersonal perceppoion, interpersonal
attraction, and social confictity ruie and performanco.cent
comminication.
511./411. Communication in Prerequisites: SPPH 210 and SPCH 305. An analyicicil ilvestigation of the nature. and the study and understanding of conflict management as examined from intrapersonal,
interpersonal, intragroup, organizational, and nal perspeotives.

\section*{512./412. Male Femal
Communication (3) S}

Survey of theories and research literature with the objective of increasing studdents' understanding oft and faniliaritiy with, major issues regarding
communication between men and women in various contexts.
520./420. Advanced Concepts in Organzational Communication (3)
Prerequisistes: SPCH 220 and SPCH 305 .
Philosochy, methods and dealigns for stucuying the coopmy muthotion and destigns tof stuoding
thems of complex organizations; organizational communication
needs assesment, methods for developing and improving communication
521./421. Communication in

Bargaining and Negotiation
(3) \(\bar{F}\)

Prerequistes: SPCH 220 and SPCH 305 . Role of communication in the decision-making procosse
of negotiation and bargaining. Emphasis on the functions of communication in resolving disputes
through bargaining.
through bargaining.
Program (3) S
Prerequisite: Consent of instructor. Principles of constructing and adminintering a forensic
proorrat, includuing recruiting squad direction,
budgeting, toumament policies and current litegature, on tourrensict direction. Not open to
In
532./432. Communication

Leadership (3) F
Development of leadership \(\left.\begin{array}{l}\text { skills } \\ \text { problem-solving } \\ \text { communication enviromments; }\end{array}\right]\) problem-sooving communication environments;
leadership theocies, strategies and techniques of leadership theories, stratergiesen and tiechn
533./433. Trends in Interpretive

Communication (3) F
Trends and issues in the theoretical and historical
developmento of oral interperetaion as applied to current times.
534. Organizational Issues in

Public Communication
(3) F, Odd Years
(3) F, Odd Years

Study and anayysia of public communication processeses. Planning. practice, and presentation
of mesages for fifterent pseefific roagizational environments ranging thom stockholdorer and employees of organizations to the media and the
public at large. (Seminar.) Traditional grading

\section*{36/436. Communication}

Strate
(3) \(F\)
Preerequistes: SPCH 300 and SPCH 301 .
Comparion and chitrast of tamous American environments from the coclonial period to present. 537./437. Communication

Strategies of European Speakers
(3) \(F\) (3) F Prerequisites: SPCH 330 and SPCH 301 .
Comparison and contrast of tamous European
 environments from Churchill and Hitior.
540. Contemporary Rhetorical Theory (3) \(\mathbf{F}\)
Prerequisite: Consent
Prerequisiste: Consent of instructor. The thetorical
\begin{tabular}{l} 
1750. \\
175 of British and American hetoticilans since \\
\hline
\end{tabular}
546. Issues in Communication Studies (3) S
Prerequiste: Consent of instructor. Investigation

 systems: persuaasion and atitudo change:
contribution sto human communication theory
trom other disciplines; and current trends and onm orther iocipininesi and dumuricat thends and
lirections in communicaton revearch. 49./449. Studies in Oral Persuasion and Attitude Change (3) \(\mathrm{F}, \mathrm{S}\)

Attiude formation and change through oolal communiatiton: factors in persuasion: problems
in deternining the effects of persuasive messagees sourcy crevibility, mesagag varaiables,
and personality factort in the process of and persona
550./450. Communication Training In Organizations (3) F Prerequisite: Maior of minor in speech communication or consenn of instructor. The variet of scoial, educational. and busineas
organizations are investigated and analyzed. organizations are investigated and analyzed.
Cominuication effectivenes ppograms are
examined and sutulied in terms of goals, tructure, and impact. Use of audioivisual aids and comm
551./451. Intercultural
ommunication (3) S. Study of the relationship between culture and
commurication with emphasis given to
ocial poyychological linguistic and nonvertal variables;
problems in the practice of intercultural communication.
\(590 . / 490\). Special Topics in Speech Communication (3) F Preerequibite: Consent of instructor. Investigation
of topics of current interest and concern to Students in speench communnination ancoern tol tiled areas. Topics will be announced in the Schedule
of Classes. May be repeated for credit with of Classes. M May be repoeated in the scredie with
different topics, but no more than six unts may different toward the master's degree in speech
600. Seminar in Nonverbal ommunication
Prevequiste: SPCH 695 or 696 or consent of witrings and critical studies in nonveribal communication: the reutationship of nonverbal havior to oral communication.
610. Seminar in Interpersonal
Communication (3) \(F\), Odd Yea Prerequisite: SPCH 695 or 696 or consent of instructor. Current theories
interpersonal communication.
611. Seminar in Negotiation and Conflict Resolution
reorequistes: SPCH 411 or 422 and either 695 or
06 or consent of instructor. o96 or consent of instructor. Investigation,
anayysis,
and and
citicism of the nature, evelopment, and dynmamics of conflict and the ole of negotiations in interpersonal. group. ommunication; study and understanding of onflict management.
620. Seminar in Organizational
Communication (3) F , Even Yrs Preerequisite: SPCH 695 or 698 or consent or Theories and models o communication in large organizationssideseign
and management of organizational
communication systems communication systems
632. Seminar in Small Group ommunication (3) S, Even Yrs Prerequisite: SPCH 695 or 696 or consent of
instructor. Research in small group discussion. 633. Seminar in Interpretive Communication (3) F, Odd Years Prerequilite: SPCH 695 or 69 or consent of
instructor. Theories of communicative nistructor. Theories of communicative
interpetation of literature, with emphasis upon the theory and vevaluation of oral plesesentation o
iterature as an at form and a pedagogical iterature as as an
instument.
635. Seminar in Communication Criticism (3) \(F\), Even Years Preerequibite: SPCH 695 or 696 or consent o
instructor. Critical theoories of hiteric and maio systems of communication criticicm,
development of fiteeria and aproashes for the
evaluation of select communication acts evaluation
contexts.
636. Seminar in American Public Communication (3) S, Even Yrs Prerequiuste: SPCH 695 or 69 or consent of
instructor. Studies of American the ecrical events and their social, political and intellectual setings. application of thelotical theory in the analysis of hese events
637. Seminar in British Public
Communication (3) S , Odd Yrs
 theit social. political and intellectual setting:
application of thetorical theory in the anaysis of
these events. appication of envents.

650. Seminar in Instructional

Communication (3) S, Odd Years Prerequisites: SPCH 695 or 696 or consent o instructor. Designed for either beginning a expentifnced teachertruaineras, the course will
ilentiy those communication variables and
strategies strategies entich contribute to greater
student/flient learning as well as grieater satisfaction with the learming proccoses. Students
will developo an instrutionaltraining pack ogeg. will develop an instructionaltraining packas 651. Seminar in intercultural
Communication (3) S Even Yr Prerequisites: SPCH 695 or 696 or consent of instructor. Analysis of cuitural infivencees on interpersonal communication; emphasis given to
cultural lalues, perception, social organization,
 strategies for in effective intercultural
communication in
both international and communication
domestio settings.
695. Empirical Research Methods (3) S

Prerequiste: SPCH 305 or equivalent course in statistics. Emplitial reseacch menthoorloggieg
applied to communication research; problems of measurement, quantification and measuring instruments: theory and
research; analysis of findinge

Methods (3) F,S Methodological problems invoved in graduate
 1esearch, methods in the development of
hetorical, experimental, desecifitive and critical research. ferequisites. Sn the department Graduate Advisort, consent of hatructor. Dinectid reseearch leading to the issue in speech communication and the presentation of feesearch results in a formal paper
ibmitted to the department. (Independent submitted
Study
998. Thesis (2-4) FS

Preerequistes: SPCH 995 or 696 or consent of suburission of an aceparation, complable thesition in partial Hfiliment of the requirements for the master's


College of Natural Sciences

Dean: Fredrick H. Shair Acting Assoclate Dean for James L. Jensen Acting Assoclate Dean for
Instruction: Henry C. Fung Instruction: Henry C. Fung Acting Assoclate Dean for Technical Servic
College Office: Faculty Office 5 (FO5),Room 104 Telephone: 985-4707
Recent surveys indicate that nearly \(80 \%\) of the new jobs being created require a technical skill. In a world
where science plays an increasingly important role and where an understanding of tre sciences
essential for a participating and infermed citizenry, the College of Natural Sciences provides quality
educational opportunities in the life educational opportunities in the life
and physical sciences. Students are provided a broad- based, fundamental education in the natural
sciences, and are challenged to think and act in a scientific way. Alumni of the College demonstrate that science graduates are well-prepared to enter to assume responsible positions in industry or government.
The College is dedicated to the concept that a university has a specia
responsibility toward academic excellence and the advancement of knowledge. The faculty and staff of the Departments of Anatomy and
Physiology, Biology, Chemistry and Physiology, Biology, Chemistry and
Biochemistry, Geological Science Microbiology and Physics and
Astronomy plus the Science Astronomy, plus the Science
Education Program are committed to providing an outstanding educationa xperience for all students.

Science Education Program Director: William C. Ritz Telephone: 985 : 4801 Telephone: \(985-4801\). Patrick F Kenealy, William C. Ritz;Assoclate Professor: Dorothy Rosenthal; Assistant Professor: Teny Topalian
Secretary: Delia Flores Secretary: Delia Flores The College of Natural Sciences is strongly committed to science
education, K -University, focused education. K-University, focused through its Science Education
Program. The activities of the Program. The activities of the
Program are highly diversified, Pranging from its roots in teache
prepartion through science preparation through science
education projects of national significance. Faculty of the Science Education Program play an importan
role in preparing and credentialing role in preparing and credend
both elementary and secondary school teachers for science teaching Significant emphasis, as exemplified
by a unique series of 'Mini-Courses in by a unique series of 'Mini-Courses in
Science,' is also placed on providing experienced teachers with continuing opportunities to increase their scienc
teaching effectiveness. Through its teaching effectiveness. Through ts Education Program serves scientists engineers, and others who wish to in science and/or mathematics teaching. The 'Young Scholar's
Ocean Science lnstitute', offered Ocean Science institute,
annually in the summer with the support of a grant from the National Science Foundation, offers selected high school students an opportunity
to learn and explore scientific research prior to their college years. The most recent projects of the
Program include: The Project to Program include: The Project
Improve Methods Courses in Elementary Science and The Minority Opportunities in Sceience Teaching Project MOST
Intiddition the their feaching members maintain an active progra
of research and are involved in a of research and are involved in a
variety of local, state, and University organizations and projects to improve Science and environmental educa The Program also maintains an
extensive Science and Environment Extensation Curriculum Materials science teaching guides, textbooks,
professional journals, audio-visual
professional journals, aualo-visual
materials, and computer software Degrees Offered
All departments within the College
of Natural Sciences offer both the Bachelor of Science and Master of Bachelor of Scien
Science degrees.
The Departments of Biology, Chemistry and Biochemystry, and Physics and Astronomy also offer the
Bachelor of Arts degree. Each degree has unique requirements and students should refer to a
departmental section of this catalog to departmental section of this catalog
determine specific requirements. A department advisor must be consulted early, preferably prior to the first semester or enrollment, in order
to develop an appropriate academic plan consistent with career goals. Student Research Opportunities Faculty in the College involve more
than 200 students, both undergraduate and graduate, in a wide variety of research activities. Many of these students are supported
by research grants, especially during by research grants, especialy
the summer months. Each year a number of these students present the
results of their research at scientific conferences. It is not unusual for a student to co-author an article appearing in a major scientific journal The faculty's commitment to these
students is based on the knowledge that involvement in scientific research makes the study of science more real and provides strong motivation for the
student to pursue a career in science. Since the anticipated need for scientists far exceeds the enrollment
of science majors, we are committed of science majors, we are committed
to meeting the coming short-fall by making the study of science at Minority Programs as possibe Minority Programs in Sclence The University is known for its ethnic
diversity. There are a host of activities and programs that involve students in science: those below have special involvement of students in science they feature an ethnic identity that provides a unique encouragement for of our science majors. College hosts both programs funded by The National Institutes of General

preparing themselves by making use of the advising sevvices coordinated
by the Pre-Health Professions Office. Pamphlets, catalogst and college admissions and testing inf orr those
are available in the office for those interested in such fields of study as medicine, dentistry, optometry,
osteopathy, pharmacy, podiatry, and osteopathy, pharmacy, podiany
veterinary medicine. The office maintains a file on each student which, among other features, allows
students to have one centralized students to have one centraized
location for all of their letters of recommendation. Letters are copied
free of charge and sent to free of charge and sent to
professional schools at the student's request.
An alumni group, composed of
CSULB alumni who are practicing
health professionals provides role health professionals, provides role
models for prehealth professions students as well as providing guidance and insight into a variety of health \(p\)
schools
College Courses (NSC1)
200. Introduction to Computer
Methods In Science (2) F,S

Prerequisites: Two years of high school
mathematics. Introcucution to computer methods used in collecting. analy) ting, and presenting Used in coilecting, analyzing, and presensing,
scientific data Will intoduce word prosesing.
spreadsheet analysis, data base management, spreadsheot anayysis, data base management,
and statistical
analysis
Essentitis of programming using BASIC will be presented.
(Leecture 1 hour, laboratory h hours.) A course fee may be required.
301. Science In
School (3) F, S

Preerequistes: STX units of corrse work in departments of the Cclloge of Natural Sciences.
A sampling of the broad felch of science, emphasizing the proceses of solience. Practice approaches to teaching elementary school
sciencess are integrated throughout. Equivalent to

 302. Elementary School Science Workshop (2) F,S A practicum on the development and use of
hands-on elementary school teachingleaning activities, units, and leanning
centers. BIOLNSCI 301 recommended.
 305. Workshop In Environmental 305. Workshop In
Education (3) F,S
 K-12. Current environmental issues, fifid
exxursions, invovement with innovative curricular materials, and dovelopment of teachinghoeaning
untes for claass use. (Lecture 2 hours, workshop 2 units for class use. (Lecture 2 hours,
hours.) \(A\) course toe may be required.
3701. Science and the New Creation Epic (3) F,S
Prerequisites: a courre in the IIfe or physical
sciences, with lab; ENGL 100 and Upper division status. The eariest accounts of creation and the
 during the nineteenth century are reviewd tom
historical, religious, and scientifo viewpoints. The current evolution-creation controversy is special focus on the evidences for the current
scientific understanding of how our planet came scientific understanding of how our pla
to be as we know it. (lecture 3 h hours.) 3751. Discovery: The

Serendipitous Sclence (3) F,S Prerequiuites: a course in the life or physical
sciences, with lab; ENGL 100 and Upper division status. Maior scientific discoveries, while
sometimes invowing an element of luck or sometimee invoring an element of luck or
chance, are trequenty serendiptous. Such chance, are reevem, disocveries are not the result of bind luck, nor are they the result directly sought trom the
experiments undertaken. Rather, a unique
 provides the opportunity for the serendipitous
idea of obsenation. Illustations trom recent idea or obervation. Illistrations trom recent
discovereies in the physical and ite sciencesa are diocussed. along with the appropiate basic
science. A spocial focus in placod on the


\section*{3761 Scienty. LLeture 3 hours)}

\section*{(3) FS}

Preerequishtes: ENGL 100 and upper division staturs at least wo courses in the departments of
the Colloge of Natural Sciencos, and two courses trom the Dupartment of History of Pooritical Science. Stupy of the mannee in which culture
has been shaped by the neterpithe of eviter has been shaped by the enterprige of science.
lasues or subtopics within emeroing themers wil

 during specific histarical petiods sincce the
begegning of the modern scientifo age.
3771. Blood Research: A Study
andmark Discoveries (3) F,S
A study of lindmavk dilocoveries in blood biloogy, chemistry and phycica. (Diocususion 3
hours.).
401. A Process A
Science (3) F,S

Preerequisites: BIOL 200; PHSC 112; GEOL 102 or
1een, and GEOL 104 ; all whit a 'Co or betere grade. The processes of science as they rolate to the life,
earth, and phyical sciences. Practical
approaches to understanding how science works will be modeled and integrated throughout. Not
open to students with credit in NSCVIBLO 30 . open to students with redit in NSCVBIOL 301 .
(Lecture 2 hours, laboratory 3 hours.) A course Leecture 2 hours labo
tee may be required.
443./543. Laboratory Techniques
In Blotechnology (3) S in Biotechnology (3)
Prerequistes: CHEM 443: BIOL 370 or MCC 450
and 451; MCR 453. Students will conduct laboratory experiments suind techishiques hhat are commonly used in induystrial biotechnology.
Students will conduct experiments on \(\mathrm{DNA}, \mathrm{RNA}\). and protein isolation and characterication vuing procaryotio and eucaryotio cell lines of
commercial importance. Hands-on experience
 positions in the biotecchnologyy industry. (Lecture
1 hour, laboratory 6 hours.) Tradtional grading 1 hour, laboratory 6 hours.) Tratition
only. A course fee may be required. 490. Special Topics in Science
Education \((1-3) \mathrm{FS}\) Education (1-3) F,S
Prerequisite: Consent of instructor. Solected
topics in coience education. Curree content will
vary tom
 492. Internships in Natural

\section*{492. Internships
Science (3) F,S}

Prerequisites: Upper division standing and consent of instructor prior to rerisitration.
Students who qually will careers-elated assignment in private industry and
 agreements. A final witten report is required.
Cliass attendance to be arranged by instructor. (9 hours experienco per weon). May yo tepeateod
for a maxium of six untit. Credit No credit for a maximu
grading only.
496. Directed Studie

\section*{Education (1-3) F,S} Preerequiste: Consent of instructor. Supenised eq repeed.
543./443. Laboratory Technique Biotechnology (3) S
Prerequisites: CHEM 443; BIOL 370 or MCR 450 and 451; MICR 453. Students will conduot commonly uesed in industrial biotechnotogy Students conduct experiments on ONA, RNA,
and protein isolation and characterization Using procaryotio and eancayotiac collition inses of
commercial impootance. Hands-on experiencol
 positions in the biotech hologyy industry. (Lecture
1 hourt laboratory 6 hours.) Tradtional grading only. A course fee may be required.

\section*{Anatomy and Physiology
College ot Natural Sciencess}


Financial Suppor
A limited number of teaching graduate, and research assistantships are available in the half-time work davoted to invol preparation and/or instructio undergraduate laboratory classes. Application forms for these position Anatomy and Physiology. achelor of Science in Zoology: option In Physiology
Requirements for the Bachelor of clence (code 3-7604):
Lower Division: BIOL 210A\&B and 60; CHEM 111A-B; MATH 115S 116; PHYS 100A-B; MICR 210. Upper Division: A/P 440 , CHEM
321A, 322, 441A-B; an additional 28 units satisfied with the following
requirements including BIOL 370 equirements including BIOL 370 and one or more courses selected 33 ; four units selected from A/P 340 and \(340 \mathrm{~L}, 342\) and 342 L ; and nine or more units selected from \(A\) \(340,342,441,442,443,445\),
\(447,460,480\), and BIOL 473 . inor in Physiology (code \(0-7604\) )
A minimum of 18 units including at least one lab course selected rom the following courses with at A Ant 12 units from the Department \(335,340,340 \mathrm{~L}, 342,342 \mathrm{~L}, 440,441\), 442, 443, 445, 446, 447, 490; BIOL
473; CHEM 441A-B or 448, 443.

\section*{ertificate Program in} Certificate Progral
Blomedical Art
The certificate in Biomedical Art is an interdisciplinary program ponsored by the Art, Biology and Requirements for the certificate are isted in the Art Department section \(f\) this bulletin. Co-directors of the CSULB Biomedical Art program are
Richard Oden and Peter Mendez Richard Oden and Peter Mende
rom the Art Department; and Kenneth Gregory from the Anatomy/ ysiology Department. Question
ddressed to them during office hours which are listed in the espective departmental offices. Concurrent and/or Summer roiment in Another College Students who wish to take cours college to meet curricular equirements while enrolled as undergraduates in the College of appropriate department for prior approval to enroll in specific ourses. This policy is for either concurrent enrollment or summe iso be complied with. See "Concurrent Enrollment" and Transfer of Undergraduate Credit" eceiving prior approval will not be accepted for credit by the department.
Master of Science in Biology The is degree program tarticipates in planning to undertake graduate work leading to this degree must and obtain further information from the Department of Biology. Courses (A/P)

\section*{Lower Division}
107. Human Body-Structure and Function (3) F,S sief survey of structure and function of human nnderstanding of the boocy. Not designed tosio najors in the Collego of Natural Sciences Leoctura 2 hours, lab
202. Human Anatomy (3) F,S General introcuction to the structure of human
body systems with emphasis on skeletal and body systems with emphasio on skeletal and
musculuar ystems Not deosigned for maiors in the College of Natural sciencoces. (Leeture in hours, laboratory 3 hours.) A courree toe may
be \(e\) cequirid. 206. Es
(2) F,S Prerequisite: AP 209 . A systematio study of
druga, their claseficiation drugg, their clasasification, methods and route
of administration, therapeutio and toxic effection


Sciencos. Not open to students with credit in
AP 246. Same course as AP 246. Leocure
207. Human Physiology (4) F,S General introduction to the functional designed for maimans in the College of Natural Aciencos. (Lecture 3 hours, la
208. Human Morphology (4) F,S

The gross anatomy, histology and neuroanatooy of the enyman booly. Doseigned
primarily for maiors in nursing. blimedical
 sudents with creait in AP 202 excoept consent of instructor. (Lecture 3 hours
aboratory 3 hours.) A course fee may be
209. Applied Physiology (4) F,S
 Prinoiples of human physiology. Dosesigned diocipilines. (Leeture 3 hours, laboratory 3 discipipines. (Lecture 3 hours, laboratory 3
ours) A course fee may be required.
Upper Division
305. Pathophysiology (3) F,S Prerequibites: AP 208, 209: CHEM 300; MICR
210. Pathogeneesis and pathoohyyiology of 210. Pathogenesie and pathophysiology of
common oisorders of human nevous. usoculoskeletal, endocrine, cardiovasocular, eeppratatury, excretetory, digestive and physiological basis of the diseasese processa and
clinical correlations. Not designed for maicro in
 Atudents with credir in APs. (lecture 3 hours.)
307. Physiology for Therapist 307. Phys
(4) F,S

Preerequisites: Admission to the Protesisinal
Physical Therapy Program or consent of Physical Therapy Program of consent of
instuctor. Mechanisms of action and Interaction of the various boty systeme. includuring the implications relatec toc ocilinical and
therapeutio
treatment proced therapoutio treatment prectionure. Not
deosigned for majore in the college of Natural Sciencos. (Lecture 3 hours, lab)
A course fee may be required.

\section*{3081. Hu
(3) F,S}

A course deesigned to tacilitate understanding
At the human being as an integrated physiological and poychological entiry.
presents clear and simple explanations of vaious aspects of the human body's tunction, interaction between body and mind in physilogoical, medical and poychological 335. Histology (3)

Prerequiste: BIOL 210 B Micoscopic anatomy Preerequisite: BIOL 2108 . Mcrosocopic anationy tisueo, argans and organ systems; emphasis
on human histology. LLecture 2 hours. on human histology. (Lecture 2 hours,
labooratory 3 hours.) A course foe may be lequired.
*336. Human Prosection (3) F,S Prereauisite: Consent of instructor. Detailed
regional dissection of the human body with emphasis on dissection technicue. May b
repoeated once for creadit. Traditional grading only. Repeatable to a maximum of 6 units with differerst topiciss (.e ecture 1 hourn labocratory 6 *340. Comparative Animal Physiology (3) F,S Prerequiste: BIOL 2108 ; CHEM 111 AB proceasses of the maior animal phyla, (Lecture

\section*{hours.)}
*340L. Laboratory in
parative Animal Physiology
1) \(F, S\)

Preerquisine: AP 340 (may be taken concurrenty.). Laboratory course befigned to to
mouain tutudents wih direct obsenation and easurement of physiologocicial provacosses in in mrebratie. (Laboratory, 3 hours.) A course feo may be required.
342. Mammalian Physiology
(3) \(\mathrm{F}, \mathrm{S}\)

Prerequistes: BIOL 210 B ; CHEM 111A,B deommended: PHYS 100A.B. A course dealing with the function of the variou
mammalian boody systems., especially of mammanan Emphasis will be pelapecial on the
nitegration of homeostatio mechanisms of the integration of homeostatio mechanisms of the
nenvous, muscouluar, endocorine, cardilivasocular, espiratory, renal, digestwo
systems. (Lecture 3 hours.)
342L Laboratory in Physiology
(1) F,
rerequiste: AP 342 (may be taken
 andigned to provide laboratory experience in mechanisms of interaction among the variou ocy systems. (laboratory 3 hours). A cours 65. Biomedical Illustration Animals (2) S
Prerequiates: Degree in bilology or art in propress, consent of instuctor. Completion of
or concurrent enioliment in At 374A. (Activit) 9 concurre
4 hours.
400. Biology of Human

Pereequibite: AP 107 or 207. Biological and Physiological processes associated with Concoption to adulthood. Not deaigned for maliors in the colle
(Lecture 3 hours.)
401. Biology of Human Aging (3) F

Prerequiste: AP 107 or 207 or 209 or BIOL 200 Alocgical processees associated with aging
humans. Emphasis on both colluara and crgan aging. Not designed for maiors in the Collen
*440. General and Ce
Physiology (4) F,S
Prerequisites: Five units of biological or \(1004-8\). Physiological processess of plant and animal cells and tisueses basicico to understanding the function of the whole organism. (Lecture 3 3
hours, laboratory 3 hours.) A course fee may hours, laired.
441./541. Cardiovascular

Physiology (3) S
Prerequisite: AP 340 or 342 ; PHYS 1000-B
Functions of the cardit Fyntions of the carciac, vascularar and blood hours.)
442./542. Neuromuscular hysiology (3) S
Prerequiste: AP 340 or 342 or 440 or consent
of instructor. Emple of instructor. Emphasis upon the mechanisms
by which nene and muscle cells function. Representative examples will be selected from vertebrate and invertebrate ehyla (Lecture \({ }^{2}\)
hours, laboratory 3 hours)) A course fee may be required.
443./543. Endocrinology (3) F,S Prereauistes: CHEM 327 . Five units of
biological or physiological sciences. Role of biological or physiological sciences. Aole of
the endocorinese in vereberate and invertobrate
adiustment to changes in the internal and adiustment to to hangese in the intermal
extennal environment. (Lecture 3 hours.) 445./545. Metabolic Regulation
(3) S (3) S

Prereacuiaties: CHEM 4418 or AP 440 or \(A P\) P
\(443 / 543\). Study of molecular mechanisms by 443/c43. Study of molecular mechaniiems by
which interneciar metaoblism is regulated in various mammalian tiscues with emphasis on
mechanimms of hormone action and ther role in the regulation of some key enzymes of carbohydrate, tal
(Leeture 3 houra).
446./546. Respiratory and Renal Physiology (3) F
Prereculisteo: AP 340 or 342 ; PHYS 100A-B. Functions and interaction of the respiratory an renal systems. Both vertebrate and invereb
systems will be studied. (Lecture 3 hours.) 447./547. Neurobiology (3) F Prereaquibles: Six untis of biological or
phyyilogical science: CHEM 327. Study of the collular, molecular, and or oranizational
principies that underfie the functioning of the Principles that underifie the tunctioning of the
nervous syitem in the nomal control of physiologicial and behavioral procososes, and
the mechanisms that mediate atered tunctioning asociated with selectec
neuropathological diborders. (Lecture 3 hours.) 460./560. Radio-Chemical 460./560. Radio-Chemical Prerequities: CHEM 327 . Fwe units of
biological sciences. CHEM 251 and 251L
 and handiling of radioactive tracers in the
biologocical sciences. Tradtional grading only. (Leecure 2 hours, laboration) 6 hours). A course tee may be required.
480./580. Seminar (1) F,S Prerequuisites: Consent of instructor. Topise on
current research in anatomy andlor phyiclogy presented by local and visting sciontiststo orby by ryganization of the seminiars and in in ecritical vvaluation of theese presentations. May not be
repeated for credit towards any single degree. repeoted of creadin towe
Traditional grading only.
490./590. Special Topic

\section*{1-3) F,}

Prerequisites: Consent of instructor. Topics com soteocted areas of Physiology. Courre on repeated for credit with the oconest of the
instructor. Maximum credit to AP 500 andor sool limited to six units. Topics to be
 maximum of 6 . 6 .
Lecture \(1-3\) hours.)
490L/590L. Laboratory in
Special Topics (1-3) F,S
Preerequisites: Consent of instructor. Topies from selected areas of Physiology. Course be repeated for credit with the consent of the
nstructor. Maximum credif tor AP 590 and/or 5900 . ilinited to six units. Topics to be annourced in the Sohedulie of Classes.
Traditional grading only.
maximeatable of of
man

495. Supervised Laborato

Techniques (1-2) F,S
Prerequisite: AP 202 or 208 or BIILL 210 AB . Experience. for upper division studonts in the
organization of and technicues for a laboratory arganization of and tocchniques to a a laboratory
in physiology. Includes indvidual supervision of
directed teaching directed teaching. May be repeated tor a
maximum of two units. (Conference 1 hour, meximum of two unt
aboratory 3 hours.)
496. Investigations in Physiology (1-3) F,S
Preerequilit:: Consent of instructor. Research in
a specifict subiect in physiocogy. Topio of study a specific subject in physiology. Topic of study
to be approved and directed by a faculty member in the Department of a Anatounyl
Phe
Physide Physiology. May be repeated to a maximum of
3 units. (Conferencee 1 hour, laboratory 3 hours per unit.)

\section*{Graduate Division}
541./441. Cardiovascula

Trerequisite: AP 340 or 342 ; PHYS 100A-B Eunctions of the carciac, vasculur and bloo
52./442. Neuromuscula Physiology (3) S
AP 340 o 342 or 440 or consent of instructor. mphasis upon the mechanilims by which xamples will be selected from vertebrate and ivertebrate phyla, L(eecture 2 hours, laborato 33. A course fee may be required. Prerequistes: CHEM 327. Five units biological or physiologigara sciences. Role of the endocrines in vertebrate and invertebrate
adjusument to ohanges in the internal and
external envionnent. (lecture 3 hours 544. Experimental Endocrinology (3) F
 and molecular biology. (Leoture 1 hourr.
laboratory 6 hours.) A course fee may be squired

\section*{545./445. Metabolic Regulation} (3) S Prerequisites: CHEM 4418 or AP 440 or AP
433/543. Study of milocular mechanims hich intermediary meteaboliar mechanisisms beguated in mechanisum of hormone action and their role in the regulation of some key enzymes of
carbohyydrate, fat and protein metabolism. carbohydrate, far
546./446. Respiratory and Renal hysiology (3) F
reerecuisites: AP 340 or \(342 ;\) PHYS 100A-B. enal systems. Both vertebrate and invertebreat sotems will be studied. (Lecture 3 hours.) 547./447. Neurobiology (3) F
 physiological sciencoa; CHEM 327. Study of the
collulur molecuar, and organizational principles that underifit the functioning of the
nenous system in the normal control of henvous system in the normal control of

560./460. Radio-Chemical

Techniques in Biology (4) F Prerequisites: CHEM 327 . Five units of
biological sciences. CHEM 251 and 251 L strongly recommended. Experienece in the use and handiling of radioative tracers in the
isiocogical sciences. Tradtional grading only
Leecture 2 hours, laboratoy 6 hous) (Lecture 2 hours, lab
fee may be required.
580./480. Seminar (1) F,S Prereaquistes: Consent of instructor. Topics on cirent reeearch in anatomy andor physiolog. raduate studentis. Requires participation in the organization of the seminars and in the cotitio repeated for creedit towards any single deogre. 590./490. Special Topics 1-3) F,S
tremequisites: Consent of instructor. Topicic areas of Physiologyy Couin content will vary from of section to to section. Maur
co
be epeated tor be repeated for crodit with the consent of tho
instructor. Maximum credit for AP 590 and/or 590 L limited to six units. Topics to announced in the Scheoule of classes.
Traational grading only Mepeatale to
maximum of 6 units with different topices. Traditional grading
maximu of 6 .
(Lexture \(1-3\) hours.)
Special Topics \((1-3)\) F
Prerequisites: Consent of instructor. Topica Com selected aroess of Phystructorory. Copicis be repeated for crodit with the consenont of the instructor. Maximum creatif for AP 500 and announced in the Scherdite of Classes. haditional grading only. Repeatable to LLaborato
required.
66. Seminar in Anatomy and

Physiology (1) F,S
Critical evaluation of the primary literature of
this field, including oral and/or witter ion of oritiques.
697. Directed Research (1-3)

Preerequisite: Consent of instructor. Researco on a specific subiect in physuiclog. Ryspacic tor
study to be approved and drifecteg by a faculy study to be apporoved and directed by a tacuithy
member in Anatomy Pyyioloy Department
May be repeated for credit to a maximum of 698. Thesis (1-6) F,S

Prerequisites: Consent Prerequisites: Consent of departmental
graduate advisor and advancement candualicay acto the Mast and of acvancemement
Planning. preparation and compolition of of Planning. preparation and com
thesis in Anatomy and Physiology.

Department Chair: David L. Soltz Department Office: \(P\)
Telephone: \(985-4806\)
Faculty: Professors: Frank J Alfier James A. Bourret, Richard N. Bray, Goorge L Callison, Charles T Collins, Murray D. Dailey, Charles P. Gaft, Ju-Shey Ho, Kennean
Jenkins, Ira Jones, Greayer Mansfield-Jones, Donald L. Maurer, Alan C. Miller, Donald R. Nelson, Stuart Warter Assoclate Professors: James Archie, Philip C. Brokersors: Javid \(G\). Huckaby, Lisa Klig,
Bate ndrew Z. Mason Assistant Professor
Emeritus Faculty: John J. Baird, Hiden T. Cox, Honore Dash, Robert P. Durbin, Ross Hardy, Cliff W.
Everett \(H\). Hrubant, Ronald A. Everett H . Hrubant, Ronal Kenneth E. Maxwell, Dennis Rainey Donald J. Reish, Lee B. Stephens, E Department Secretar
Shirlee Critchfield
Students desiring information
should contact the department office should contact the department
for referral to one of the taculy advisors. Credential Advisor: Willian Undergraduate
David Huckaby;
Graduate Advisor: Alan Miller
Blology Department Advisory Council:
The Biology Department Advisory Council consists of individuals prominent in the community who epresent a wide variety of hiological department regarding its instruction program and provide informat interaction between the department and the community.
The Biological Sciences
The biological sciences include all of centered around the general questio of the nature of life. Such diverse areas as biochemistry, ecology, all part of the biological sciences. On this campus the biological sciences
departments in the College of Natura Sciences. The discipline biochemistry is located in Chemistry
and Biochemistry; the discipline of microbiology, with special emphasis on medical concerns, is located in
Microbiology: the discipiline of animal physiology, with special emphasis on physiology, with special enter in
human concerns is located in Anatomy \& Physiology; and the
disciplines of invertebrate and plant paleontology are located in Geoological Sciences. For information bout the programs in these disciplines, consult the appropriate disciplines of the biological sciences epresented in the College of Natural
Sciences are located in the Department of Biology, which offers aried program in the biological ny one of the following: biology, otany, matine biology, or zoology Courses in any of these degree consultation with the major adviso hho will be assigned in the
Elective courses may be selected that provide an emphasis in one or a ombination of the following: genetics, , marine bioloogy, morphology, and plant physiology. The department occupies lacilues lectron microscope, a seawater ystem, greenhouses, and research and teaching collections of algae vascular plants, invertebrates
(including insects), and vertebrates. Courses are offered in several areas of experimental biology. Because the campus is near the ocean, mountain fier a number of field and laborato courses in botany, ecology, entomology, matine
The Biology, Anatomy and Physiology, and Art Departments offer an interdisciplinary program in he Art section.
The Department of Biology also participates in the Desert Studies
Consortium and the Ocean Studies Institute. Information on the latter
Ins
is lised in this Bulletin under
University Programs
inancial Support, Assistantship The Department of Biology offers a nited number of teaching and orms requesting consideration for ese appointments are available in he department graduate office. Duties consist of approximately
ours per week devoted to reparation and/or instruction eneral undergraduate laboratory asses. These appointments ar mited to a maximum indual.
The department also has a limited umber of technical assistant positions as w
employment.
Several members of the faculty have grants which provide for lesearch assistantships.
A number of scholarships are
available through the University
Graduate and Health Professional Preparation
In addition to preparing students for careers in teaching, industry, and
overnment, the programs in this department provide preparation for dvanced study at the graduate leve and for entry into various health should consider the degree equirements listed in the catalogue s minimal; some graduate schools, protessional schools, or careers may nathematics, physics, chemistry, or Siology.
Students desiring entrance into a
graduate school to obtain a master's or doctor's degree in some area of the biological sciences should dor the school(s) of interest early in their undergraduate years. Specifically, students contemplating
graduate work in mathematically graduate work in mathematically
oriented areas of the biological sciences should consider taking more
calculus (MATH 122, 123, 224, and calculus (MATH 122, 123, 224, and 115 S and 116) and those contemplating graduate work in

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Biology
College of Natural Sciences



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(CHEM 251, 321A, 321B or 322. Students desiring entrance into one
of the various health-reated professional schools including medicine, dentistry, chiropractic optometry, osteopathy, podiatry, graduate program in physical therapy should consult with the Pre-Health
Office
Of the Office of the College of Natural
Sciences (FO5-104) for information. Most of these schools do not require students to major in any particular discipline and many do not rather, they want students who hav done well in their major and who also ook the prerequisite courses required by hat particular school. Bachelor of Ar
(code 2-7621)
This degree is designed primarily for those interested in teaching high degree of this department and is designed to offer broad coverage of the many areas of study within the specializing in any one field. Students interested in graduate work in biology are advised to opt for one of the B.S. degree requires a total of \(71-76\) unit in the major, of which 43 are in lower dow and \(28-33\) in upper division. Lower Division: CHEM 111A, B
BIOL 210A, B, 240, 260; PHYS 100A,B; MICRO 210; MATH 112 or 115 S or an appropriate college leve course chosen in consultation with
department advisor: and NSCI Upper Division: CHEM 327 or 321 A and 322 a a minimum of 25 units in biological sciences including the
following: BIOL 350 370 A A 340 ollowing: BIOL 350, 370 ; AP 340 and
340 L or 342 and 342 L or 440 or BIOL 447 and 447 L ; BIOL 313 or 316 or 32 or 332 or 333 , and 425 or 427 or program must include a minimum of wo upper division animal biology courses and two upper division plan courses accurseptable for this degree courses acceptable for this degree:
AP 335,340 , and 342, , 101313 ,
\(314,315,316,324,332,333,351\), \(314,315,316,324,332,333,351\),
\(413,417,418,419,421,42,424\),
453,456 , and 460 , Plant biology courses acceptable for this degree 477, and 450, 420, 422, 438, 439, 447 and 4 , and 342 may also be used to satisty he physiology requirement. The emaining \(2-5\) of these 25 units should other courses in consultation with a
faculty advisor. The following course are not acceptable toward these 28
biological science units: \(A / P 305,307\) 3081, 400, 401; B1OL 301, 302, 305,

Bachelor of Science in Botany (code 3-7642)
This degree is designed primarily for those interested in careers in botany
and is particularly approprite for those contemplating graduate work in this field. This degree requires a total of 84 units in the major, of which 46 division, and a minimum of 124 units for graduation
Lower Division: CHEM 111A,B; 100A, B; MICRO 210; MATH 112 or 117 or four years of high school math,
\(115 \mathrm{~S}, 116\); and NSCl 200 Upper Division: CHEM 321A and biological sciences, including BIOL 427, \(438,439,447,447 \mathrm{~L}, 350\) or 450 and 370 to bring the total upper
division units to 38 . ENGL 317 is acceptable toward these 38 units. The following courses are not acceptable toward these 38 biological science
units: \(A P 305,307,3081,400,401\). BIIS: A01, 302, 305, and 3081; NSCl 492.

Bachelor of Sclence in Marine
Biology (code 3-7626) Biology (code 3-7626)
This degree is designed primarily for
those interested in careers as marine biologists, especially with an
environmental orientation environmental orientation, either in
private industry or government service. It is also appropriate for those contemplating graduate work in marine biology or ecology. This
degree requires a total of \(92-96\) degree requires a total of \(92-96\) units
in the major, of which 42 are in lower
divis division and \(50-54\) in upper division and a matinim.
Lower Division: CHEM 111A,B;
BIOL \(210 \mathrm{~A}, \mathrm{~B}, 240,260\) P PHYS 112 or 117 or four years of high school math, 115S, 116
and NSCI 200. Upper Division: CHEM 321A and
322; GEOL 364, 364L, or 465,466 ; AP 340 and 340 L or 440 ; BIOL 313 , in marine sciences selected from the following six courses: BIIL 413, 414, 417, 455, 458, or MICR 441; on
course in methodology and course in methodology and techniques selected from the
following six courses: BIOL 360,457 ,
\(463,465,468,0 S S 460\), \(463,465,468\), OSS 460 ; and six units
selected from upper division courses selected from upper division courses
in the College of Natural Sciences and Ocean Studies Institute and approved
by a marine biology advisor, including ourses not already selected from the preceding lists. The following courses are not acceptable toward these six
units: A/P \(305,307,308,400,401\) : units: AP 305, 307, 308, 400, 401;
BIOL 301, 302, 305, 308; NSCI 492 . Bachelor of Science in Zoology
ption in General Zoology

\section*{code 3-7643)}

This option is designed primarily for and is particularly approers in zoolog hose contemplating graduate work in his field. This option requires a total 85 units in the major, of which 4 upper division, and a minimum of 124 nits for graduation.
Lower Division: CHEM 111A,B;
BIOL 210A, B, 240, 260: PHYS
OOA,B; MATH 112 or 117 or four
years of high school math, 115 S , 116 MICRO 210 or GEOL 102 and 104 or Upper Division: CHEM 321A and 322: 31 unitis of biologicicl sciences
including ither A/P 340 and 340 L or 4cluding either A/P 340 and 340 L or 40; BIOL 350 and 370 ; one course
elected from BIOL 313 or 316 ; one course selected from 324, 419, 421 423 , or 424; and one course selected s acceptable toward these 31 units. he remaining \(8-11\) of these 31 units. should be selected from above as well as other courses in consultation courses are not acceptable toward ese 31 units: AP 305, 307, 3081, NSCl 492.
Option in Physiology Option in Phys
(code 3-7604)
See Anatomy and Physiology Option in Terrestrial Biology Option in Terre
This option is designed primarily for hose interested in careers as terrestrial biologgists, especially with a vironmental orientation, either in service. It is also appropriate for those contemplating graduate work in terrestrial biology or ecology. This
option requires a total of 85 units in the major, of which 46 are in lower division and 39 are in upper division and a minim
graduation.
Lower Division: CHEM 111A,B;
BIOL 210A,B 240, 260; PHYS OOA, B; MATH 112 or 117 or four years of high school math, 115 SS . 116
GEOL 102 and 104 or 105 ; and NSC

322; 31 units of biological science including AP 344 and \(340 \mathrm{~L} ; \mathrm{BIOL}\)
\(316,350,370,412\), and \(427 ; \mathrm{BIOL}\)
332 or \(333 ; \mathrm{BiOL} 324\) or two 332 or \(333 ; \mathrm{BIOL} 324\) or two courses
selected from 421, 423, or 424 . The remaining \(0-2\) of these 31 units shoul faculty advisor. The following courses are not acceptable toward these 31 units: APP 305, 307, 3081, 400, 401 ;
BIOL 301, 302, 305, 3081; NSCI 492 .
Minor in Biology (code 0-7621)
A minimum of 19 units is required
for the minor.
Lower Division: BIOL 210A and
210B.
Upper Division: A minimum of nine units selected from upper division biology courses with at least one
course selected from the 400 series. The following courses are not acceptable toward these nine units. 301, 302, 305, 308

\section*{Certificate Progra}

The Certificate Progra Biomedical Art is an interdisciplin program sponsored by the Art, Anatomy and Physiology, and Biology certificate are listed in the Art section of this Bulletin. Co-directors of the Art: Richard Oden, professor, and M Peter Mendez, assistant professor and in Anatomy and Physiology, Dr. Kenneth Gregory. Questions may be
addressed to them during office hours which are listed in the respective departmental offices
Concurrent and/or Summer
Enrollment in Another College
Students who wish to take course
work in a community or another wollege to meet curricular equirements while enrolled as ndergraduates in the College of
vatural Sciences must petition the appropriate department for prior approval to enroll in specific courses enrolliment or summer enrollment. University policy must also be complied with. See Concurre
Enrollment' and 'Transfer of Undergraduate Credit' in this Bulletin. Courses not receiving prior approva department.

\section*{Master of Sc} (code 6-7621)
The Department of Biology offers this degree jointly with the Dep
of Anatomy \& Physiology. The
avaiable programs cover a wide spectrum of biology and include laboratory and field study. This
degree requires a thesis based on original scientific research; a list of research areas with the names of faculty specializing in these areas can
be obtained from the department be obtained ifrom
graduate office.

\section*{Admission to th}

Prerequisites:
In addition to the prerequisites for entrance into CSULB as a gradua
student stated previously in this Bulletin under Graduate Degrees and Post Baccalaureate Studies, the (1) A bachelors degree in the iological or related sciences with minimum course work similar to the Department of Biology, CSULB
division requirements (other indergraduate degrees will be onsidered by the Graduate Studies Committee);
(2) An undergraduate overall grade pourses) of at least 2.75 , or a grade
on
our point average of at least 3.00 in the
ast 60 semester ( 90 quarter) units ompleted;
(3) The Graduate Record
xamination Subiect Tost in Biology or the Subject Test in iiochemistry, Ce ests must be passed at, or above, ocandidacy by the end of the second semester in residence. Th GRE must have been taken within 5 years

Application
Prospective graduate students in Piology, including CSULB graduates nust formally apply for admission to Bulletin and must also apply directly oo the Department of Biology. All applicants must submit the following no later than 15 March for the fall emester or 15 November for spring semester to receive
consideration for admission:
(1) Departmental Application Form available from the departmental raduate office;
(2) Official transcripts of all college eve academic work including that
done at CSULB, in addition to those transcripts required for general
graduate admission to
CSULB: (3) Two letters of recommendation
from persons familiar with the
appicants sacademic perrormance
and research potential
(4) Official report of scores on the Subject Test in Biology or the Subjec Test in Biochemistry, Cell, and hould have taken this examination well prior to applying to the department, because the official core must reach the department
the deadlines above. Review by th
Committee:
The Graduate Studies Committee will review all folders completed by the acceptance of the applicant as a classified or conditionally classified graduate student accepted students who expect to enroll in the next semester Graduate Advisor during the in-person egistration period. This interview will ocus on counseling and orienting the applicant with special
Admission to the Department of Biology as a Classified Graduate Student (7621-52)
The Department of Biology will
admit as a classified graduate student any applicant who:
(1) Has met all prerequisites. (2) Has a complete folder of al ocuments
(3) Has obtained acceptance by a faculty member as the Chair of tudent should then set 4 a a program student shou).
(see below).
Admission to the Department of Biology as a Conditionally Classified
Graduate Student (7621-51) Applia Applicants who fail to meet the
criteria above for classified admission to the department and who fall into one of the following three categories nay be considered by the Graduate Studies Committee for admission a
Conditionally Classified Graduate Students:
(1) Applicants with course and/o Studies Committee will determine what deficiencies each applicant has and indicate on the back of the course(s) the applicant must take to make up those deficiencies. These courses are in addition to the minimum 30 units on the student's
Program of Study (see below). The applicant must make up all such 60 semester ( 90 quarter) units
between 275 and oetween 2.75 and 3.00 may secure admission as a Conditionally
Classified Graduate Student. The applicant must first obtain sponsorship from a Department of
Biology or Anatomy and Physiology Biology or Anatomy and Pyssiology
faculty member; this faculty member must indicate in writing to the Graduate Studies Committee Wilingness to serve as the chair of the reasons why the Graduate Stu Committee should admit the appicant. Thus, applicants with low
GPA must contact potential thesis advisors before the Graduate Studies Committee can consider th application. In addition, an applicant
recevining Conditional Classification must complete, with a grade of \(A\) or B, three approved courses totalling at
least nine units acceptable to the
Graduate Studies Committee and the Graduate stuaies Committee and the department chair before attaining
classified status. These approved courses may appear on the student's Graduate Program of Study. It the applicant receives less than a B in any
of the three courses, the applicant of the three courses, the applicant
cannot continue pursuit of a Master's degree in this department. An applicant who fails to meet the GPA
criteria for normal, classified criteria for normal, classified admission and with either an overall undergraduate GPA of less than 2.50 or a GPA in last 60 units of less than
275 is not eligible for admission to 2.75 is not eligible for admission to
the Department of Biology Master's Degree Program.
(3) Applicants who meet all
preeequisites but who do not a chair for the thesis committee All students must obtain a chair and set up a graduate program by the end of he second semester in residence
following admission to the Master of Science program or they will be dropped from the progran.
The Program of Study:
After admission to the department as assified grifaduate student, the student must establish a program of study. The student and thesis committee chair will select at least tw
additional members to serve on the student's thesis committee. The departmental Graduate Advisor
serves as an ex-officio member
thesis committees. Each student must prepare a written thesis proposal
approval by the student's thesis committee. The thesis committee wil hen meet with the student to must take and indicate them on the Department of Biology Graduate Program Form. The Program of
Study must be established before the end of the second semester atter admission to the department; in
addition, a score at, or above, the addition, a score at, or above, the
50 th percentile on the Graduate Record Examination Subject test in
Biology or in Biochemisty Cell Biology or in Biochemistry, Cell, and
Molecular Biology must be achieved by this time. Failure to meet these requirements will result in dismiss
from the department's graduate program.
Advancement to Candidacy: In addition to the general university requirements stated previously unde Post-Baccalaureate and Graduate
Degrees in this Bulletin, the student must complete the following steps before receiving Candidate status Biology
(1) Admission to the Department of Biology Master's Degree program as a classif
above);
(2) Pass the University Witing
Proficiency Examination (WP) (3) Establishmination (WPE) committee and program of study (see above
above the 50 then percentile on the Graduate Record Examination Subject Test in Biology or the Subjec Test in Biochemistry, Cell, and
Molecular Biology. This requirement must be met by the end of the second semester in residence. Normally,
students not meeting this requireme students not meeting this requireme
will be dropped from the program. Only in cases where English is not the student's native language or if a
disability impedes the student's performance may an alternative be petitioned. In these cases, the chair o her/his thesis committee must
petition, in writing, the Graduate pettion, in writing, the Graduate
Studies Committee to provide an alternate method for meeting this requirement. This pettion must student's progress to date, professional promise, and schedule
for meeting all for meeting all degree requirements.
granted, the alternate method will consist of an exam, oral and//or
written, in which the student must
emonstrate extensive knowledge of the major areas of biology. The exam committee will consist of three faculty members selected by the Graduate
Studies Committee. No member of the student's Thesis Committee may serve on this committee. The Graduate Advisor will normally also
participate in the examination. Requirements for the Master Requirements for the Master of
Science in Blology (code 6-7621) In addition to the general University requirements stated previously in this
Bulletin, the student must meet the Bulletin, the student must meet th
ollowing requirements before receiving the degree of Master of eceiving the degre
Science in Biology.
(1) Advancement to candidacy (see
above);
(2) Each program must include six
units of Thesis (BIOL 698\()\), one to hree units of Directed Research BIOL 697), one unit of Seminars
BIOL 580 or A/P 580 ), and two un with different topics chosen from BIOL
\(661,662,663,664,664,665\) \(661,662,663,664,664,665\), APP
661, CHEM 5954 Of Of the 30 int 661, CHEM 595 A . Of the 30 units, no
more than three may come from BiOL m62-665, AP 661 , CHEM 595 A and no more than six may come from ransfer credit and/or other
departments within CSULB. No more than two courses may have numbers
between \(300-399\). between 300-399;
(3) Maintenance of a 3.00 (B
average), or better, overall graduate grade point average, overall graduate upper-division and graduates level ourses taken since admission to this
university and after completion of the baccalaureate degree) and graduate program GPA. If either GPA falls selow 3.00 , it must be elevated to
.00 at the end of the following semester or the student will be dropped from our graduate program (4) Completion of a written thesis
and the oral presentation of the thesis and the oral presentation of the
research. The members of the
candidate's thesis cesearch. 'se thesis committee must
cead and approve of the thesis before ead and approve of the thesis before presentation. The student may not complete the thesis or give an oral presentation during the summer session.
(J) Recognizing that effective organization and verbal information and ideas are a necessary
part of a successful graduate part of a successitul graduate normally requires that a Biology graduate student serve as a teaching
assistant or graduate assistant as part ofsistant or graduate assistant as p
240. Introduction to Cell and

Molecular Blology (3) F,S
Prerequiste: : BIOL 210A, CHEM \(111 \mathrm{~A}, \mathrm{~B}\) with
 compoostion of blological maccomoleculese and
how they are organized into colluara componente structure and tunction of subbecoliular organelleo introduction to recombinant DNA technology and
tha applications in cell and molecular biologicilil tresparich. Not open to students with crecitit in BIOL 334. (Lecture 3 hours.)
Preerequibites: BIOL 210A, MATH 112 or 1155 . Proerquibites: BIIOL 2101A, MATH 112 or 1155 and analyieio of biolocolical data, (Leecture 2 hours,
laboratory 3 hours.) A course foe may be labovatory
required.
Upper Division
301. \#\# Science in the Elementary
301. \#\# Science
School (3) F,S

Prerequisistes: Six units of course work in
doparments of the College of Natural sciences. deparments of the College of Natural Sclencess
A sampling of the broad field of science emphastzing the procoseses of science. Practica approaches to teaching elementary schol NSCl 301 . (Lecture 2 hours, activities 2 hours.) 302. \#\# Elementary School
Sclence Workshop (3) S

A practicum on the development and use of A handson' elementary school science centiers. BIOLNSCI 301 recommended Equivalent of NSCC 302 . Not ppen to stude with creode in NSC1 401. (Lecture 2 hours,
workshop 2 hours.) A course fee may be required.
305. \#\# Workshop in

\section*{305. \#\# Workshop in}

Environmental Education (3) F,S An inted diociplinary workshop/seminar course for \(k-12\). Current envirommental issues, field maxterials and developopment of teachinghloaming

hours.) A course fee may be required.

\section*{308
S}

Preerequisites: PSY 100, BIOL 200 or 210B, ENGL 100 , upper dinilion status. Human sonat bivior Tas seen in the contex of evolutionary bitioligy.
Topics induce the importance of kinstip in human societebes, attruism and reciprocity, human sexualily, parent-offspring relations, ettical and legal systems, and
313. Invertebrate Zoology (4) F,S

Preerequibite: BIOL 210A,B with grade of 'C' or
beter. Basic taxonomy, morphology, ecology.



(4)

Preerequisites: BIOL \(210 A, B\) with grade of 'C' or better. A comparative study of cortain
morphological. physiological and life history featurus of representative protazoan species
Emphasis in the laboratory on Emphasis in the laboratory on optical
cytochemical, mutritional and other exxerimenta

*315. General Animal Parasitology (4) S Preerequisites: BIIL \(210 \mathrm{~A}, \mathrm{~B}\) with grade of \(\mathrm{Cl}^{\text {Cl }}\) or or
better.
comparative
morphology syytematics, and liomparative morphology.
invertebratet parasitites of animals, potozoan and invertebrate parasites of animals, including but
not cestricted to those of humans. Emphasis on life cycles, the host-parasite interaction, and hoost
examination and staning. (Leecure: 2 hours, examination and staining. (Lecture: 2 hours,
laboratory: 6 hours) A course fee may be
required. recuired.

General Entomology
(3) \(F, S\)

Prerequisites: BIOL \(210 A, B\) with grade of 'CC' or
better. Characteristics, structure, habits, and life clese of insects; the importanco of insects to humans and other organisme. (Lecture: 2 hours,
laboratory 3 hours.) A course fee may be laborato
*324. Vertebrate Zoology (4) FS Preerequiste: BIOL \(210 \mathrm{~A}, \mathrm{~B}\) with grade of ' \(C\) ' os better. An evolutionary and systematio survey of phylogenetio origininates. Emphasio on the morphological and physiological adapatation of the maior rroups. following courrees had been if perere than onone of the
 laboratory 6 hours.) A curse foe may be
required.

\section*{328. Pla
(3) \(\mathrm{F}, \mathrm{S}\)}

Preerequisites: BIIL. 210A,B with grade of 'C' or Peerequistes: BIICL \(210, A, B\) with grade of 'CC' of lant products in our covilization from a botanical perspective. Emphasis on the origins, methods of 332. Comparative Anatomy (4) F,S

Prerequisen: BIOL 210A,B with grade of 'CC or
 and tunctional morphology. (Luecture 2 hours,
laboatory 6 hours.) A course fee may be required.
3333. Vertebrate Embryology (4) F,S Prereaquiste: BIIL 210A,B with grace of 'CC or
better. A comparative stuyy of gamelogenesis隹ilization, cleavarage, sluastuof gamenelogenenosis, neuruation, primary embyyonic induction, and he development of organs and systems
Emphasis on frog.
chick, and
and hours) A course fee may be required.

450./549. Plant Ecology (3) S Prerequivites: BIOL 427 or 447, BIOL 260 .
Relationship of plants to their environment and
 \(l\) laboratoriy a
*453. Insect Ecology (3) S Prerequisiste: BIICL 316 or 317 . Fiold and
experimental studies of abundances disperasal experimental studies of abundanco disperaal,
distribution and behavior. LLecture 2 hours, laboratory and field 3 hours.) A course fee may be required.
454./554. Research in Tropical Marine Ecology. (2) St Even Years
Preequisistes: BIOL 200, ether 350 or 353 . Field
 research on tropical marine biological probleme
Designed to engage students in experimente researach, inclucing: recoognizing ap problem,
designing and carrying out a provert statistical
 presentation. An eight-day fied trip to tawair wir
be required during the sping recess at student

 455./555. Ecology of Marine Communites (3)
 communtities. Includes an individual fifed research project and two class projects. (Lecture
2 hours, fold 3 hours.) \(A\) course fee may be 2 hours.

\section*{456./556. Population Biology}

\section*{(3) F}

Fiequisites: BIOL 350, MATH 1155, 116. Anaypsis of characteristics of animals and plant
populations includuing population growh and Poguations, incmupenition, population, protaion, pararhastism, and other intraspecolifo and intierpecocifio

457./557. Field Methods in Ecology (3) S
Preerequistes: : BIOL 280,350 . Design of fried Weearch projocts, collection and analysisio of data,

 458./558. Ecology of Marine ferequistites: BIOL 260, 353, CHEM 327, MATH
 phytoplankiton and zooplankiton as a basis tor
tucuy of structure, Aynamics, and modeling of plankiton communtities. (Lecture 3 hours.
laboratory and field 3 hours.) A course fee may aboratory ad
460./560. Biological Control (3) \(F\)
rerequistes: BIOL 316. Natural and artificial control of pest species of insects, atheo
arthropods, and weeds, throunh the use predators, paraasites, and funga.)
463./563. Computer Applications In Biology (4) F,S
Preerequisites: BIIL 260,350 or consent of instructor. Computer programming in the
biblogicial ociencese. Emphais on simulato,
modeling, and use of statistical packageos. Not moding, and use of statititioal packague. . 3 hourr, labora
required. only.
464. Environmental Toxicology (3) \(F\)
beerequibites: BIOL 210A.B with grade of 'C' or
SHEM 327 . Metabolism, mode of action and detoxifioation mechanims of toxic ubstancos in organisms. Ethects of poclutuants, vaents, drugs ando daroctics on human heath and the enironmen
(Lecture 3 hours.)
465./565. Advanced Biostatistics
4) \(F, S\)

Prerequisites: BIILL 200 ; six units of upper
Jivilion biological science or consent of instructor. The application to probilems in biology
 nalysis of variance and covariance, mutipiple tyatisics. Laboratory experience in analying
tiococical data with a conputeried statisicical ach ingical data with a ocmputerized statistical. course tee may be required.
468./568. Principles and
applications of Ele
Microscopy (4) F
Prerequistes: BIOL 210A,B, 340; PHYS 100A, B;
 ranemission, caanning and transmission election
micrococopy. Theory and applications of microocopp. Theory and applicarions of mmunocytochemistry. histochemistry and
wavelength and energy diopersive
\(x\)-ray Wavelength and energy dispershe \(x\)-ray
microanalyis for elucidating cols structure and
functioning. Laboratory emphasis on soecimen functioning. Laboratory emphasis on specimen
preparation,
instrument operation and preparation, instrument operation, and
photogopaphy for both scanning and transmission
隹
 equirad. Enollment iminted. (Lecture 2 hours,
laborator 6 hours.) A cuirse tee may be 73/573. Molecular Genetics (3) s

Prerequibite: BIOL 370 . CHEM 327 . Nature,
 477 577 . (ite
477./577. Biotechnology:
Recombinant DNA (3) \(F\)

Prerequibites: BIIL. 370; CHEM 441A.B: (all with a \(C\) Co or betier): consent of instructor. intensive stucy of the theory and lecchiques of isclation of genes, analysis of the mechanaisms of reculation of gene expression, and detalier dstudy
of how genes are characterized. Traditional of how genes are characterl
grading ony. (Lecture 3 hours.)

477L/577L Biotechnology: Prerequisites: Concurrent encolment in BIOL 47

 expression, and characterization of genes. aditional grading only. (Laboratory 12 hours.)
course fee may be leguired. 480./580. Seminars (1) F,S rerequistes: BIOL \(210 A, B\) with grade of 'C' or beter, consent of instructor. Weekly metetings at which professional biologojits present the results of their eesearch. Tequirites participation in the presentations. May not be repeated for credii
towarda any yingle degree. (Seminar 1 hour.) *490. Special Topics in Biology (1-4) F,S
Prerequisiteses BIIL \(210 \mathrm{~A}, \mathrm{~B}\) with grade of 'C' or
better, Oonsent of instructor. Topics trom selected setter, consent of instructor. Toples from selected section to section. May be repeated for crovit too maximum of eight units toward any single
degree. Topics may
be announced in the Scheodiul of Classes. LLecture, laboratory, and/or 5ell 5 Surn 495. Supervised Laborato
Techniques (1-2) F,S Prerequisite: BIIOL \(210 \mathrm{~A}, \mathrm{~B}\) with grade of \({ }^{\circ} \mathrm{C}^{\prime}\) ar better. Experiencos tor upper division studenits in he organization of and trochiciques for
haboratory in biology. Includes individual
 will usually be required. May be repoeated for a
maximum of two unita. (Conference 1 hour. laboratory 3 hours per unit.)
496. Investigations in Biology (1-3) F,S
prerequilites: BIOL \(210 A, B\) with grade of \({ }^{\prime}\) ' \(C\) ' \(\alpha\)
betert. consent of
 approved and directed by a faculty member in he D Department of Biology. A wittern report will
vusaly be required. May be tepeated to maximum of 3 units. Not avaliable to graduat
students. (Conference 1 hour, laboratory 3 hour studidents. (Conferencos 1 hourt, laboratory
per unit). Acourse fee may be equired. Graduate Division
\(\mathrm{S}^{512 . / 412 \text {. Evolutionary Biology (3) }}\) Preerequisite: BIOL 370 or an equivielent course in genetics. Introcuction to the theory of evolution mechanisms involved in tis continued adaptation
and a description of the results of thel and a description of the
adapatation. (lecture 3 hours.)
513./413. Marine Zooplankton
(4) (4) S

Prerequuiste: BIOL 313, may be taken
concurrenty. Diversidy, natural history, taxonomy



555./455. Ecology of Marine

Communities (3) S, Odd Years
Prerequistes: BIOL 260,350. Discussion of fe
 communtites. Includes an individual field
research proioct and two class projects. (Leecture research proiect and two class projects. (Lecture
2 hours, fied 3 hours.) A course tee may be
required.
556./456. Population Biology (3) \(F\) Prerequuistes: BIOL 350, MATH 1155, 116.
Analysis of characterisics of and populations inducuding poopulation srond plant regulation, compeetition, prodatation, parasastion regulation, competition, Predation, parastitiom,
and other intraspecifio and intern
Interactions interactions; population fuuctuations; spapitiol
patterns; population genetics; and evolutionary patiens; population genentics,
responsese. (Leoture 3 hours.)
557./457. Field Methods Ecology (3) S
Prerequisites: BIOL 260,350 . Design of field
reesearch proiects, collection and reeearch propects, collection and analasyis of data,
witity and perestation of reports. Emphasis on
feild sampling techicues. field sampling techniques. Five weekend field
trips required. (lecture 2 hours, labocatory and trips sequired. (Lecture 2 hours, laboratory and
fifid 3 hours.) A course fee may be required. 558./458. Ecology of Marine
Plankton (4) S, Odd Years Plankton (4) S , Odd Years Prerequisites: BIIOL 200, 353, CHEM 327, MATH
IISS. Physiogical phytoplankion and zooplankoon as as marine
study of stucture, adynamico, and modelis for study of structure, cypnamicics, and modeling of
plankton communities. LLecture planktion communties. (Lecture 3 hours,
laboratory and field 3 hours.) A course fee may be required
560./460. Biological Control

Prerequis
Prereacuisites: BIIL 316. Natural and artificial
control of peat control of pest species of insects, other
atrhopods, and weeds, through the wise of predators, pirasites, and fungal, viral, ait
bacterial diseases. Leocture 3 hours.). 563./463. Computer Applications in Biology (4) F,S
Preerequisites: BIOL 260, 350 or consent of
instructor. Computer programming in the instructor. Computer programming in the
biologocal sciences. Emphasis on simulation
modeling and

 be reauired.
565./465. Advanced Biostatistics
rerequisite
Pererequistres: BIIOL 260: six units of upper
division biological science or consent dinsion. bitiogical scicones or consent
instructor. The application to problems in bidogs,
of ackanced statistical of advanced stataistical teechiques such as
anayysis of variance and covariance, mutiple
 statistics. Laboratory experience in analyzing
biolocical data with a computerized statiosicical package. (Leeturut 3 h hurrs, laboratitory 3 hourrs). A
curree fee may ee reauired. course tee may be required.
Prerequisite: Rearch Methods (3) F,S Prerequisites: BIOL 260. Practical experience in
the skils necessary for publication and presentation of biological revearch, inoluding
niting, computer editing, fifure proparation and photography. (Lecture 2 hours, laboratory, 3
hours.) A courre fee may be required. 568./468. Principles and

Aplications of
Microscopy (4)
Prerequisites: BIIL 210A,B, 340; PHYS 100A,B; all with grade of 'C' or better: Basic theory of transmission, scanning and dransmission electron
microscopy. Theory and applications of microsocopy. Theory and applications of
specialized techniques such as autoradiography,
immunocytochemisisty.
histocochemisty mmunooytochemistry, histochemistry and
wavelengh and energy dispersive \(x\)-ray
 Unctioning. Laboratory emphasis on spocimen
preparation,
instrument
operation
and phopotararaphy for both scanning and trane and
ond electron microscoppy. Indinidual researanh project required. Enrollment limited. (Lecture 2 hours,
laboratory 6 hours.) A course fee may be
recuired. reguired.

\section*{53./473. Molecular Genetics}
(3) S
eplicution, regulation and MEM 327 . Nature, netio material. (Leecture 3 hours

\section*{577./477. Blotechnology
Recombinant DNA (3)}

Trerequistes: BIIL 370; CHEM 441AB; (all with C or better): consent of instrutor, Intensive sudy of the theory and techniiuues of
combinant ONA . Includes the selections for the Isolation of genes, analysis of the mechanisms of Iogulation of gene expresosion, and dotalilisd dtsody
of how genee are characterized. Traditional grading only. (Lecture h hourra.) 577L/477L Blotechnology:
Recombinant DNA Laboratory Preeraquisites: Concurrent enrollment in BIOL 577 Prerequisites: Concurrent enrollment in Blo L577 lo consent of instructor. Intensive study of the
laboatory technicues of recobinent ONA
research. Incluces the isolation, amplification. research. Includes the isolation, amplification,
exproseion, and hharactiritarn of genes.
Tradtional grading only. (raboratory 12 hours.) Traditional grading only, (raborat
A course fee may be required.
580./480. Seminars (1) F,S

Preerequisites: BIOL 210A,B with grade of 'C \(C\) '
 better, consent of instructor. Weekly meetings at
which profesional biocolist present the results
of their researach. Requires participation in the of their research. Requires participation in the
organization and the critical evaluation of these
presentaina presentations. May not be repeated for credif
towards any single degree. (Seminar 1 hour). 590 . Specil Topics in Biology

\section*{(1-4) F,S}

Prerequuisite: Consent of instructor. Topics from
selected ate

 single degree. Topics may be announced in the
Scheodue of Classes (Lectue, Schedidie of Classes. (Lecture, laboratory, and/ar 661. Seminar in Biology
(1) Demand

Critical evaluation of the primary literature of this
field, includuing oral and/or witten presentation of oiritiques. May be repeated tor creait.

\section*{662. Seminar in Botany (1) \(F\) Ciritical evaluation of the primary ilierature of this
field, includuing oral and/or witten presentation of
 \\ 663. Seminar in Genetics and \\ Development (1) F \\ Citical evaluation of the primary literature of this \\ fifli, including oral and/or wittion prose
cititues. May be repeated for credit. \\ 664. Seminar in Marine Biology
(1) S \\ Cititical evaluation of the primay literature of this field, including oral and/or wititen prea}

\section*{665. Seminar in Terrestrial}
the primay literature of the field, includingo oral and/or witien porititives. May be repeated for credit 97. Directed Research (1-3) F Prerequisites: Consent of instructor. Repearch on a specifico subiect in biology. Toplo to stucy to be approved and directed by a facuity member in oquiled. May be reppeated for dogroe credit to a meximum of 3 units. A course tee may be 698. Thesis (1-6) F,S

Prerequisites: Consent of departmental graduate Peorequisistes: Consent of dopartmental graduate
Master of Advancement to Candidience in in Biology. Planning. Master of science in in Biology, Planning.
pepopation, and completion of a theses in the proparation, and completion of a thesisis in the
biological sciences. A course tee may be
recuived.

\section*{Chemistry and Biochemistry}

Department Chair: Kenneth L. Marsi
Department Office: \(\mathrm{PH} 3-242\) Telephone: 985-49 Faculty: Professors: Roger A. Arnold J. Berry, Stuart R. Berryhill, Jeffrey A. Cohiberg, Jerald A. Devore, Dorothy M. Goldish, Edwin R. Harris, James L. Jensen, Gen
E. Kalbus, Van T. Lieu, Robert L. Loeschen, Tom J. Maricich, Kenneth L. Marsi, Henry N.' Po, Nail M. Senozan, Leslie K. Wynston;
Associate Professor: Dennis M. Anjo, Margaret L. Merryfield; Assistant Professors: Marco \(P\) Lopez, Kensaku Nakayam Emeritus Faculty: Edwin N Becker, Julie V. N. Kierbow, Darwin L. Maytield, Clyde E. Osborne, Simonsen, A.G. Tharp Department Secretary
Jeannette Santag
Students desiring information should contact the department office advisors:
Undergradute Advis Berryhill, Goldish, Harris, Marsi, Merryfield, Wynston; Graduate Advisor in Chemistry: Po Graduate Advisor in Blochemistry: Cohlberg; Graduate Studies Committee: Acey, Berry
Cohlberg, Marsi, Po, Senozan.
Chemistry Department Advisory Council
This council, including persons prominent in the community, fosters and industrial chemistry. It advises the department concerning the instructional program and informs he department of opportunities for Degree Programs
The program in chemistry at the promote development of a ackground in a specific science, to serve as preparation for graduate
work in chemistry or biochemistry
and to provide a foundation for those students seeking careers in teaching, law, medicine, dentistry, professions, and in industrial and governmental scientific occupation certified by the American Chemical Societ
The Department of Chemistry and Biochemistry offers graduate study science degrees in chemistry and biochemistry. The candidate is equirements stated in this Bulletin as well as the specific departmenta equirements stated here and, more Brochure of the dep tudies available upon request
A limited number of teaching, graduate and research assistantships areavailable. Usually, hese involve half-time work in
nstructional program at the freshman and sophomore level or work in the laboratory. Application orms for these positions are Department of Chemistry and Biochemistry.
Transfer Students: A student who ransfers to the University must tak chemistry courses here. To receive credit towards the major for course aken elsewhere in place of CHEM \(377 \mathrm{~A}, \mathrm{~B}\), consent of the department chair is required. Satisfactory performance on appropriate proficiency ex
be required.
Bachelor of Sclence in Chemistry
The bachelor of science degree program is intended to provide a horough background in chemistry or those planning to pursue careers graduate study in chemistry or iochemistry. This program, when supplemented with study in other ppropriate areas, can serve as eath professional schools medicine, dentistry, pharmacy,
tc.). Each student should consult with a faculty advisor (Professor Marsi, Merryfield, or Wynston) to plan his or her individual program Chemistry majors must achieve a courses required for the major. Requirements for the Bachelor of sclence (code 3-7661):
Lower Division: CHEM 111A,
111B, 251 ; courses to support the 111B, 251; courses to support the major to include PHYS 151, 152,
153, and MATH 122, 123, 224, and either MICR 210 or BIOL 210A. Upper Division: CHEM 321A,B.
371A, B, 373, 385, 431, 451, ENGL 00 or 317, and an additional six units of upper division chemistry of CHEM 496. A maximum of three units from CHEM 495, 496, and 499 be used to fulfill this six-unit equirement.
B.S. candidates are encouraged o acquire competence in reading Chientrific German, French, Russian, also advised to take one or more additional courses in mathematics, uch as MATH 370A, 247, 380, 36
The bachelor in Chemistry
The bachelor of arts degree provide a general background in chemistry, but not in the depth equired for a bachelor of science egree. This program, when areas, will serve as preparation for career in chemical and related ndustries or secondary science
ducation. The bachelor of arts pogram is also an appropriate preparation for medical, dental, and hharmacy schools. In order to take program for various caree objectives, adequate counseling by hemistry advisors is indispensable. Each student must confer with an
advisor to set up his/her individually ailored program in chemistry and ne or more complementary areas

Chemistry majors must achieve a grade of 'C' or better in all chemistry ourses required for the major. equirements for the Bachelor of
trs (code 2-7661).
Lower Division: CHEM 111A,B, colude PHYS 100A, B or 151, 152; and MATH 122, 123
Upper Division: CHEM 321A,B,
371A, B or 377A,B, 451 ; ENGL 300 or 317 . A minimum of 3 additional units to be chosen in consultation with an advisor must be taken from CHEM 373, 385, 421, 422, 431 additional units involving computer programming must be taken from NSCI 200 or CHEM 385 . computer courses may be substituted for the above with the approval of the chemistry department chair. Students must onsult an advisor to select
dditional courses to meet student's individual goals and interests.
Bachelor of Science in Biochemistry
The Bachelor of Science degree provide a aigorous background in chemistry and biochemistry for those planning for graduate study in or for careers in biochemical and related industries. This program is also an appropriate preparacy for clinical chemistry at the graduate level. Students must confer with an advisor to set up an ap
Biochemistry majors must achieve Brochemistry majors must achieve chemistry and biochemistry courses required for the major. Requirements for the Bachelor of Science in Bio
(code 3-7658):
Lower Division CHEM 111A 1118, 251; courses to support the major to include BIOL 210A or M1C
210; BIOL 210B; MATH 122, 123; and PHYS 100A, B or 151, 152
Upper Division: CHEM 321A, B and 3 units of elective chosen from CHEM 373, 421, 422, 431, 451, AP 445, 447, BiOL 334,47, MCR
must include AP 342 and 342 L (or 470), and ENGL 317. Computer programming requirement: NSCl
200 or CHEM 385 . Other computer courses may be substituted for the above with the approval of the Minor in Chemistry (code 0-7661) A minimum of 20 units of A minimum or must include CHEM 111AB.B. A minimum of nine units must be taken from upper divisio cemistry courses. The following
ourses are not acceptable toward he minor: CHEM 100, 101, 200, 300.

Concurrent and/or Summer .int a Students who wish to take course
work in a community or other college meet curricular requirements while nrolled as undergraduates in the ollege of Natural Sciences must r prior approval to enroll in specific courses. This policy is for either oncurrent enrollment or summer also be complied with. See Concurrent Enrollment" and Transfer of Undergraduate Credit" inthis Bulletin. Courses not receiving
prior approval will not be accepted prior approval we department.
oo credit by the deplen Graduate Credit Earned as an Undergraduate Che
iochemistry Major
Graduate credit usually may not baccalaureate degree. Howeve based upon the recommendation o he Department Chairman and Graduate Studies Committee academic performance (a grade point average of 3.00 overall and academic achievement in postgraduate study, a student in his/her senior year may be granted
approval to earn a maximum of 12 approval to earn a maxits of course work in the 400 and 500 level taken at this University toward his/her prospective graduate program, s
conditions:
(1) The course work must be in
addition to that required by the
department for the B.A. or B.S.
degree in chemistry or
(2) The undergraduate student
in the Senior Year approved by the appropriate department graduate Studies for the College of Natural Sciences, and the Dean of Graduate Studies.
Master of Science in Chemistry
Prerequisites:
(1) Acceptance as a graduat student by the Chemistry and
Biochemistry Department; (2) A bachelor's degree with a major in chemistry; or
(3) A bachelor's degree with undergraduate preparation in
chemistry, physics and mathematics equivalent to that required for the bachelor of science degree with a major in chemistry at this University, (4) Entering graduate students examinations in analytical, inorganic, organic and physical chemistry. Any student failing to take and pass a placement examination in any of an appropriate course as recommended by the Graduate Studies Committee. Usually the 451 if the subject is analytical chemistry: CHEM 431 if the subject is inorganic chemistry; CHEM 321A chemistry: CHEM 371 A and/or 371 B it the subject is physical chemistry (5) The placement examinations eusualy gwo onday and rist day of instruction. The Graduate Studies Committee evaluates the examinations and recommends ny deficiciencies in chemistry. The chemistry graduate advisor meets with the student at this time to

Advancement to Candidacy:
The department recommends graduate student has:
(1) Either passed the placement examinations in anaytyica, inorganic rganic and physical chemistry coommended by the Graduate Studies Committee for correcting deficiencies;
(2) Earned an average of at least University as a graduate student: (3) Passed the Writing Proficiency (3) Passe
xamination

 bichemistry malors or students with credit in
CHEM 111 A or 200 . (Leeture 3 hours, laboratory CHEM 111A or 2 20. (Leocurare) A course fee may be requiried. 101. Introduction to General Chemistry (4) F,S



 emphasis on problem soching. Does not count
for General Education credit. CredidNo crodit (tecture \({ }^{3}\). hours,
gradingeral onty.
laboratory-problem session 3 hours.) A course laboratory-problem se
111A. General Chemistry (5) F,S
111A. General Cherists who intend to (Recommended for students who intend to
pursue careers in stione of enginiesing.)
Prerequiste: A passing score on the Chemistry Prerequisite: A passing score on the Chemisitry
Placement Examination and two years of high Placemement Examination and wo years of high
school algebao o equivelitioneyear
school chemistry is otrongly recommended. The


 equiburatory and problem session 6 hours), course tee may be required. (CAN CHEM2) 111B. General Chemistry (J) Prerequisite: CHEM 111 A with a arrado of \(C^{\prime}\),
better. The second semester of a woosemester sequence (CHEM 111 A and 111 B ) Continuation of the study of chemical priniplipeo
with application to inorganic sytems. Incluces with application to inorganic systems. Inciluses to inorganic molecules and study of trends anc reactivities of the elements and then
compounds. Cualiatative inorganic anaysyis and extensive soving of aqueous equilibrum
problems are emphasted in laboratory and
 laboratory and probilem solving sessions 6
hours.) A courre fee may be required. (CAN hours.) A
200. Introduction to General and Organic Chemistry (4) F,S Prerequisite: One year of high school algebbra
and passage of the Entry Level Mathematica and pasage of the Entry Level Mathematici
examination. The first semester of two-semester sequence (CHEM 200 and 300 ) covering general, organic, and blochemistry.
CHEM 200 deals with general chemisty and a portion of organic chemistry. Not open to credit to students. with credit in CHEM 111 A
(Leeture 3 hours, laboratory 3 houras.) A course Lee may be requiled.
251. Quantitative Analysis (4) F,S
Preereauiste: CHEM 1118 with a grade of 'c' or better. Introduction to the tocrniques and
theory of ravimetric and volumetric analysio spectrophotomemetryic and volumetric analysion
potentiometry
and chromatography. This course meets the
requirenens of most medical and dental
schools (lectura 2 hours, laboratoy 6 hours) school. (Lecture 2 hours, la
A course fee may be required.

\section*{upper Division}
00. Basic Concepts of Organic nd Blochemistry (4) F,S Pretequisite: CHEM 200 with a grade of 'C" or better and astifactocty performance on a
 Study of orgaric chemistry; structures,
metabolic reactions and functions of the emaio
lden claseses of biochemical compounds and the
mechanimems of vitamin and enryme action, kisentics bions bionergetics, and bicochemical
openetios. Doose not meet the requirements of
 medical or
labocatory
required.
equired.
F,S
P,S
Treerequicie: CHEM 111 with a grade of 'C' or
beter CHM 251 is recommended. The frist


 the reauirements for meedical and dental modem principles to structure, reactivity, methods of syntheeis and physical properties of organic compounds: spectroscoppy inclucing 3 hours, laboratory and quiz section 6 hours.) A course fee may be required.
321B. Organic Chemistry (5)
F,S
Prereraviste: CHEM 321 A with a grade of 'C' or
better. The secend
\begin{tabular}{l} 
better. The second semester of a two-semester \\
sequence (CHEM 321 A and 321 B ) for students \\
\hline
\end{tabular} desiring 10 units of organic chemistry. A
continuation of the stucy of organic chemistry including heterocycles, nitrogen compoun
natural products, and spocial topics.
 students are expecteo during the sememester to
attend two hours of lecture on use of the attend two hours of lecture on use of the
chemical itierature. (Lecture 3 hours, laboratoy and
required.

sed
322. Organic Chemistry Lecture (3) F,S

Prerequiste: CHEM 321 A with a grade of 'C' or
 sequence (CHEM 321 A and 322 ) for students
desifing 8 units of organio chemitry. Not open

 of CHEM 321 B . In addition to regulaty
scheduied leetures, students are expected during the semester to atten two thours of
lecture on wee of the chemical lierature lecture on
(Lecture 3 hours.)
323. Organic Chemist

Prerequisites: CHEM 322 with a grade of 'C' of
Pererequistes: CHEM 32 with a grace of Cr or
beter and consent of doparment chairerson.
For suduents who have credtrin in CHEM 322 and change to a major requiting 10 unts of o rganic chemistry. (Laborad
may be lequired.
327. Organic Chemistry (3) F,S Prerequisites: CHEM 111 A with a grade of ' \(C\) '
or better; CHEM 1111 is secommended. CHEM 200 may not subbestitute for CHEM 111A Lecture course in the chemistry of the carbon
compounds. Not applicable to a degree in chemistry. (Lecture 3 houras.)

\section*{371A. Physical Chemistry}

Preerequiste: CHEM 111 B and 251 with a grace
 two semester sequence (CHEM 371A and
 applications of dlassical thermodynamic
introcuction to stalisical thermocynamic Introcturtion to
(Leeture 3 hours.)
and
371B. Physical Chemistry (3) S Prerequisite: CHEM 371 A with a grade of C C
beter. The second semester of a wo-semester setter. The (econd semester of a two -ememestef
sequence (CHEM 371 A and 371 B ) in phyical chemistry. Introv aution to quantum chemistr) heurras). rerequiste: CHEM 371 A with a grade of \({ }^{\circ} \mathrm{C}\) ' beter. Solected topics in physical chemistry of Equilibrium and steady state thermodynamica combustion gasese, strong electroythes, tused
 chats ical kinetioses and trangpion
chemistry. (eocurer 3 hours.) 373. Physical Chemistry Preequivites: CHEM 251, 371AB, or 377 AB
 concurrenty). all with a grade of 'CC' of better.
introuction to basic apparatus and techniques of physico-chemical experimentation and
research and application of the pinipipes
discussed in \(371, \mathrm{~B}\) and \(37 \mathrm{~A}, \mathrm{~B}\). Reference to
 laboratory

\section*{377A. Fundamen
hemistry (3) F}

Prerequisites: CHEM \(111 B\) with a grade of ' \(C\) C o betier: MATH 123 (may be taken
concurtenty): PHYS 1008 or 152 . The first
 ornciper of phyilal chemistry with emphasis
on thermocynamics and chemical kinetics. Examples firm biological and environmental sciencoes will bu ug
(Lecture 3 hours.)
377B. Fundamentals of Physical Chemistry (3) S
Preerequisite: CHEM 377A or 371A, each with a
grade of \({ }^{\circ} \mathrm{C}\) or beter. The second sememete of a two esemester sequence. Princospos of of
physical chemistry with emphasis on molecular phyyical chemistry with emphasis on molecuial
structure and spectroscopp. Leeture 3 hours.)
\begin{tabular}{|c|c|c|}
\hline & emist & , \\
\hline Prerequisites: CHEM 111 B with a grade of 'C' or better; MATH 224; PHYS 152; and NSCI 200 .
Preequisite of NSCI 200 may be waved upon Prerequisiste of
demonstration of computing experience Beginning FORTRAN programming applied to
typical problems in chemical engineering and typical problems in chemical engineering and
chemistry. (Leeture 1 hour, laboratory 3 hours.) Not open to students with credit in CH E 210. A course fee may be required. & \begin{tabular}{l}
de of 'C' or better. Laboratory techniques d in biochemical research. (Lecture 1 hour, oratory 6 hours.) A course fee may be uired. \\
7. Clinical Chemistry \\
(3) F,S \\
equisites: CHEM 251 and either 448M or
\end{tabular} & \begin{tabular}{l}
tes: CHEM 371A with a grade of 'C' \\
and consent of instructor derivation and quanilas importance in all fields of chemistry nsive problem solving to show the n of these relationships. (Lecture 3
\end{tabular} \\
\hline 1./521. Physical Orga hemistry (3) F & & \begin{tabular}{l}
495. Colloquium in Chemistry \\
(1) F,S
\end{tabular} \\
\hline \multirow[t]{5}{*}{Prerequisites: CHEM 321 B or 322 with a grade of ' \(C\) ' or better or pass the organic entrance exam; 371 B or 377 B (may be taken concurrently). Theoretical interpretation of the chemical and physical properties of organic
compounds including the following: mathematical derivations of rate equations from experimental results, calculations of reaction rate constants from experimental data,
quantitative comparison of the reactivities of organic compounds, mathematical correlations of structure and properties. Practice in solving problems relating reaction mechanisms to the
factors derived above. (Lecture 3 hours.)} & & \\
\hline & 48. Fundamentals & \\
\hline & & \\
\hline & & 496. Special Problems in \\
\hline & processes, biological control and regulatory processes, nutrition and chemical energetics and kinetics of animals, plants and &  \\
\hline & & Directed Reading (1) F,S \\
\hline \multirow[t]{2}{*}{Prerequisites: CHEM 251, 321B, 371A (or 377A), all with a grade of 'CC' or better, or pass the organic entrance exam. Characterization of organic compounds through study of their chemical and physical properties. (Lecture 1 required.} & 448M. Fundamentals of Biological Chemistry for Microbiologists (3) F,S & Thorough survey of the chemical literature on some tiopic of current interesest under the a witten report based on this reading. Not \\
\hline & isite: CHEM 327 with a grade of 'C' & \\
\hline \begin{tabular}{l}
required. \\
*431. Advanced Inorganic \\
Chemistry \\
(3) F
\end{tabular} & consent of instructor. (Lecture 3 hours.) & \[
\begin{aligned}
& \text { 421. Physical } \\
& \text { istry (3) F }
\end{aligned}
\] \\
\hline \multirow[t]{3}{*}{Prerequistes: CHEM 371 B with a grade of \({ }^{\circ} \mathrm{C}\) ' or better. Detailed quantitative study of chemical bonding in inorganic molocules with coverage of transtion metal chemistry including coordination chemistry, ligand field theory, application of spectroscopy to structural analysis of inorganic moleccies and a review of properties and reactivities of the elements and their compounds. (Lecture 3 hours.)} & \begin{tabular}{l}
449. Nutritional Biochemistry Laboratory \\
(3) \(\mathrm{F}, \mathrm{S}\)
\end{tabular} & tes: CHEM 321B or 322 with a grade better or pass the organic entrance 3718 or 377 B (may be taken \\
\hline & Prerequisite: CHEM 448 with a grade of ' \(C\) ' or better. Analytical and biochemical analyses of foodstuffis and other compounds of bibchemical interest. (Leeture hour, haboratory
6 hours.) A course fee may be required. & concurrenty). Theoretical interpetation of the chemical and physical properties of organic
compounds induding the following: compounds including the or oriowng: experimental results, calculations of reaction \\
\hline & \begin{tabular}{l}
*451. Instrumental Methods of Analysis \\
(4) F,S
\end{tabular} & onstants from experimental data, ative comparison of the reactivities of \\
\hline \multirow[t]{7}{*}{\begin{tabular}{l}
*441A. Biological Chemistry \\
(3) F,S \\
Prerequisites: CHEM 111 B and CHEM 321B, 322 , or 327 all with a grade of 'C' or better; a biology or microbiology course is recommended. The first semester of a two semester sequence (CHEM 441A and 4418) in biochemistry. A chemical and mathematical reactions in living systems, including the chemistry and metabolism of carbohydrates and the chemistry of proteins. (Lecture 3 hours.)
\end{tabular}} & erequisites: CHEM 251 and 371A or 377A th a grade of ' C ' or better, or consen instructor. Theory and application & of structure and properties. Practice in solvin problems relating reaction mechanisms to factors derived above. (Lecture 3 hours.) \\
\hline & mental methods to chemical problems. niques covered include the following: & \begin{tabular}{l}
522. Special Topics in Organic Chemistry \\
(3) \(\mathrm{F}, \mathrm{S}\)
\end{tabular} \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline & & \\
\hline & \begin{tabular}{l}
461. Scientific Glass \\
(1) F,S
\end{tabular} & \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
*441B. Biological Chemistry \\
(3) F,S \\
Prerequisite: CHEM 441A with a grade of 'C' or better. The second semester of a two-semester sequence (CHEM 441A and 4418) in
bicchemistry. Metabolism of lipids, proteins and
\end{tabular}} & Demonstrations and practice in eleme laboratory glass manipulation. Open onl & \\
\hline & grading only. May be repeated once for but not more than one unit is applicable tow hours.) A course fee may be required. & \\
\hline
\end{tabular}


\section*{Center for}

\section*{Environmental Studies}

Director: Roswitha B. Grannell Room 130
Telephone: \(05-27\) ( Certificate in Environmental
Studies (code 1-7000) The Center for Environm Studies has as its objectives (1) creation of an awareness of the kind and scope of environmental problems, (2) preparation to analyze
environmental problems and issues and (3) training in research in, and The center offers the The center offers the Program which is comparable to an academic minor. It has three components: natural environment
prerequisites (or corequisites), core requirements, and elective courses distributed in human behavior resources and analysis and
pplication.
The pattern of completion for the certificate is directed toward both he technically trained, research oriented student and the liberal arts, Students in both areas must contact the Director, Center for Environmental Studies, for entry into he program. This contact should be student's academic career so that he or she may receive counseling in
the most appropriate course work. the most appropriate course work. Requirements for the Cer
(1) A bachelor's degree (may be
completed concurrently). (2) Consultation with the director of the program;
(3) Overall GPA of 2.0 in all work (4) 33
(4) 33 units distributed as follows: (A) Prerequisite or Corequisite major department selected from the three categories below; at least one laboratory course from categories a. or b. must be ecommended).
(a) Life Sciences: At least thre units from BIOL 200, 201, 210 units from BIOL 200, 201, 210A, 427, 450, 453, 464; MICR 100 210, 441;
(b) Physical Sciences: At least three units from CHEM 100, 111A, 111B, 200, 300; GEOL 102, 104, 105, 160, 163, 463, 464, 465, PFS 100A, 1008 104, 151, 15
(c) Geography: 140, 440, 442
(B) Core requirements (nine units; upon petition to the Director, three substituted for 499 may be ollowing):
(a) PHIL 360;
(b) E/ST 490 (2 units) and 490 (1 unit), taken concurrenty (only the sections entitled
Environmental Field Studies
may be used; the prerequisite completion of six is prio Section A , above, including the laboratory):
(C) Elective Requirements (15 Units, distributed over the following niee categories; nine of these department, six units must be utside the school, and six units ust be at upper division level);
(a) Human Behavior: At least department trom the major HIST 405: MICP 321: 30SC
442; PSY 351 or SOC 335; SOC 350;
(b) Man and Resources: At least three units outside the major department from BIO 161, CHE 475; CE 364, 460, GEOG 160; ECON 305; 460, 467: GFO 190, 191, 305 HSC 422. PHSC 100 SOC 410;
(c) Analysis and Application Three units from BIOL 260 ; 486, 490; H SC 485; MATH 180; PSY 310. (Upon approval of the Director, one additional course from this category may be used to fulfill Section C, Elective Requirements in lieu of ourses (E/ST)
Upper Division
490. Special Topics in
rereuiste: Can Studies (1-3) F,S
 selected for intensive development. May be
repeated (with change of topici) for a maximum of six units of reitit. Topics will be announced in the Scheodule of Classes. Upon approval of
the director of the Center for Environmental Studiese, this ocourse is anterceptable Envion or ceredtial in lieu of equivalent units in Seection C , Elective
Requirimemt.

\section*{equireme}

\section*{(1-2) \(\mathrm{F}, \mathrm{S}\)} Prerequisitit: Consent of instructor. Lataboratory
in topiris of current interest in innitenmental
stucies selected for intensive development. May studies selected tor intensive developpment. May be repeated for a maximum of four units of
creait. Topics will be announced in the
Schedule of Classes. Schedule of Classes. Upon apporoval of the
director of the Center for Environmental Studies, this course in acceptable for crodit
toward the Enviromential Studies coctificat on
leu lieu of equivalent units in appropiate subbect
499. Directed Studies (1-3) F,S Prerequiste: Consent of instructor.
Independent stucy under the supenision of a Independent study under the superision of a of the Center for Enviprovenantal thtudies this course is acceptable for credit toward the
Enviromental Suries Coetricato in lieu of


Stanliey C. Finney
Department Office: PH3 102A elephone: \(985-4809\) aculty: Professors: Kwan M. Ch Stanley C. Finney, Roswitha B. Winchell; Assoclate Professor: R.D. rancis; Assistant Professors:
Elizabeth LAmbos, Catherine A. gigsby, James C. Sample. meritus Faculty: Bert L. Conrey, Abert L. Ehrreich, Paul J. Fritts, Department Secreta
Victoria V. Nguyen
Students desiring information should contact the department
for referral to one of the faculty advisors:
Undergraduate Advisor: Rigsby Graduate Advisor: Francis. Geological Sciences
Professional Advisory Counc The Geological Sciences Advisory and Development Council consists outstanding geologists, engineers government. The function of the council is to provide a liaison between the University and Incustry. isure that the curriculum is appropriate in light of modern department on employment
opportunities for students who are opportunities feology
The Geological Sclences
The Geological Sciences include the The Geologiclal ciences the hydrosphere, and the atmosphere.
Within the broad field of Geological Within the buoad field of Geoological
Science students may elect to take coursework leading to proter
careers in such areas as geohydrology, environmental
geology, urban geology, engineering geoology, petroleum geoology, minera The degree programs also prepare students for academic careers in schools or universities, although
additional work is usually required for additional work such careers. All Earth Science and Geology majors must contact department office to obtain a
departmental advisor prior to the first semester in residence.

\section*{Geological Sollege of Natural Sciences}

The Geological Sciences Departisinl paricicpates in the Sience Studies. See the Ocean cience Studies section of this - \(n\) rer al Concurrent and/or Summer
nnrollment in Another Colleg
Students who wish to take course work in a community or another college to meet curricular equirements while enrolled as undergraduates in the College of
Natural Sciences must pettion the Naturap Sciences must petition tep pproval to enroll in specific courses. his policy is or either concurrent
enroliment or summer enrollment. University policy must also be complied with. See 'Concurre
Enrollment' and 'Transfer of Undergraduate Credit' in this Bulletin. Courses not receiving prior approval
will not be accepted for credit by the department.

\section*{Bachelor of S}

\section*{(code 3-7664)}

The bachelor of scien program is intended tonce degree horough background in the geological sciences for those or to do graduate stucy or to do graduate study. The pronviction that, in an wever-changing
cond and technologically-oriented
geological sciences industry and research environment, a student must have a strong geological background As such, he/she needs a program
which explores the fundamental which expol processes, cultivates skills in integrative three-dimensional geological thinking, provides
laboratory and field experience, and stimulates interest in the many subdisciplines of the geologica sciences
Within the broad field of geology, students may elect to follow any one
of five emphases: General Geology Petroleum Geology
Stratigraphy/Sedimentology GeochemistryM Mineralogy-Petrology,
and Structural Geology. Each studen should contact the undergad studen advisor for assistance in planning the degree program.

Minor in Geology (code 0-7664)
Twenty units in geology courses
which must include:
Lower Division: GEOL 102, 104, 240 Upper Division: At least 5 additional
units of geology approved in advance units of geology approved in advanc by the appropriate un
departmental advisor
Bachelor of Science in Earth Science (code 3-7663) The Earth Science program
prepares students to understan prepares students to understand the
natural environment, earth resources land and ocean use, pollution, geology of the sea floor, and other and future world problems. Career-oriented interdiscipiplinary emphases are offered in Geohydrology/ Environmental Exploration Geophysics, and Marine Geology/Oceanography
Earth Science majors must receive required for the major. A grade of \({ }^{\circ} \mathrm{C}\) or better is required in the laboratory portion of each geology course in
order to pass that course. Also before any geology course can be taken, all geology prerequisites for that course must be
grade of "C' or better.
As outined below a minimum of 12 units is required for the various
emphases in Earth Science.
Lower Division: GEOL 102, 100,
240, 273; MATH 122, 123, 224;
CHEM 111A: PHYS 151, 152 :
Upper Division: GEOL 324, 343
428, 433, 460
(1) Geohydrology/Environmenta
Geoolog: MICR \(210 ;\) CHEM 11B

Geology: MICR 210; CHEM 111B
CE 205, 335,\(336 ;\) GEOL 450, 451
461, \(490 \mathrm{~b}, 496\) ( 1 unit devoted to
hand specimen petrology which
MUST be taken the same semester as taken from an approved list, selected in consultation with the undergraduate
advisor (2)
(2) Engineering Geology: BIOL 200
or 210 AO CHEM 1111; CE 205,345 , 346, 445: ME 373; GEOL 231, 350,
451, 490b, 496 ( 1 unit devoted 451, 490b, 496 ( 1 unit devoted to
hand specimen petrology which Mand specimen petrology which
MEOT be taken the same semester as GEOL 428)
(3) Exploration Geophysics: BIOL
200 or 210A; MATH 247 370A-B.

2OHY or 210A; MATH 247, 370A-B;
PHYS 153, \(362,340 \mathrm{~A}, 402\); GEOL 462, 467, 496 ( 1 unit devoted to hand specimen petrology which MUST be
taken the same semester as GEOL taken the same semester as GEOL
428 ), and a minimum of 5 units taken from an approved list, selected in
consult
(4) Marine Geology Oceanography: BIIL 200 or 210A;
CHEM 111B; GEOL 321, 341 , 364 H64L, 429, 452, 461, 465, 466, and a minimum of 6 units taken from an approved list, selected in consultatio
with the undergraduate advisor.
Master of Science Degree in
Master of Science Degree
Geology (code 6-7664)
The Department of Geological Sciences offers a comprehensive appropriate thesis projects leading to he Master of Science in Geology. Within geoology, students specialize in ny of a number of sub-discipin
including engineering geology, environmental geochemistry, geology hydrogeology, marine geoology,
micropaleontology, mineralogy and micropaleontology, mineralogy and
petrology, paleontology, petroleum geology, sedimentology, stratigraphy tructural and field deoology, and mphasis in geophysics is available Students may include in their studies courses offered by other departments tate University Northridge and California State University Los Angeles: CSULB participates with program.
The objectives of the Master of Science in Geology are (1) to train equired by the geological profession or employment in industry and government agencies, (2) to enable
promising students to attain a level of nowledge and research ability equired for admission to Ph.D. programs at other universities, and (3)
o provide course work and research oprovide course work and researc
experience necessary for students planning to teach geology at the
ommunity college level.
Emphasis in Geophysics The Emphasis in geophysics is
available for students wishing to
specialie specialize in the application of geophysical principles to the solution f problems in engineering geology, tectonics, petroleum geology, an mineral exploration. Students ollowing this Emphasis are expected
o have completed the equivalent of coursework required for the B.S. in
Earth Science, Geophysics emphas Earth Science, Geophysics emphasi and additionaly to complete M.S. geophysical coursework approved in advance by both the graduate advis nd a geophysics advisor.

Appropriate B.S. programs which provide training suitable for completion of the M.S. in Geology,
Geophysics Emphasis, include Civil Geophysics Emphasis, include Civill
and Electrical Engineering, Physics,
Mathematics, and Geology in addition Mathematrics, and Geology in addition to Geophysics, although some deficiencies will exist in these alternat with the graduate advisor about this program.
Departmental Resources Resources available for thesis
research include atomic absorption flame photometer, UV/visible spectrometer, 3.2 meter emission spectrograph, carbon-sulfur analyzer electron microscope, transmission electron microscope, EG \& G ES-1225 seismic unit with falling
weight energy source, Wild theoodolit and electronic distance mild theoosolite unit, LaCoste and Romberg grevity
meters (D meter with electrostatic meters (D meter with electrostatic
feedback device and G-level), surfac esistivity/self potential apparatus, System 10 color-enhanced ground penetrating radar, telluric cuir
recording meter, total field magnetometer with gradiometer X-ray diffraction and fluoresceence units, hydrous pyrolysis pressure
vessel, gas chromatographs, stable isotope vacuum lines, departmental computer network featuring three
SUN microcomputers and five PC's SUN microcomputers and five PC's
Macintosh computer, a portable PC for interfacing with hiflel geophysical
instruments, a Hewlett-Packard istruments, a Hewlett-Packard campus VAX mainframe computer, and access to oceanographic
research ship \(R / V\) Yellowin with research ship \(R / Y\) Yellowfin with
associated oceanographic equipmen ascluding a proton precession magnetometer and a high resolution eismic reflection system.
Admission to the Program
The basic requirement for admission
o the graduate program is oo the graduate program is equivilent in geology or earth sciences comparable to degrees
offered at CSULB. The student normally will be expected to have ompleted as an undergraduate acceptable work in certain basic lowe ower division subjects include calculus, calculus-based physic
chemistry, biology, computer chemistry, biology, computer
programming and statistics. Uppe division subjects depend on the degree emphasis and sub-discipline
to be followed by the student, and generally include (but may not be mited to) courses required by the
orresponding undergraduate
corresponding undergraduate some of this course work may be minted to the pove deficiencies present acceptable alternatives. In addition to the above coursework equirements, students are required
ake both the General (quantitative ake both the General (quantitatite and verbal) and Geology subject tests and to submitt three letters of
Prospective graduate students in he geological sciences, including CSULB graduates, must formally apply for admission to CSULB as and must also apply directly to the epartment of Geological Scien All applicants must sumienithe
department no later than 15 April or he fall semester or 15 Novemb
the spring semester to receive the spring semester to recelv
(1) Departmental Application Form, (2) Official transcripts of all college one at CSUU B in addition to those transcripts required for genera
(3) Three letters of
(3) Three letters of familiar with the applicant's academic (4) Official reports of scores on verbal) and Geology subject tests of the Graduate Record Examination.
A limited number of assistantships are available to fund graduate stud Sciences. Applicants wishing to be
considered for assistantships must ubmit all application materials to the ubmit all application maleeras a 15 ebruary for the Fall semester or October for the Spring sem Students not meeting the or application requirements may be admitted on probationary status on case-by-case basis. Those stude same high academic standards as fully admitted students. Atter two semesters, students admitted on probationary status will be re-evaluated for full admission to the department.
Initiation of Graduate Study
Students are responsible for all University and overning master's
legrees as outined in this Bulletin. he regulations governing the degre are those in effect at the time of
andil to candidacy. Until that time, students are governed by the most current Bulletin. The advising of incoming graduate students, is carri
out by the graduate advisor, who explains the requirements of the program and carries out initial student arrange for this initial dvising before or during his/her firs amester.
All entering students must take Seminar) during their first Fall emester. This course consists of new students to the department and o the faculty and their research. One purpose of this is to encourage the hesis advisor by the end of the second semester. This is done with he help of the graduate ackisor once he student has chosen a
sub-discipline or option in which to sub-cialize.
Students are required to maintain a
GPA of 3.0 or higher at all times if at GPA of 3.0 or higher at all times. If any tow 3.0, that student will immediately be placed on probation
for a maximum of two semesters for a maximum of two semesters. If
the student does not bring the GPA back up to 3.0 during the probationary period, he/she will not be allowed to continue as a graduate
student in this department. In order or a student tor ergain status in the department after failing to maintain his academic standard, he/she mull
ormally reapply for departmental admission.
Advancement to Candidacy
A student must have been
advanced to candidacy before initiating thesis research necessary to complete the M.S. degree. Students are expected to be advenced by the may pettion the department for an may pestition the department for an
extension of the four semester time Cinit on a semester by semester basis.
Students should be aware, however, that they are at risk of not receiving credit toward their graduate programs
tor research stated for research started or courses taken
prior to advancement. Students must prior to advancement STE and have advanced to candidacy before they apply for graduation. Requests to
graduate must be received during the graduate must be received during the graduation or preceding December
for Fall graduation. Filings after the for Fall graduation. Filings ati
deadlines are not accepted.

Before advancement can proceed thesis topic, committee, and least 30 units (see below) must be stablished by the student and the rospective thesis committee chair. In
ddition the following requirements must be met:
(1) Prior completion of all deficiencices or incompletes. This
ncludes courses required in the undergraduate major for the emphasis in which the student is pursuing graduate research, as well
as additional courses specified by the as additional thesis advisor.
(2) Completion of six units of
graduate level courses with a 3.0 or higher grade point average and
attainment of a 3.0 or higher grade attainment of a ai. or higher grade graduate work attempeded as well as graduate academic program (see graduat
(3) A passing grade in GEOL 500 (4) Completion of the writing proficiency exarn
passing score.
(5) Successful completion of an oral qualifying examination given by acceptance of a written proposal for acceptance of a writen proposali's hesis topic will be the subject of the examination
Once the above requirements are met, advancement to candida
proceeds with approval of the committee, graduate advisor,
department chair and Associate Dean for graduate accountability. After the student has been advanced, no coursework in addition to that
specified in the graduate program speciried in the graduate program order for a student to change thesis
director, topic committee members or courses in the graduate program or courses in the graduate program
approval must be obtained. Under some circumstances this may mean

\section*{Requirements of Gradua}

\section*{cademic Program}

The graduate academic program consists of at least 30 units of courses advances to candidacy. Although advances to candidacy. Although
courses that will eventually become part of the student's academic program may be taken before
advancement, it is strongly recommended that students make-up any undergraduate deficiencies (if any) first, and then advance as early
as possible. The program proposed as possible. The program proposed
by the thesis committee chair and the

370. En
(2) تrequisistes: ME 172, CE225. Earth procesoses Prerequivites: ME 172, CE2z. Earth procossess
and materias which infuencoe the deion, Construction malterials. Not open for creodit to eeology majors. LLecture 2 hours, field trips.) *420. Geowriting (3) \(F\) Prerequisites: Upper division or graduato
standing in Natural Scioncoses. Eng 10 or equivalent, passing scocre on WPE and a course geoology, and consent of instructor. Covers maior types of ocientichic mwing aimen on witing scientific content at an advancod level. Jourual Atiles and abstracts will be covered in detail.
 Interperetation, logic and argument, clarity of stylie,
and witing for specific aucuiences. Reopuries extensive indopendent witing. Envoliment.
limited. Creditrno credit ony. (Lecture 3 hours). 424./524. Sedimentary Petrology
\(424 . / 52\)
\((4) \mathrm{F}\)
Prerequis
Prerequisites: GEOL 321, 324, and 343 .
 sedimentary yocks. IIentification of grain typpes,
texexures, strucurures, and coments with emphasis on provenance, reconstrutionsectectonics, and paloovenironmental reconstructions, and
diagenenios. (Lecture 3 hours. aboratory 3 hours.)
A course fee may be required.
428. Igneous and Metamorphic petrology and Petrogenesis (2) Preerequistes: GEOL 102, 104, and 324, CHEM
111A and 111B, PHYS 151 and 152 , MATH 122

 Cheracapheristics of magmatio and metamorpolio onk bodiesemand systems, induduing minearalogical and chemical apsecta. Ond migin of fabicics: avesd on petrologici, isoctopic, and gooochemical
 ecture 2 hours, field tipe.)
*429. Igneous and Metamorphic
Petrography Laboratory 321 . Corequibete:
Prevequisite: GEOL 273 and
GEOL 428 . Microsocopic and andillery hand
herl specimen analysis of igneous and metamomphic
 Tocks. computur modelling of magma geneesis
Topics will e cloeent lied to concurrent material opics will be cloesy tied to concourrent maleeial
GEOL 428 . Traditional grading only laboratory 6 hours.) A course tee may be a
30./530. Seminar in Structura Prerequisite: GEOL 433 . Critical review a solected topics concoming the anayyse) Iterpretation and origin of geoclogio structures
 only for MaiorsMinors. (Lecture 2 hours.
laboratory 3 hours: fold tripe.) Acourse foe may be required.
431./531. Geomorphology (3) F 31./53. Gee register in GEOL 431; rradua
 AEOL 433 . Nature and origin of land forms. Appication on mapopopand and aerial phototo in tre aboratory and booal field studies. (Lecture \({ }^{2}\) mours, laboratory 3 h
433. Structural Geology (4) \(F\) Pierequistes: GEOL 240, 273, 324, PHYS 152. ock structures, graphical solutions to so structural probltems, computier manioultaion of strtucturual data, strain anayysis, rock fabtic anayysis, field structures from maps and croos seectione, and structural beology and tectotices. (Leoture 3
hours, labocatory 3 hours, feld tripe.) A course hours, labocatory 3 hay
434./534. Photogeology (3) S Frerequisites: GEOL 433, and 450. Terrain nalysib using aetial photoraraphs. Emphaszises baic photorammetio techniqueso for hape. (1 hour lecture, 3 hours labboratory, and field trip.) A course tee may be tequired.
442./542. Paleoecology
(3) \(F\)
 GEOL 341 . Emvironmental significancee and age Understanding of of fosesil communnities. (Lecture 2 hours, laboration 3 hourrs) A course fee may be required.
443. Micropaleontology (3) S Prerequivites: GEOL 104, ,341: or uppor division
standing in biology with consent of instrutor Morphology, taxanamy and ecclogy of
microtaunas: bioctratioraphy. (Lecture 2 hours micotatannas; blostratigraphy. (Lecture 2 hours)
laboratory 3 hours, feild tipes), A course tee may be required.
444. Palynology (3)

Prerequistes: \(G E O L 240\) (may be taken
concurenty): \(G E O L\) 341 or BIIL 427, Study of concurrenty): GEOL 341 or BIOL 427, Study of
losesi and modern pollen and spores, induding morphology, taxonomy. paleococology, and ond oosil asemblages through time. Laboratory to
 450.
SS

Preerequisties: GEOL \(343,428,429 \mathrm{or} 496\) ( 1 unit
devoted to hand specimen petrology which
MUST be taken concurrenty with 428) and 433. MUST be taken connourrenty yith 428) and 433
Sx weeks of goological fretd mapping at a selected area Preparation of geological report of the feld problems. (Lecture as needed,
feild work) A course tee may be required. *451. Senior Field Study (3) F Prerequivites: GEOL 450 . Advanced field tadies in geology. studonts pursue Ield-oiented proiocet of interest in a geographica
 implementation of project belongs to the student.
Projoct will aloo involve laboratory work and
ecture 1 hour, felid tring) Ane
460. Introduction to Geophysics
(4) \(\mathbf{F}\)
Preerequistee:: PHYS 152 , MATH 123, and GEOL

 course fee may be required.
461. Introduction to

Preerequistes: CHEM 111B, MATH 123 . saundiance and mical micration of elementsts in the arth and its orust including geochemimity of hours.) A course fee may be required. *462. Physics and Chemistry of Prerequivites: GEOL 240, 428; PHYS 152 Stucture and composition of the Earth's interior rigin and evolutiton of the Earth. Review of typees of evidence tor Earth strucurure and
compootional models. Tradtional grading only compositional modeles. Tratitional grad
for MaicosMMinors. (Lecture 3 h huras.)
464. Advanced Topics in Marine Geology (3) \(F\)
 It preerequiste: GEEL 406. Advancod courso anaraysis of data in in laboratory, and completion o
report. Individual topics will be selected. Lecture on avivanced topics in maline geellogy: structure nadrvancod topitics in mainine geoology, structure

 laboratory 3 hours, 5 days of seat tipes.) A course
tee may
ee requiled. 60 may be required
465./565. Physical and Chemical Oceanography (3) F,S (Undergraatuates regiteo in GEOL 465; CHEM 111B, PHYS 100B, and Upper division stanyoling in the Naturual Scieincose or Engineering. cabbonate cycle; ming ocoancography; the micronutrient elements minor seelements anter: water and interpetatite theor
circulatiop.
tecture 3 hours.)
*466. Oceanography Laboratory
and Ocean Studies (1) F,S
Preerequisese: Concurrent or prior encollment in
GEOL 465 . Instruments and technicues in physical and chemical ocoanograchy; seas trioe
 quality analysio and interprotation
 *467. Petroleum Geophysics
(3) S

Prerequishes: PHYS 152 , MATH 224, GEOL 240 ,
460 . Applications of selmio reflection and
potential field methods to petroleum exploration
Includes processing and
interperetation Pollected datasassing and integration of of getaition
dataica with surface and subsurace data with surface and subsurface geology.
(Lecture 2 hours laboratory 3 houra.) A course fee may be required.
*471. Petroleum Geology and
Weli Log Analysis (4) S, Prerequistes: GEOL 240, 343, and Prevequistes: GEL 240, 343 , and 433
Applicition of geology to the exploration and production of pettoleum, including the uses of
both surface and subsurface techniques. Basio both surface and subssurface techniques. Basio
well
petrouging
techniques as peptoleum (and ochner) industries, incoyluding in the
colection,
reduction,
interpertation, and interaraion amoung vaious ilopging methods as
well as with surface geology and geophysical Weif as with surface geology and geoohysical
data. (Lecture 2 hours, laboratory 6 hours, field trips.) A course fee may be required. *472. Regional
America (3) S
Preerequisites: GEOL 240,433 , Regional
stratigraphy, structure and stratigraphy, structure and geologic history of
maicr provinces of North America, induding theoretical cooncepts of the origin of thes teatures. (Lecture 2 hours, discussion session 2
hours, feld trips.) A course fee may be required. 486./586. Engineering Geophysic (3) \(F, S\)

Prerequisite: GEOL 460 (may be taken
concurenty). (undergraduates register in GEOL 486; graduates register in in GEOL 586 .)
Applications of geopher
 geophysical technicuess, and idenemification and the solution of specific rochlemes suitable for the solution of specific probtems. Applications
and case histoies in hazardus waste site
evaluations, actively evaluations, actively subsiding areas, mapping of
basement topography, sea water intusion problems, mapping of the water table, groundwater contiaminaifon, and detection of research articles; preparation of geophysical feasibility studies in selected engineoring enmironments. Traditional grading only
Meiors. (Lecture 2 hours, laboratory 3 hours;
feld titis) ) A Alse field trips.) A course fee may be required. \(* 490\). Current Topics in Geological
Sciences \((1-3)\) F,S Prerequite: (1-3ent of
current interest in the geoclogical sciencoes selected for intensive development. Topics to be selected from such areas as (b) Ground water
geology, (f) Aerial photo interpetation, (k) Economic mineral deposits, (1) Planetary goology, (m) Volkanology, (u) Urban geology. May be
repeated for a maximum of ount.
may teld tips
mequired. Acourse tee may be eqequired.
\({ }^{\text {491./591. X-ray Crystallography }}\)
(3) S
of insurtuctor: (Undergraduatees register in GEOL 491; graduate students register in \(G\) GOL 591 .) Theory of \(x\)-ray diffraction and its application to
the analysis and identifcation of crystalline phases. Not open to students with creodit in GEOL \(4 \begin{aligned} & 4900 \text {. (Lecture } 2 \text { hours, laboratory } 3 \text { hours.) A } \\ & \text { course fee may be required. }\end{aligned}\)
496. Investigations in Geology and (1-4) F,S
Preerequistes: Senior standing in geology, earth Prierequistes: Senior standing in geology, earth
sivited fields completion of an upper
division oourse in aivision course in geollogy or earth scienco in the
area of the topisi hhosen and appoval of the
topic chosen by the geology facuity. Supenvised epearch in geoology o the other earth h covericoes.
Field trips may be required. A course fee may be fiequired.

\section*{Graduate Division}
500. Introductory Graduate Seminar (1) \(F\)
erequisite: Graduate standing. An introcuction ○ graduate policies and faculty research in
Geologocical soiences. Abstracts on faculty pres. entations will be required of all students. Course
annot be counted tor procaram requirements for canno be counted tor program requirements tor
the M.S. degree in Geology. CreoititNo Creoit
 15. Advanced Micropaleontolog (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: Three units of micropaleontology or Consent of instructor. Advancedd studies in in
morphology,
taxonomy. ecology and morphology, taxonomy, ecology and
peleoocologyy of miroforosilsss biostratitraphy and aged determination o s sedimentaray roccss. (Leeture
ihour, Ibiborator 6 hours.) A course fee may be 1 hour, lab
520. Advanced Stratigraphic Analysis (3) F,S
Preerequisites: Introductory course in stratigraphy,
sedimentary petrology and paleontology of consent of instructoor. Principles palent techniques
of stratioraphic ander of stratigraphic analysis with emphasis on interpeting the stratigraphic record to aid in
reconstruction of environment of depososition and paleogeography. Course will revove around a
field problem and indude application of methods tom physical stratigraphy, biostratigraphy and edimentary petrologyy to solution of the problem. (Lecture 1 hour, laboratory 3 hours, fin
days.) A course fee may be required.
524./424. Sedimentary Petrology (4). \(F\)
Prerequis reerequisites: GEOL 321, 324, and 343 sedimentary rocks. Identification of grain types, extures, structures, and coments or withem emphasis,
provenance.
peleotectoins. on provenance, palaotectonics, palao-
environmental reconstructions, and diageneols.
(Leeture 3 hours, laboraton 3 hours.) A course Lecture 3 hours, lab
530./430. Seminar in Structural Geology and Tectonics (3) F selected topise concerning the analysio, interpetation and origin of geollogic structures,
the mechanics of rock deformation and of large the mechanicas of rock deformation and of large only for Maiors. (Lecture 2 hours, laboratory \({ }^{3}\).
hours; field trips.) A course fee may be equired. 531./431. Geomorphology (3) S Undergraduates register in GEOL 431; graduate suddents register in GEOL 531 .) Prerequisite:
GEO L33. Nature and origin of land tome
pplication of concepts by analyzing land forme Appleaved on maps and aeeiai photoos in the
diaboratory and local field stuclies. (Lecture laboratory and 1 loc
hours, laboratory
fee may be required.
532. Neotectonics (3) F,S

Prerequistes: Graduate standing in geology or
consent of the instructo. Application of Consent of the instructor. Application of geomorphic principles to tectotic problems scaps, and marine teracoses in order to
inderstand the locations, magnitudes, and Inderstand the locations, magnitudes, and and discussion of research articles, preparation Leoturer. 2 haursitional laboratory, 3 hours, field tripe). A Ourse fee may be required.
534./434. Photogeology (3) S Prerequisites: GEOL 433, and 450 . Terrain
 basic photogrammetric techniques for
quantitative data, and construction of geolecil quantitatre data, and construction of geologic
maps. (Lecture 1 hour, laboratory 3 hours, field
tip.) A course fee may pe requited. 535.) A course fee may be required. Prerequibite: GEOL 433. Remote sensing of the
 Resource exploration, properties of rocks, land
uee and hazard applications. 537. Modern Aspects Geology of California (3) F,S Prerequuisites: \(G E O L\) 433, GEOL
Examination of recent theories concerning the Examination of recent theories conceerning the
evolution of Califoria's geological provinces geoliogical, geochemiasa, and and prounchyesical
evidence for these theories. Traditional grading evidence for thesene theoeriese. Traditional lryading
only (cecture 3 hours, field tripes). A course fee
may be required. 542./442. Paleoecology (3) Undergraduates register in GEOL 442; graduate students register in GEOL 542 ). Preerequisite
GEOL 341 . Environmental significance and age of occurrence of fossil
Understanding of fossil communties. (Lecturese Understanding of fossil communtites. (Lecture 2 beursired.
543. Carbonate Petrology (3) F,S Prerequisites: GEOL 321, 343. Microscopic
description and characterisics of carbonate rocks in relation to their originin( (lecturur 2 hours,
laboratory 3 hours.) A course fee may be equired.
54. Clastic Petrology (3) F S Prerequisites: GEOL 321 and 342. Advanced
study of clastic sedimentary rock using Petrographic microsocome, csaanning levection
microscope and
and microprobe to evaluate the microscope and microppobe to evaluate ther
composition and origin. (Lecture
hboratory 3 hours) labovotion 3 hours.) A course fee may be
requited. 545. Rock
545. Rock Mechanics in
Engineering Practice (3)

Preerquisites: CE 345,346 . Principles of rock mechaniis with emphasis on engineering
practices for problems of slopes toundations practices for problems of slopes, foundation
and tunnels. Same course as CE 545 . (Lecture, and tunnels. Same
(3). F,S
rerequisites: Graduate standing in geology, Preerquisites: Graduate standing in geology, Unsent of instructor. Geochemical cycclee Human intefferencoc with cylles. Triace lemementis, roundwater chemistry. Reading and diccussic Pechememistry. Traditional gratading only for Maiors. ecture 3 hours, field trips)
556. Organic Geochemistry (4) F Prerequisites: CHEM 1111 , GEOL 240
Exchange of organic matter among sedimente ydrosphere, and blosphere. Diagenesis aid rganic matter. Origin of coal and crude ol. Thermal maturity of sedimentary rocke. Laborcr yexerciese in anaytical techniques, uatifio of hiemal maturation, and geochemical mapping
Tradtional grading only. (Lecture Traditional grading only. (Leoture 3 hrsi)
laboratory 3 hrs . \(A\) course fee may be equired. 65./465. Physical and Chemical oceanography (3) F,S
Undergraduates register in GEOL 46 : raduates register in GEOL 565 ) Preerauistees.
HEM 111 , PHYS 152 or 1008 , and upper Nision standing in the Natural Sciences or Engineering.
occancoraphy cieanography; the ocartonate cycle; minor water; water masses of the ccoans: the phyical
concopts and interpretative theories related to concepts and inculation. (Leecture 3 hours.)
570. Special Topics in Geology (1-3) F,S
Preerequiste: Consent of instructor. Investigation
of selcected topics in geollogy. May be repeated
 hhanges. Seminars with laboratoties
572. Geohydrology (3) F,S Prerequisites: MATH 123, PHYS 152, graduate landing in geology of consent of the instructor.

 ,esourres. Traditional grading only for Majors. Lecture 2 hours, lab.
73. Groundwater Modeling

F,S
Prerequisites: GEOL 373 and 572 , MATH 224 ,
 aplication of these mathematical modolels to Traditional gradingo only to Majors. Leecture 2 hrs
laboratory 3 hrs) A course fee may be required. 74. Geological Aspects of Waste Management (3) F,S
Preerequistes: Graduate standing in geology or
chil engineering or consent of the instrutoro.
Clasafication of wastes, elfects on solis and
waste disposal sites. Tradtional
575. Advanced Topics in
Sedimentology (1-4) \(F\)

Prereqquistes: Consent of instructor. Investigation of splococtend tonios in insodimentology such as coastal procecoses, funial procoseses, advancod stratigraphic analysio, and tetotonics and lo year. May be reppeated for crearit with different
 work as
required.
576. Practicum in Geohydrology 3) S Prevequisite: Consent of the instructor; the
ftudent should have a fundamental student should have a fundamental Shemistry, stratigraphy, and geotydirology. upply and resource contamination. complination of field techniques, problem
approaches, and quantitative anayasis will be appoachese. and quanemaive problems in a frived
period of time to simulate industy condions. period of time to simulate industry conditions.
Tradtional grading only. (seminar and field trips, 3 hadituns.) 580. Sp
(1-6) F,S
Prerequisite: Consent of instructor. Investigation of selected topics in geophysicss succh as
Numeicial Metiods in Geophyics, Selimology. Seiemio Migration, Physics of the EEath, Flectrical Methods, and Geophysical Field Methods. May
be repeated for credit with consent of instructor as topics change. Seminars with laboratatoies andlor foild work
581. Seminar in Engineering

Geology (3) F,S
Preeraciuste: Upper division course in enginesing elating geoclogic factors to engineering projectis: ith emphosis on slope stability, subbiciderce,
ingineering seismology and constuction ongineering seismology and construct
problems related to engineeting geology.
(3) F,S

Preerequishes: GEOL 460 . Use of seimmic wave
characerisicics
(amplifuce diffractionses) to interpreet litholagicic composition and structure from slemmic record sections Leecture 2 hours, lab
feem may be required.
583. Advanced Selsmic Data Processing (3) F,S Prerequibites: GEOL 273, 467; MATH \(370 A B\) Mathematical piniciples underytying seismie data
 equirsed. laboratory 3 houral A Acours

\section*{(3) F,S}

Prerequistes: GEOL 433,460 . Cocurrence and
origin of gecthemal resources. Hoat transter and origin of geothermal resourcos. Heat transter and geophysical geoclogical and oeechemical methods (Lecture 2 hours,
course tee may be required.

\section*{585. Advanced Gravity}

Sagne Advanced (3) \(\mathrm{F}, \mathrm{S}\)
Prerequisites: MATH 224, PHYS 152, GEOL 400 . Avvanced topics in the gravity and magnetic
 bereatoury 3 hours, field tripe.) A course fee may

\section*{586./486.}
reerequisite: GEOL 460 (may be taken oncurrenty). (Uncoll Graduates enrol in GEOL 586.) Applications
 engineering geolgy and hydrogeology
probems.
Review of basic
geophysical
 speceificied prochliliques. Suitable for the solution of
 actively subsiding areas, mapping of basement
topography, sea water intrusion probleme,

 articles: preparation of geophysical freasibility Tradtional grating only for Majors. (2eature 2 hours, laboratory 3
tee may be required.
591./491. X-ray Crystallography
\(\qquad\) Preerequisites: GEOL 324 or equivalent or consent
of instructor. (Undere
 Theory of x-tay diffraction and its application to the analysis and identifcation of crystalline 40d. (Leecture 2 hours, laboratory 3 h hours.) A 592. Clay Mineralogy (3-4) F,S Preerequiste: Graduate standing in Geology of
consent of the instructor. Chystallography. structure, classification, origin, occurrence, characterization, Leoloogic iginififanco and use of clay mineralas. Laboratory identifcation of clay
mineerais by \(X\)-ray, SEM, EDS and microprobe
 hours: laboratoty/porotlem session 3.6 hours.) curse tee may be required
Prerequiste: Consent of instructor. Research on
 be approved and directed by a staff member in
oeocogical sciencess. A course tee may be geological
698. Thesis (1-6) \(F\)

Preerequiste: Consent of Graduate Committee
and graduate adisor. Etther laboratory or feid and gratuate advisor. Ether laboratory of field unts to culminate in an approved thesis. course fee may be requirec.

\section*{Microbiology}

Department Chair:
Vern (L.K.) Eveland
Department Office: MIC-108 Telephone: 985-4858 Faculty: Professors: Carl R.
Anselmo, David M. Carlberg Anselmo, David M. Carlberg, Ver
(L.K.) Eveland, Gill G. Geesey, Henry C. Fung, Juhee Kim, Laura Kingsford, Harkisan D. Raj, Ruth Assoclate Professors: Car Itatani.
Emeritus Faculty: Betty H. Kazan Lucile McD. Logan, Mitton A. Petty Marguerite Smith
Programs Conducted by the Department
Students desiring information should contact the department office advisors. In addition, advisement also available in the following areas Pre-Heath Profe sions: Vern Kim, Frank E. Swatek Medical Technology Advisor
Henry C. Fung, Carol A. Itatani Henry C. Fung, Carol A. Itatani Graduate Advisor: Carol A. Itatan microorganisms and their interactions with people and the environment. There are two options degree in Microbiology that enable students to prepare for a variety of professional goals. The general microbiology option is of a broad nenetics and biochemistry of th microbes and prepares students for careers in molecular biology. raduate school and related areas
The medical microbiology option emphasizes the host-parasite elationships of humans and microbes and prepares students for aceers in clinincal aboratory elated areas. Either option, with the inclusion of appropriate classes,
may be utilized by pre-professiona may be utilized by pre-profession
students preparing for medical, dental, pharmacy and veterinary school. A major in microbiology
prepares students for a wide rang prepares students for a wide range
clinical and public health fields
genetic engineering, environmentall concerning food, pharmaceutic and hospital supplies. In addition, degree in microbiology, combined
with appropriate education, can be utilized for community college teaching credential. There is a common core of courses for these varied
educational and employmen opportunities and specific programs can be arranged by counseling with advisors in the Microbiology department
The Master of Science and
Master of Public Health available to qualified students preparing for professional careers in sciences, industry, government and eaching, and those preparing for urther studies at the doctoral level. Graduate and Health
In addition to preparing students In addition to preparing student
or the broad range of careers indicated above, the programs in microbiology provide preparation for graduate studies and for entry into Students should consider the
degree requirements ists in the Bulletin as minimal; some graduate careers may require additional coursework in mathematics, hemistry, or biology.
Students desiring entrance into a
graduate school for a meter dactoral school for a master or elated disciplines) should determine the specific entrance requirements or that school(s) of interest early in their undergraduate career and
academic advisement with the aculty. Students desiring entrance into
one of the various health-related professional schools such as
medicine, dentistry, chiropractic, optometry, osteopathy, podiatry eterinary, and pharmacy should onsult with the Pre-Health Natural Sciences (FO5-104) for mo hformation and preprofessional
academic advisement with appropriate faculty. While most students to major in a specific discipline, the majority of the successful applicants have done
well in their maior, completed prerequisite courses, and graduated with a baccalaureate degree. With he completion of CHEM 321 AB (o CHEM 327 , students interested in he health-related professional schools may select either Option Microbiology) offered by the Bachelor of Science in Microbiology and be well prepared for the
health-related profession schools. ealth-related profession school Microbiology is described below. Bachelor of Science Degree in Microbiology The baccalaureate degree
program offered by the Microbiolog Department is recognized by the
merican Society for Microbiolog as meeting their Core Curriculum for e Baccalaureate Degree programs
Microbiology
- General Microbiology
- Medical Microbiology (Lab Medical Microbiology
Medical Technology:
(code 3-7655)
- Pre-professional Microbiology (pre-medical, pre-dental, p pharmacy, pre-veterinary Option in General Microbiology,
Requirements (code 3-7654) Lower Division: CHEM 111A, 51 ; MATH 112 or \(115 S\) or an appropriate college-level course elected in consultation with OOA,B; MICR 210; BIOL 210B SCl 200.
Upper Division: AP 342; and a minimum of 39 units including the 471; MICR 450, 451, or BIOL 370; CHEM \(327,441 \mathrm{~A}-\mathrm{B}\), and a minimum of 6 units in microbiology to be maior advisor from upper division microbiology courses.

Option in Medical Microbiology Requirements ( (code 3-7655) Lower Division: CHEM 111A-B appropriate college-level cours selected in consultation with a departmental advisor; PHY
100A-B; MICR 210; BIOL 210B; NSCI 200.
Upper Division: AP 342; and a minimum of 39 units including the
following: MICR \(320,322,323,330\) following: MICR \(320,322,323,330\)
360,\(452 ;\) CHEM 327 ; and 448 M , 447, or 441A-B, 447, and a minimum of 6 units in microbiology
to be selected in consultation with the major advisor from division microbiology courses
Additional units are selected (in
consultation with the maior advisor) consultation with the major ad to satisty the specific course requirements of the protessional
school to which the student seeks admission.
Minor In Microbiology

\section*{Requirements for the Minor}

\section*{(code 0-7654)}

A minimum of 21 units which must include:
Lower Division: MICR 210; Upper any one of the following sequenc any one of the following sequences
(a) MCR 322 and 496 or (b) 360 or (a) MICR 322 and
(c) 452 and 453 .

Concurrent and/or Summer
Enroilment in Another College
Students who wish to take course college to meet curricular requirements while enrolled as undergraduates in the College of appropriate department for prior approval to enroll in specific courses. This policy applies to either concurrent enrollment and/or summer enroilment. University policy
must also be met. See 'Concurrent' and 'Transfer of Undergraduate Credit' in this Bulletin. Courses not receiving pior approvalit by the
accepted for cred department.
Master of Science in
Microbiology
Inquiries concerning the graduate program in Microbiology and requests for application forms for graduate admission should be directed to the Department
given to applicants filing application end March 15 for the fall semester emester. All applicants are urged to submit their apolications, transcripts nd three letters of recommendatio ot the Graduate Advisor before the above dates. Students must qualify physically as well as academically to
Teaching assistantships and graduate assistantships are available within the resources of the Department to qualified individuals. should be directed to the graduate advisor.
Prerequisites
A bachelor's degree with a major in microbiology from this Unive
with a GPA of 3.0 or better, or:
A bachelor's degree with a major in microbiology, bacteriology or related fields from an accredited institution, with a GPA of 3.0
better on the condition of completing deficiencies, if any, in the upper division course work as equired of a microbiology major at his University, or
A bachelor's degree in any
cademic area from an accredited issitution with an undergraduate overall GPA of 3.0 or better, on the condition of completing a minim
of 24 semester units (or the equivalent) of upper division courses in microbiology or related fields before starting the full graduate
program. These courses must be comparable to those required of a major in microbiology at this University, and should include but not be limited to: medical bacteriology, immunology and
serology, organic chemistry and biochemistry (two semesters). Unit Microbiology it taken Genera division course, may apply to the graduate program, or: A student whose overall Andergraduaws pomiess han 3.0 espects, may be given specia consideration for admission. Following admission to the University and tentative acceptance be interviewed by the Department Graduate Committee or the Graduate Advisort to formalize the acceptance by the Department
aliber for graduate studies evaluate transcript records to detect any scholastic deficiencies and counsel the student in his/her student is thus admitted to the graduate degree curriculum in microbiology with conditionally dvancement to Candidacy (1) A 3.0 GPA and the completion of all scholastic deficiencies: (2) The satisfactory completion of the University Writing Proficiency xamination;
(3) As early as possible each graduate student must choose a
hesis advisor who will establish the tudent's thesis committee consisting of at least three members cast one other member of the Department with expertise specific 0 the student's chosen field of iterest in microbiology)
(4) The thesis committee will egree program (a minimum of 30 units) and forward it to the Associate an early as possible, but not later than ne year prior to anticipated ne year \(p\)
(5) Upon evidence of satisfactory progress and completion of the
University Writing Proficiency
Examination. The Thesis Committee ay recommend the student to the dvancement to candidacy, by orwarding its recommendation to e Department Graduate Adviso epartment Chairman, and Natural Sciences. Upon approval by he Associate Dean, the student wil attain the status of
(6) Requests to graduate must be (6) Requests to graduate must be
eceived by Enrollment Services uring the preceding May for pring/Summer graduation o graduation. Filings after the deadline are not accepted. Requirements for the Master of cience (code 6-7654) (1) A minimum of 30 units of upper division and graduate courses be in the MICR 500-600 including wo courses in the 550 series
courses. All students must complete other courses in related subject matter must be approved by the (2) A reading knowledge of foreign language or computer competency may be required, depending upon the candidate's program of study as recommende
by the candidate's Thesis Committee;
(3) Thesis, MICR 698;
(4) A final comprehensive oral examination including the defense of the thesis will be administered by
each candidate's Thesis Committe It will be open to all faculty and to the public.
Master of Public Health The Master of Public Health degree is planned for professionals
who have already had experience who have arready had experience
within a health-related field. It is designed to be completed within 12 months of full-time study. There is a core curriculum with two options.
Rather than a thesis, field experienc and a comprehensive examination are required. The program has few elective courses. The Department under this degree program. The Optlon in Medical Laboratory Supervision (code 7-7657)
This option provides advanced instruction necessary for laboratory
personnel to advance to senior laboratory and supervisory positions. The Option in Nursing
Epidemiology (code \(7-7656\) ) This option provides advanced istruction for nurses with bachelor control nurses or practicing epidemiologists in hospitals and ospital-related environments.
rerequisites:
Criteria for admission to the program are: (1) a bachelor's
degree in biological science with medical laboratory emphasis for the medical laboratory supervisor option, or a bachelor's degree in
nursing for the nurse epidemiolog option; (2) minimum overall GPA of 2.5; (3) three letters of
recommendation; and (4) two years
of full professional experience

Advancement to Candidacy
(1) Upon acceptance by the established for each student specific to her/his chosen and related fields of interest;
(2) After satisfactory completion will recommend the quarfinittee will recommend the qualified stude
for advancement to candidacy. Requirements for the Master of Public Health
(1) Completion of 30 units of approved course work, of which at level courses;
(2) Satisfactory performance in
the field experience;
(3) A final comprehensive
examination after course work and All sudent mile ollowing core curriculum: BIOL 565 , MICR 429, HCA 500, HSC 528. For Option I, Medical Laboratory Supervisor, the following courses are equired:
For Option II, Nurse
Epidemiologist, the followin courses are required: EE 407, MICR 425, 427, 691, 696.
For both degree options a prior competence by examination and/or course work in either a core or option requirement may be permitted to substitute a course(s) in approval of both the student's faculty advisor and an instructor of he specific course(s) in which the her/his prior competence to complete the total of 30 units equired for the degree. Elective courses tor the two options may be
selected from upper division or graduate courses in microbiology, biology, chemistry, psychology o usiness administration, in consutation with the faculty adv
and the advisory committee. Courses (MICR) Lower Division
00. Microbiology (3) F,S Lit processes and roles of micro-organisms in beneficial sinteremelationshonhips with man mantul and his
onviromment. Not open enviroment. Not open for credit to majors in
nicrobobiogag. (Leecure 2 hours, labboratory 3 hours.) A course fee may be eequired.
101. Introduction to Human isease (3) F,S
Prerequisites: None. Introduction to the stucy economic disuease. incecture h hourars).

\section*{210. Gen
(4) F, S}

Prerequisites: CHEM 1118 or equivalent. CHEM
 arganisms in morphology, metabobolism and cultural characterisitics (Leecture 2 hros ilamoratory pper Division

300l. Human Immunology: In
Self-Defense (3) F,S
Preerequisites: ENGL 100, one laboratory course
ha life science. Introductory psychology and a aboratory courre in a p pyycical science acommended. Introduction to the mechanisme body from disease. Normal functions of the mmune system, diseases invowing the inmun system, and peychological, endoctine and age
factors affecting the immune syytem will be haluddod. Impact of immunulogyy on organ tansplata- tion, immunotherapy and
iotechnology will be discused. Not applicable blotechnology wirl be discussed. Not applicabl
Ior crodit toward the maio in Mieobiolog.
Traditinal grading only. (Leoture 3 h hours) 301. Advances in Biotechnology (3) S

Suvey of recent advances in bibtechnnology to nombicience maior. Subjects to be included oll., organ and organism), gene therapy atificial organs (bienics), genetic diagnosi
nd prodictive medicine. Preerequiste: one course in a biblogical science (Lecture 3 hours,
Not applicable for credit toward the majior in
Microbiloge Not applicabl
Microbilogy.
3021. Molecular Biology and ioethics (3)
Perequisites: ENGL 100 and upper divisio sdvances in moleculiar biology and the main conetic and ethical issues these advances hav aised. Not applicable for credil toward the
maior in Microbilogy. (Lecture 3 hours). Same naijo in Microbiology.
course as HUM 302 .
320. Medical Bacteriology (5) F,
reerquistes: MICR 210 and CHEM 327 Pathogenic bacteria of man and animals nicroorganisms by morphological and cultur characterisicics: their reaction to various
antibibitise. LLecture 3 hours, tabooratory hours.) A course fee may be required.
321. Public Health and Pollution 321. Pub
 problims in the community control oo
commicable diseases; anti, water and soil
contamination. Aeccommended tor non interested in ecology and pollution control. (Lecture 3 hours.)

\section*{322. Medical Parasitology}

\section*{(3) F,S}

Preracuisites: BIOL 2108. Sunvey of parastic protozoa and helminiths of animals; emaphasis
on human parasates, identification of fresh and
 laboratory
required.
323. Hematology (4) F,S Preerequisites: Six units of biological sciences
MICR 210. Physiology and pathology of blood Preparation of blood for counts, hemoglobin determination, and related procedures. (Lecture
3 hours, laboratory 3 hours.) A course fee may be required.
330. Immunology and Serology
(5) F. (b)

Prerequisites: MICR 320, CHEM 327 or consent
of instuctor. Principles of immunty, immune of ingtructor. Principles of immunity, immune
response in wio and in vitro. response in vivo and in yiver
immunohematology, forensic seroroloy, syphilis
serology, and the principes and usee of serology, and the principles and usee of
serologic methods tor the qualitative and


340. Microblal Taxonomy (3) F

Prerequisites: MCR 210, CHEM 327. Principles
 laboratory procedures in ditiferentiation of
micro-grganism. (Lecture 1 orur libotatory 6
hours) Acouse fee may be equired. micro-rgganisms. (Lecture thourl liabo
hours.) Acourse fee may be required.
360. Medical Mycology (4) F,S Preveruuistes: MICR 210, 320 , CHEM 327.
Introcuction to pathogenic fungi commonly


412. Supervised Laboratory
412. Supervised Labo
Techniques (2) \(\mathrm{F}, \mathrm{S}\)

Prerequisitites: Consent of instrutto and 's' or
better grade in the course in which the student better grade in the course in which the studdent
elects to do MCR 412 Experience for advanced students in organization and
techniques of a microbioblogy lab, under the direcct superision of the regularal faculty member
teaching that partioular laboratry section teaching that particular laboratory, \({ }^{\text {sen }}\)
(Confererence 1 hour, laboratory 6 hours.)
420. Epidemiology and

Biomedical Statistics (3) S
Prerequisites: MICR 320 or consent of the
instructor. The concopts of epidemilogy, use instructor. The concoptsis of epidemicmogy, use
of biomedical statistics, and the factors selatec to the natural history, control and prevention of
disease Either MCR 420 o 425 but not both. disease Either MICP 420 or 425, but not both,
will
accepeded toward fuflument of the 6 units mil be acceppled toward futriment of the 6 unts
of upper division Microbiology electives. (Lecture 3 hours.)
\({ }^{*}\) (3) \(\mathbf{F}\). Advanced Hematology
Prerequis
Prereaquistes: Medical technology license or a
grade of \(B\) ' or better in MCR 323. Investigation grade of ' \(B\) ' or better in MCR 3 . 33 . Investigation
into blood cell formation in bone merrow and
ithe the reticiculoendothelial system. Response on
these cells to dibease processes. LCecture and demonstation 3 hours. Etither MicR 424 a
432, but not both, will be accepted toward

496. Investigations in
Microbiology (1-3) Prerequisites: Consent of instructor. Research a speecifio subjeot in microbiulogorical seciencences
be approved and directed member. The one unit courted invy anes facculty
eesearch. The two ind three units courses hnolve libray and experimental researect. Special Projects may include experience with microscopy, radiotracerss, tisesue culture, etc. Course may be repeated for a maxi
units. A course fee may be required.
Graduate Division:
514. Microbiological Analysis (3) S
Preerequisites: MICR 471, CHEM 441B. Theory and application of instrumental methods in
nicrobiological problems. (lecture 1 hour, microbiological probiems. (Lecture 1 hour,
laboratory 6 hours.) A course fee may be
required. equired.
26. Biochemical Diagnostic procedures in Microbiology

Prerequistes: MICR 330 , CHEM 441A-B, 447. Medical laboatory, experience is
recommended. Theory and application of recommended. Theory and application of
diagnosico proedures
microbilogogy feseearch laboratoriese. (linical microbiology research laboratories. (Lectutre 1
hour, laboratory 6 hours.) A Acourse fee may be hour liborat
required.
531./431. Principles of
Immunobiology (3) S

Preerequisites: MICR 330 , CHEM 441A-B,
Consent of instuctor. Integrated biologegical and Consent of instructor. Integrated biblogical and
chemical consideration of immunology. Hoett parasite relationships and immune response of antigens and antibobcies, their physical,
chemical and biological propertios and the
 antigen-antibody reaction. (Lecture 1 hour,
laboratory 6 hours.) \(A\) course fee may be required.
\(532 . / 432\). Immunohematology (2) S
(Ether MICR 424 or 432, but not both, will be
accepted toward fufliliment of the 6 units of upper division microbiology electives.) Undergraduates register in MICR 43 ; ;
graduate students regiter in MICR
532) Prereaquistes: A final grade of ' \(B\) ' or better in MICR 323 and 330 or consent of instructor characteristics of human anthrocytio. Dotailed
study of isoantigens and isoantibolies study of isoantigens and iboantibodies
associated with human red blood colls; their atection, mechanisms of cellular destruction (ecture 2 hours.).
46. Clinical Diagnosis by aboratory Methods and Quality
ontrol (4) S

Prerequisiste: California Clinical Laboratory
Technologoist licensed or equivalent with consent of instructor. Correlatiouvof of atboratorn


epartment Chair: Bruce L. Scott Department Office: PH3-27
Telephone: \(985-4924\) or \(985-7924\) Faculty: Professors: M. Zahur nwar, R. Dean Ayers, Chia-Hw
hen, Lowell J. Eliason, Simon George, Chi-Yu Hu, Patrick F. Kenealy, Lawrence S. Lerner, Keung Luke, Jack H. Munsee, Sema'an Salem, Bruce L. Scott, Kwang Y Yano;Assoclate Professior: Alfred eung, S. Rajpoot; Assistant
Housek
Emeritus Faculty: Olaf P. Anfinson
Bichard H. Chow, John E
rearickson, John V. Hutcherson
calettar, Cramer W. Schultz
epartment Secretary:
rene Howard
Department of Physics and
Astronomy Advisory Council: The Advisory Council consists of rominent scientists and engineers from local industries who help the program by sharing their experience, oxpertise and resources. The list of urrent members is available on equest.
Students desiring information should contact the department office or referral to one of the faculty
Udvisors: Graduate Advisor: Gross. Concurrent and/or Summer
Enrollment In Another College Enrollment in Another College: Students who wish to take course college to meet curricular equirements while enrolled as undergraduates in the College of appropriate department for prior approval to enroll in specific courses. This policy is for either concurrent
enrollment or summer enrollment. enroiment or summer enroime complied with. See "Concurren Enrollment" and "Transter of Courses not receiving prior approval will not be accepted for credit by the department.

\section*{achelor of Sclence in Physics}

The major in physics for the achelor of science degree is offered or the student seeking the doctor's egree and the position o professional physicist in the traditional an industrial laboratory, and the student seeking a career in teaching hyysics. This major program tos the
designed with the conviction that a student must first of all be a physici and must have a program which conceptual bases of physical phenomena, cultivates skill in the practical execution and stimulates iterest in the many means used to interpret the physical world. A
minimum of 124 units is required. Requirements for the Bachelor of Requirements for the Bachelor of
Sclence In Physics (code 3-7668) Lower Division: PHYS 151, 152,
153: MATH 122, 123, 224; CHEM 11A, 111B; BIOL 200 or 210 A . Upper Division: ENGL 317; MATH
370A, 370B; 34 units of upper division physiss including PHYS 310, 340A, 408, 350, \(360,330,422,450\), and one laboratory course chosen from remaining ( 6 to 8 ) units are to be chosen from any upper division A grade of 'C' or better must be eceived in all coursester required for the bachelor of science degree in physics. The following schedule is typical for an uper division
full-time student.
Junior Yea
Fall: PHYS 310, 360, 380; MATH 370A O 370 ( it is recommended
that MAHH 370 A be taken before PHYS 310 , if possible). Spring: : PHYS 340A, 350; MATH


Fall: PHYS 340B, 422, 450. Spring: Three upper division physlor of Arts in Physic Bachelor of Arts in Physics The major in physics for the
bachelor of a tars degree is offered in the spirit of providing a curriculum devoted to "interpretation of physics
and its reintegration with other parts of

Physics and Astronomy
ur culture." A primary purpose is to prepare teachers of physics and physical
schools.
Requirements for the Bachelor Arts in Physics (code 2-7668): Lower Division: ENGL 317 (may be waved for students who achieved English sub-test or who received an A' or 'B' grade in ENGL 100): PHS
151, 152, 153; CHEM 111A, 111B; 51, 152, 153: CHEM 111A, 111B;
MATH \(122,123,224\); and BIOL 200 or MATH.
210A.
Upper Division: A minimum of 24 units of courses selected in Work must be completed in each of the following fields: physics, chemistry, and geology. At least 18 Candidates for a teaching credential must complete at least six units
selected from GEOL 103, 460, 461 , 463.

Minor in Physics (code 0-7668) A minimum of 20 units which must Lower Division: PHYS 151, 152, 153 Upper Division: A minimum of nine units which m
360 , or 494 .
Master of Sclence in Physics
The Department of Physics and Astronomy offers graduate study leading to the master of science obtain the degree either with a thesis (Plan I) or, if the department graduate committee gives permission, with a
comprehensive examination (Plan II) comprehensive examination (Plan
Active areas of research are: laser optics, particle physics, atomic physics, quantum gravity, muon
catalyzed fusion, intermediate energy physics, acoustics and condensed matter physics.
A limited number of teaching and
graduate graduate assistantships is avalabie to
students working on the master's degree. Normaly graduate assistants help a faculty member conduct the courses.
Application should be made to the graduate advisor of the Department o Physics and Astronomy.

\section*{Prerequisites:}
(1) A bachelor's degree with a major
in physics; or
24 units of upperer divisision physics. (Students defifieinent in undergraduate
preparation must take courses to preparation must take courses to
remove these deficiencies with or without credit toward the degree at the discretion of the department graduate advisor.)
Advancement to Candidacy: University requirements for advancement to candidacy and must
satisfy the Graduate satisfy the Graduate Committee as to the adequacy of their preparation by
passing the Physics Department screening examination. This will be done in the first semester in which
they are registered for courses they are registered for courses actable for codit toward the M.S. except in individual cases to be
determined by the Graduate determined by
(2) A student must have \(a B\) average or better in six units of physics applicable toward the master's degree, of which at least
three units are at the graduate leve Requirements for the Master of Science (code 6-7668):
Plan I
(1) A minimum of 30 units of upper division and graduate courses
including PHYS \(540 \mathrm{~A}, 540 \mathrm{~B}, 550 \mathrm{~A}\) \(550 \mathrm{~B}, 560 \mathrm{~A}\), and 695
(2) A thesis (PHYS 698), 6 units. The remaining required units, no
more than 7 of which may be in more than 7 of which may be in
related fields, are to be from courses selected in consultation with the
sele graduate coordinator and/or thesis Plan II
(1) A minimum of 30 units of upper division and graduate courses
including PHYS \(510,54 \mathrm{~A}, 540 \mathrm{~B}\), \(550 \mathrm{~A}, 550 \mathrm{~B}, 560 \mathrm{~A}\), and 695; (2) Passing a comprehensive
examination The remaining required units, no
more than 6 of which may be in more than 6 of which may be in related fields, are to be from courses
selected in onsultation with the graduate advisor.

Physics Courses (PHYS)

00A,B. General Physics 4,4) ,, Fereacuisite: Two years of high school algebra or
rquivient (a knowidge of basio triconomemety io
 prerequisite for PHYYS 100B. Yeat course in
introcuctory physics. Firet semester consididers properties of mateter, meeh hanices, wave motion
and heat. Second semester considers eleatricity ilight, and atomic and nuclear physicis. (Leoturuer 3

02. Introduction to Physics (3) \(\mathrm{F}, \mathrm{S}\)

Prereequisite: MATH 117 (which may be taken
concurrenty) or three-and--ne-hal years of high school mathematios including two years of algobra, one year of geometry and one-half year of trigonometry. This course is designed to asoist onrolling in PHYs 100A or 151. Basicic problems
 mechanics. CreditidNo Crodit grading,
(Lecture, problem seasions 4 hours.)
beogins in the fouth weok of the semester.
104. Survey of General Physics
4) \(F, S\)

Designed to accuaint the student with the more
mportant aspects of elementary physics. mphasis on physiological phyysicas, ophysise and
sund. Recommended for att. musio and sound. Recommended for art, music and
Phyical edivation maiors. (Leoture 3 hours, laboratory 3 hours). A course tee may be
151. Mechanics and Heat (4) F,S Prerequivita: MATH, 122. Kinematics, Nemoron's
Laws, , otational motion, flud statios, laws of Laws, rotational motion, fluid statios, laws of
thermocymamics.
(Lecture
3
 152. Electricity and Magnetism (4) F,S
Prerequisites: PHYS 151, MATH 123. Mechanical

 hours, laboratory 3 hours.) A A course foe may be
equired. (CAN PHYS SEQ B, \(151+152+153\) ) 153. Modern Physics and Ligh 4) \(\mathrm{F}, \mathrm{S}\)
rerecuister: PHYS 152, MATH 224 . Relatativy,

 open to students with credir in PHYS 154 .
Cecture 3 hours, laboratory 3 hours.) A Acourse
fee may be required. (CAN SEQ B, may me may
\(151+152+153\) )
(3) F,S

Prerequisistes: PHYS 152, MATH 224. Relatitity.
photoolectric effect; quantum theoory, Bohr model

It the atom, wave mechanics, geometrical optice
interferencoe, diffraction and polarization. No.
opon to students
(Leoture 3 hours.)
155. Laboratory on Light and
Modern Physics (1) \(\mathrm{F}, \mathrm{S}\)

Prerequisitit:: PHYS 154 which may bo taken
concurrenty. Experimental work in geometrical concururenty. Experimental work in geometrical
and physical optics and atomio and nuclear
 153. PHYS 154 and 155 together are equivalent to
PHYS 153. (laboratory 3 hours.) \(A\) course fee

\section*{may be requiried.}

\section*{310. Mechanics I (3) F}

Prerequistes: PHYS 151, MATH 370A (may be laken concurrenty). Kinematics and dymamics of mass points and systems of particlea
Consenvation laws. Harmonic motion. Central Consesvation law. Harrmonio motion. Centre, lagren
311. Mechanics II
(3) S , Even Years
reerequiste: PHYS 310 . Dymamics of rigid body Constraints. Inertia tenesor, Gyrosocoppicic motion
Deformable media: Waves on strings and in Neformable media: Waves on strings and in
fuids. Variational
methods.
Non-linear
 330. Experimental Optics Spectroscopy (3) S Prerequisite: PHYS 153. Interference, diffraction, polarization and elementary spectrococopy,
(eecture 2 hours, labocratory 3 hours.) A course
fee may be required. 340A. Electricity and Magnetism I (3) \(\mathbf{S}\)


\[
\text { ecture divan anion } 3 \text { hours.). }
\]

\section*{3) F}

Preerequisite: PHYS 340A. Special relativity, Appliations of Maxwell's equations: Plane Ilectromagnetio waves, guided waves, radiation, Cecture-discussion 3 hours.)
350. Modern Physics (3) S

Preerauisites: PHYS 310 , MATH 370A. Physical
phenomena and mocels leading to the phenomena and modela leading to the
deveroment of
quantum
mechanics. development of quantum mechanics.
Schroedinger equation onedimenional
quantum mechanical problems, uncoetainty
 applications of quantur
360. Computers in Physics (3) F Preerequisites: PHYS 152, MATH 370A (may be Prefequisiste: PHHS 152, MATH 377AA (may be
raken uoncurenty). Introduction to the use of
computers in phyics. The computers in physics. The PC and DOS
fundamentals of programming, introduction to fundamentalas of programming, introduction to
numerical analysis and computer roaphics Use
of selected types of commercially avalable of selected types of commercially avalablo progtrams such as spreadsheets and symbolic
analysis programs. (Leeture-disussion 3 hours.)

490./590. Special Topics in Physics (3) F,S
Preerequisite: Consent of instructor. Topics of atomic and nuclear physics, astrophysica, phyyics of materiais, ow temperature physics, acoustice and theoretical physics. Bot
undergraduate and graduate students may take
 (1-3)
4.
F. (1-3) F,S
Prerequiuites: Consent of instructor and senior
standing. Problems in physics. Problem Standing. Problems in physics. Problem analysio. A witten and 10 -minute oral report are required. May be repeated for credit to
meximum of 4 units. A course fee may bo

Astronomy Courses (ASTR)

\section*{Lower Division}
100. Astronomy (3) F,S

Introcuctory course in astronomy. The earth moon system and the planets, the stars and theil astronomical observation.
100L. Introductory Astronomy
Laboratory (1) F
Prerequisiste: ASTR 100 which may be taken
concurrenty. Astronomical coordinates, stal maps, magnitude, spectral classification, ages of maps, mayntitude, spectral llasatifacion, ages students with credit in ASTR 101. (Labopatotry)
Tradtional grading only. A course fee may bo Traditional grading only. A coura
required freerequisite: ASTR 100. A descriptive and obsernational study of the 100 finest deep shi are well placed for viewing. These objects will be discussed in a lecture as examples of the variey
of colestial obiects, and they will alo in color photooraphs taken by students on fiel trip. The field tripo, moost of them overnight to
local campgrounds, are optional but strongly local campgrounds, are optional but stiongly
recommended (Cecture 2 hours, laboratory hours.) A course fee may be requiried. 200A. Introduction to Astronom Preerecuistit: MATH 101 (may be Preerequishe: MATH 101 (may be taken
concurnety). Nemtonis Laws and gravitation, the earth and the osolar syatem, atomic radiation spectra of stars, stellar population, Lstellar
clisters. the gaiayy and cosmology. (Leeture
disursion discussion 3 hours).
3701. Extraterrestrial

Environments (3) F,
Preerequishes: A course in the life of physical
sciences with
atb two years of high school
sciercese wihh lab: two years of high school
algebra, ENGL 100 and upper divison status
Analysis of our own solar sytem and Analysis of our oun solar system and nearby
stars with a focus on the capacity of various environments to sustan capacily hat varation
stellar evolution and extrapolation to estimate the prevalence of life elbewhere in the universe.
Cititial analysis of available data on probable distances, masases and a aes of nearess staras to
determine spatial diltribution of thooes most likel| determine spatial diltribu

\section*{Physical Sclence Courses \\ (PHSC)}

Lower Division
112. Introduction to the Physical Sclences (3) F,S
Selecteded processes which illustrate some of the basic principles used by scientists to interprei
modern ideas of matter and energy in the physical universe. Students with a tully year coures some other lower division courre in chemistry, geology or physics. Not open for crodilit to majiors
nany of the physical sciences. (Leeture 2 hour aboratory 3 hours.) A course fee may by Upper D
331. Light, Lasers and the Visual
331. Light, La
Image (3) \(F\)

Nonmathematical course that describes light, it behavior and applications. Emphasios on immeage
formation, optical instruments, science of color lormation, optical instruments, scienco of colo
lasers, holography and analysisis of light foc dilements, planets and stars.
dementortur
demontrations using ansers. and demonstrations using lasers and holograme
including kinetio art. Feocommended for art and other non-science
demonstration 3 hours.) majors. (Lecture Graduate Division

Physics (PHYS)
500. Research Methods (1) FS Preerequibite: Consent of instructor. Directed studu
of the literature about research methods in hysics. May be repeated once but only one unit may be applied t.
\(502 . / 402\). Fourier Methods in Physics (3) \(F\)
Prerequiste: PHYS
reerequiste: PHYS 310, MATH 370B. Fourier ranstorms in time and space, convolution,
generalized functions, impulse response and ranster function. Amplication of Fourier
rechniques to problems in classical acoustics icaniquues to problems in classical acoustics nolography and imaging in general. (Lecture 3
ours.) 503./
503./403. Fourier Physics

Laboratory (1) \(F\)
Prerequisite: PHYS 502 which may be taken Concurrenty. Selelected experiments in acoustricas and optiss illustating Fourier techniquess in wave
physics. Detaled study of the diocrete Fourier transtorm and its application to experimential
measurements and calculations. (Laboratory hours.) A course fee may be required.

\section*{510. Graduate Mechanics (4) \(F\) Lagrange's equations, Hamilton's equations,} canonical transformations, Hamiltorn-Jacobi
theory, eleativistio mechanics and small osalliation theory. (Lecture 4 hours.) Years
Prerequusites: PHYS 340 A and MATH 370 B or
permission of the instuctor.

 522./422. Thermal Physics (3) F Prerequisites: PHYS 310, 350 . Entropy and
temperature, Boltmann distribution and Helmholtz, free energy, therribal rad adiation
chemical potentil Chemical potential, Gibbs distribution, Ideal gas,
Fermi ind Bose gases, heat and work, Gibbs tree energy and chemical reactions,
transtomations and kinetio theory. discussion 3 hours.)
534./434. Astrophysic
(3) F, Even Years
(3) F , Even Years

Prereaquisite: Graduate standing in physics or
consent of instructor. Review of obsenational data of astronomy, elementary theory of stellar structure, model stellar calaulation and simple
stellar systems. (Lecture 3 hours.) 540A. Graduate Electricity Magnetism and Electrodynamics (3) S

Prerequisitit: PHYS \({ }^{340 \mathrm{~B}}\). Boundary-atue
problems, applications of special functions to

 equatis.) 540B. Graduate Electricity and (3) F . Preerequisit
simple
rad Preerequisites: PHYS 540 A . Covariant formalism,
simple radiating charges, and selected topics in elecatrocynamice chosen from the following: wave guides, magnetohydroctymaniss, thermocynnamics and
electrococymamics of continuous media, radiation reaction. (Lecture 3 hours)

\section*{(3) S, Plasma Physic}
(3) S, Odd Years

Preerauistes: PHYY 340 A . Characteristic
behavior of high temperature plasma Partic traiectories, two-fluid and hyyromagnetic motictele. waves, instabilities and transport processes.
Aplication to laboratory plasmas. (Lecture 3 hours.)

\section*{(3) F}

Prerequisite: PHYS 450 . Mathematical and
postulational basis of quantum postulational basis of quantum mece ananics,
one dimensional problems, two-level systems, one-dimensional problems, two-lvel systems,
annuiar momentum, contral potentials, time
indenendent and independent and time dependent perturbation
(3) S

Prereauiste: PHYS 550 A. Scattering, rotation
rrup and ireducible tensoc operation, Identical partitles, sememi. clasesical radiatiotion theory, atomems path integral formalism,
topics. (Lecture 3 hours.)
54. Nuclear Physics (3)

Prerequisiti:: PHYS 550A. Deuteron problem, ucleon-nucleon potertial, shell model, nutlear models, nuclear reactions, elememtary partidleo
weak interactions, strong interactions. (lecture 3 hours.)
55./454. Elementary Particle hysics (3) S, Even Years Prerequisite: PHYS 450. Particle detectors and

 particle modelse. (Lecture- discussion 3 hours.) Physics ( 4,3 ) F,S Mathematical hysics \((4,3)\) F,S Freetauisites: MATH 3 ToA, B or equivalent. Linear complex variable, special functions, properties methods of solving partial differential aquations of physics, integral equations, tensor 569./470. Introduction to Solid ate Physics (3) S
 Topics incude leatrice vibrations., loastio
constats, and themal, electric and magnetio propertios. (Leoture 3 hours.)
570. Solid State Physics (3) F evirequiste: from the stand 450 . The modern theory of mechanics. Binding in solids, energy bands Imperfections, and semiconductors. (Leecture 3 mperfection
575./475. Modern Optics (3) Freerquiste: PHYS 340A Propagation lectromagnetic waves, optical resonatiors, laser pectroscopy and operation, optical phase
conjugation, nonlinear optics and selected applications. (lecture 3 hours.)
576./476. Modern Optic
aboratory (1) F
rereauiste: PHYS \(4755 / 575\) which may be taken ancurrenty. Selected experiments illustrating bectro-optics and laser physice Anterest in include optical methods in communications atomic sppectroscopy, and nonlinear optics.
Traditional grading onl. (Labocratry 3 hours.) A Traditional grading only. (Labo
course fee may be required.
586/486. Experimental Physics-Radiation (3) S, Odd Yrs ierequistes: Consent of instructor. Interaction of gamma rays with matter. X-ray technicues
Charged Particle range and energy lose Radiation Paetitectors.ange Neutron productition and
(Leeture 2 2 hours. detection. (Lecture 2 hours, laboratorycourse fee may be required.
590./490. Special Topics in

Physics (3) F,S
Prerequisiti:: Consent of instructor. Topics of hierest in phyice selected for fintensive areas as atomic and nuxlear physics, momphysics, physics of mateialis, low physics. Both undergraduate and graduate undents may take the course for a maximum of \(\theta\) ints of oredit. (Lecture 3 hours.) A course fee ay bequira
Terequisites: PHYS 550B a permission of satructor. Solected topics to be chosen from Many-particle systems, and field theory:
hiteractions, bound states, and the \(s\)-matrix; gauge theocries and Q.E.D.; pathintegral picture.
Solected applications from condinesed matter
 gauge theory, conformal
91. Directed Study (1) F,S,SS Itensive study of advanced topics in physics.
694. Seminar in Special Topics
(1) \(\mathrm{F}, \mathrm{S}\)

Peerequisen: paparaduate standing. Study of olected topics. If demand forc more than one subjoct exixits, mutiple sections may be given in unit of credit may be applied toward 695. Colloqulum (1) FS

Prerequisites: Graduate standing. Weeky
meetings for presentation and discususion of courrent reoseach in physics. All roaruate
sudentis are expeocted to attend each semeste sudents are expected to atten each somester credit grading only.

\section*{697. Directed}

Theoretical and experimental problems in physicas requiting in
requiled.
698. Thesis (1-6) F,S,SS Planning. preparation, and completion of an acceptabie thesis in, partial fiffilment of the

 upon formal acceo


Dean: Dorothy deF. Abrahamse Assoclate Dean: Gary Peters College Office: Liberal Arts 4-201 LA4)
Studene: 985-5381 and Behavioral Sciences explore the applied, historical, and theoretical aspects of social and individual certificate programs, the College serves general education students
and other qualified individuals seeking broadened understanding of ndividual and collective behavi

\section*{Degree programs}
- Bachelor of Arts: Anthropology, Asian Studies, Black Anthropology, Asian Studies, By History, Human Development International Studies, Mexican-
Ameren American Studies, Political Scie
Psychology, Social Work, and sociology.
- Master of Arts:

Anthropology, Asian Studies, Economics, Geography, History,
Political Science, Psychology (with options in general research and in ndustrial and organizational
psychology).
Psychology
- Master of Social Work

In addition to the degree programs
programs and curricula.
- Certificate Programs:

American Indian Studies, Asian American Indian Studies, Asian
American Studies, Black Studies, Computer Studies in the Liberal Arts, Latin American Studies, Legal Studies in the Liberal Arts, Russian-East - Minors:

American Indian Studies, America
Studies, Anthropology, Asian
American Studies, Black Studies Economics, Business Economics, Geography, History. Mexican-American Studies, Political Science, Public Policy, Psychol
Sociology, Women's Studies.
Language Courses:
Bilingual English-Spanish, Chines

\section*{Special Facilities} The College operates special laboratory, a geography laboratory. psychology laboratories, and omputer laboratories. Individuals seeking academic
advisement should consult with the undergraduate or graduate prograr advisor listed for the particular area Student Organizations American Indian Student American Indian Student
Association, American Studies Student Association, Anthropology
Students Association, Asian American tudents Association, Asian American Students Association, Associat
Students of Social Work, Black Sudies Student Association, Geography Students Associatio History Students Association, Huma Development Students Association a Razat Political Science Students Association, Sociology Students Association, Women'
Student Association.
College Programs and Courses achelor Studies (code 2-8545)
The Bachelor of Arts in International Studies is an interdisciplinary degre program designed to provide a
rigorous introduction to the complex igorous introduction to the complex
interrelationships that exist among societies in the modern world. It ombines the study of international relations, global and developmen
issues and contemporary belief systems with a concentration on a major world area In addition, the
degree aims to equip students with degree skills in language, analytical hinking, research, and economi literacy that are necessary for
graduate study and careers in international fiflds. Further, students in the International Studies program eceive direct exposure to an participating in a foreign study program or an internationally related
internship in this country. As an iternship in this country. As an
iterdisciplinary program, this program emphasizes the ways in which the expertise and
methodologies of various disciplines

College of Social and Behavioral Sciences
contribute to the understanding and contribute to the understanding
resolution of international issues. The degree is a liberal arts program intended to provide a broad understanding of international issues
and world cultures through the methodologies of the social science disciplines. It offers pre-protession
study for careers in qovernment stommunications, business, law, journalism, and international nonprofit organizations. Students are
encouraged to combine a major in encouraged to combine a major in
International Studies with a second maior or minor in a field appropriate to
their career plans. heir career plans.
All International Studies majors are study in consultation with the program advisor. This program should be
balanced among the participating balanced among the participating
disciplines and should help the student to develop a coherent emphasis in a world region and/or a topical area. The foreign language
foreign study or internship, and research in the senior seminar should
reflect this emphasis. The program reflect this emphasis. The progran
advisor will also give advice on advisor will also give a
post-graduate study.
Requirements for the Bachelor of
Arts in International Studies Arts in International Studies A minimum of 45 units in a program
approved by the International Studies advisor. It is expected that each student's program will reflect the interdisciplinary nature of the degree
by including a balanced selection of courses from the participating courses from
disciplines.
Lower Division Prerequisites: (12 units): ANTH 120; HIST 112; GEO
100 or 160 ; POSC 215 or 220 . Economic Literacy: (Units not included in total for major; may be
fufililed as part of General Education) fulfilled as part of General Education):
ECON 201, 202; or, with permission of the I/ST Advisor, ECON 300. (Note: Economics 201 and 202 are strongly as prerequisites for some upper as prerequisites for some uppe
division courses in the program Foreign Language: Three years of college level study or equivalent
proficience in a language appropriate proticience in a language appropriate
to the program of study and area concentration selected. Upper Division: A minimum of 33
units including:


Senior Research Seminar: As approved by the director of the
International Studies program. Pre-Legal Program
Professional schools in many universities either require or ocommend that applicants complete Although the professional schools do not always require a bachelor's
degree, they generally encourag degree, they generally encourage
basic preparation and a general education leading to that degree
before beginning specialization before beginning specialization. Students planning to enter law
school may elect any one of several majors. However, the major chosen and the courses should be selected
recognizing the need for performance recognizing the need for performan clearly and understanding abstrac concepts. Pre-legal students are advised to take the minimum program chosen major and courses beyond the introductory survey level in other course sequences betwien the socia sciences, the natural sciences and the humanities is desirable. Students ore-law advisors in the Finance Department or the Political Science Department concerning entrance
requirements of specific law schools. Teaching Credential Programs in the Social Sclences
Single subject credential programs
in the social sciences are offered in in the social sciences are offered in Science. Students who plan to teach social studies in the secondary schools are strongly advised to early as possible in their studies so that they fulfill subject matter preparation requirements while completing an undergraduate major
Credential Advisor: Schwartz.

Oral History Program (SBS)
The Oral History Program has been
established to preserve a record of established to preserve a record of events of historical significance. The
Program supports research into the sources of unwritten historical information. The Oral History
Resource Center offers advice Resource Center offers advice to
CSULB students and faculty abour designing oral history projects and conducting interviews. It also offers a
one-unit workshop in oral history one-unit workshop in oral history
methods as well as directed studies in oral history and local history.

403. Clvic Issues and Values (3) S Prerequisistes: Limited to students in the Liberal
Studies maior, Track 1 , who have completed al rea N Core requirements with a ' C ' of better grade Provides sublect opportunities and
upperiential aativites for students to learn to confront controverasial issues, solve problilem cooperatively, examine issues from multiple and
Cialogical point of view, and praatico istening
with understand iteracy in the social sciences and abilily to to recognize and deal with the dynamemics of a
mutitiuutural, mutiethnic community will be
490 .
490. Special Topics

Topics of special interest in SBS for intensive
stucy. Topics will be announced in the Scheculue stucy. Topics will be announced in the Schediui different topics.
493. Research in Action (1) F,S A saminar in the comparative methodology and


494. Wash
rereaquistes: Upper divion standing and Prerequiuities: Upper division standing and
connent of chair of mair depatment. Student
Who are acceoted by the Washington Center will who are accepted by the Washington Center wi career-related internship in a federat., corrporate-
independent.sector agency
located in or independent-sector agency boated in contract. A final partiten reportize is reaenining
CreditNo Creacit only. Students must participate concurrently in a weeky seminar, for which credit will be awarded dhought hhe malior department
tidependent studies course
495. Social Science for Teachers (3) F Prerequisites: Students must have completed al
courseover in the scoial Science or liter Waver Procram. A Acapotone course of tor studeronts oftered just proio to studront teaching
Examination of issues in scial ccience educhion with an emphasis on recent interpereations in

 grade of '8' a better is required for advancoen

\section*{American Indian Studies \\ coilege of Social and Behavioral Sciences}

American Indian Studies is available A Program OOffice, F03-310 by
ertificate in American Indian
uales (code 1-8000)
Students pursuing any approved University may at the same time earn a Certificate in American Indian
Studies. Courses taken to meet the requirements may also
simultaneously be used, where simultaneously be used, wher applicable, to meet General degree or credential requirements of Cooperating departments.
Certification of successfuil completion of requirements will be the Director of the American Indian Studies Program.
Requirements for the Certificate 1.
ajor in a traditional discipline. (Certificate requirements may be completed prior to the completion of .A. requirement),
college/university transcripts to the academic advising coordinator, who will work with the student to develop a well-integrated program of studies encouraged to meet with the academic advising coordinator after having completed the lower division core courses.
3. A minimum of 21 units,
distributed as follows: Required Core Co
Required Core Courses: unitswer Divisision Core Courses (from): AIS 100, AIS 101, AlS 200;
Upper Division Core Courses (12
units from): AlS 319 AIS 320 AIS units from): AIS 319, AIS 320, AIS
340 , AIS 361 , AIS 420 AIS 340, AIS 361, A
497, AIS 499;
Upper Division Elective Course (select 3 units from AIS Upper Division Core Courses not selected above and from: ANTH 317,
\(322,347,349\); ART \(56 / 598 S\) 457/598T; EDSE 435; HIST 471; HDEV 401; CHLS 380, 42.

\section*{Minor in American Indian Studies} (code 0-8420)
Requirements for the Minor in
American Indian Studies:
A minimum of 18 units, including
2 units in American Indian Studies, distributed as follows:
Required Core Courses
Lower Division Core Courses
(select 6 units from): AlS 100 ,

\section*{200;}

Upper Division Core Courses (select 6 units from): AIS 319, AIS
\(320,340,361,420,490,497,499\);
Upper Division Elective Courses Course offerings in this section
contain classes that either have content relevant to the American Indian experience or include a section or unit devoted to American
Indians. Although some of these Indians. Although some of these
courses contain a minimum amount of Indian material, they have been included because of their relevance
to American Indian Studies as well to American Indian Studies as wel as offering the student a wid
selection to meet individual programmatic needs and goals;
(AlS Upper Division Core Courses not selected in Section II can be used to meet requirements in this section.) (Select 6 units from): ANTH 456/598S, 457/598T; EDSE HIST 372, 471; HDEV 401; CHLS 380, 420.
Courses (AIS)

\section*{Lower Division}

\section*{100. American Indian History:} Pre 1871 (3) F A survey of the histories and cultures of American Incian Peopleses in North America from
Precontact to 1871 and an analysis of the political, cultural, legal and military relationships
that developed between the American Indians that developed betwe
and foreign nations.
101. American Indian History

Post 1871 (3) S
A survey of the histories and cultures of
American Indian Peopoles in Nooth America from
1871 to the present
200. Contemporary Issues in
American Indian Studies (3) F Analysis of the diverse contemporary isoues
that have impacted upon the American Indian that have impacied upon the Amerlican Inclian
in contemporary society. Overiew of the maio issues in American Indian aftairs: politics, art philosophy, music, education, reservation lifie,
economics,
government
relations, Indian
 isosues, land rights, mevili issues, Incian activis additional topics of interest of a contemporary Upper Division

\section*{319. The Ethnic}

Ethnic Studies 319 is an eramination of the dynamics of the develiopment of our
muticiulurual society, emphascing stucuy of the four distinct ethnic strands of American socoiety
 American, and American Indianc) and their role
in the mainenanco of cultural diversity in the in the maintenance of cuitural diversity in the
United Statean Same couss as SBS
AMST 319 , ASAM 319, B/ST 319, CHLS 319 , AMST 319, ASAM 319, B/ST 3,
WST 319. Leoture DDisususion.
320. American Indian Art (3) S

A suivey of the arts of the Nothth American loms of the continental United States, Alaska, and Canada. Traditional and contemporary art eosthestio, hheoretical, historical, religiousu, and philiosophical aspects
American Indian Culture. (3) F,S An analysie of the witten and oral iteraray 361. American Indian Education (3) \(F\) A study of the historical deveropoments of solutionn to todian selecteducation and proms op edococosed he vaious types of schools. Cueview of the ine thementin traditional lndian societies and socitites occasioned by contact with
Europeans and how these changes have thered sexual Iole deffintions will be examined. altered sexual Iolit definitions
20. American Indian Studio Art (3) F,S

Tochniques, materials, concoppts and procossess
 490. Special Topics in American Indian Studies (1-3) F,S
Prerequisise: Consent of instuctord. Topicis of
current interest in American Indian studies current interest in American Indian studie)
selected for intensive development. May bo
 ee announced in the Schedivie of Classe. Indian Studies (1-3) F,S Prereaquistes: Upper division standing, consent or instructor. Supenised experiencoes relevanant to specific aspects of the American India
community in off-campus setings. Th community in off-campus setings. The
feildwork proiect must be directy related to the
 eports reavired. May
499. Directed Studies (1-3) F,S

Prerequiste: Consent of instructor. Directed Studies to permin individual students to pursue
opies of special inerest. May be repealed for a

\section*{American Studies \\ College of Social and Behavioral Sciences}

Directors: David R. Peck David Fine
Telephone: 985-4262
Faculty Advisors: Ro (English), David Fine (English), Joe Krause (Art), Ronald Schmidt (Political Science), David Peck (English), Federico Sanchez
(Chicano and Latino Studies), Sharyn Blumenthal
(Radio-Television-Film).
Department Office: FO3-310 Department Secretary: Olga Alvarez
Bachelor of Arts in American
Studies (code
tudies (code 2-8004)
Students desiring information or referral to one of the faculty advisors.
American studies is an
Interdisciplinary study of American culture. The American Studies
Program offers a major leading the bachelor's degree, a minor, a single subject teaching credential (in cooperation with English), and a
Liberal Studies concentration. The program also offers a variety of general education and interdisciplinary courses. Most American Studies are interested in both (1) studying American culture as a whole from several disciplinary perspective
depth a pro according to individual choi Reflecting these two interests, the major consists of a six course core pattern that centers on one theme or problem.
The American Studies Program is governed by a committee of faculty chools who also serve as advis Students majoring in American Studies confer with advisors to pla heir programs, which are recorded
,
liberal education focusing on American culture, traditions and istitutions, the major in American or careers in law, journalism, public
service, government, business and eaching. The program also provide American Studies gad reluate work in In preparation for the upper division major in American Studies students are expected to have completed lower division courses study of American culture. Students planning to major in American Studies should consult the program aculty advisors early in their academic careers for genera ducation and preparatory course ecommendations and for teaching dential information. Arts in American Studies A minimum of 33 units distributed

Six core courses: AMST 300, 77A,B, 490, 498, and one course in American literature chosen from 77A,B.
Elective pattern: The student hooses one of the following topics or themes and with an advisor (who appropriate courses) plans an elective pattern of a five course equence with no more than tw academic department: (A) America istitutions; (B) American People C) Women in America: (D) emmunironment; ( E ) Arts and Communication in America; (
merican Mind; (G) Student Designed Pattern. In place of one of Ae above topics or themes, the approval of the advisor and the rogram director, may design a equence of courses focusing on a opic, theme, or problem in whic
or she is particularly interested. inor in American Studies (code 0-8004)
A minimum of 18 units, including 2 in American Studies ( 300 , hosen from at least two of the following categories: (A) AMST 490;
(B) ENGL 370A,B, 474, 475, 476,

77A,B; (C) ART 413A, 413B, MÚS 393; (D) GEOG 306, POSC 308,
OC 445 .
Courses (AMST)
ower Division
100. Popular Culture in America (3) F,S
xamines popular culture as a sensitive and of the society for thich attitudes and connoeln students to the profound impact popul culture exerts on our sociery and develops the
itical and analytical skills needed to mee hese influencess with conscicus rationa
isponses. 190. Top
\({ }^{900}\). Topics in American Studies (1-4) F,
Exploration of a slgnificant topic, theme, bssue
problem in American culture Iterdiscoiplinary matereilis and mutturoc, Using erpeated for creodit with a different topic to naximum of six units.

\section*{Upper Division}
300. Introduction to American Studies (3) F,S
Interdiciciplinary approaches to the study problems in American life will be examined tro 319 The Ethnic Exp 319. The Ethnic
the U.S. (3) \(\mathrm{F}, \mathrm{S}\)

Ethnic Studies 319 dynamics of the dexamination of the nuticultural society, omphasking study of our dur distinct ethnic strands of American of the Alerician, andican, Ameicick Americican, Mexicican in the maintenance of cultural diveristy in the in the mainitenance of cuitural diversity, in the
United State. Same cousse as SS 320 AIS
319, ASAM 319 , B/ST 319 , CHLS 319 , W/SI \({ }^{319}\) ASAMM 319 , B/ST 3 3501. California Culture (3) FS Prerequisites: ENGL 100 and upper dilision
status. This course examines the culture status. This course examines the culture of
Califriaia form several distinct disciplinary perspeectives including history, political scienco
geography, scoidogy, art, and literature.
 methodologoies of these discipinines as they
converge on the study of Califineria. Students
take three fout-week intenive tina three four-week intensive modulues and a fina three-weok synt.)
course as

477A,B. American Cultural History ( 3,3 ) \(\mathrm{F}, \mathrm{S}\) Development of a disitinctive American way of
life treated in terms of valuen institutionss. Themes oes vases, behavior, and
indidualisn
comunity ethnic diversity and social seen within the changing complex of nationa character. (Same course as HIST 477A,B.) 485A. History of Women in the Provides a survey of the roles and actritites of American women from colonial period to 1855 , variety of female life experiencos; slavery;
immigration; relationships to the famiy, economy and political movements.
course as HIST 485A and W/ST 485A. 485B. History of Women in the U.S. - Since 1850 (3) Changing roles and status of women in movement: women in union moverent an
wW Il: the decade of the sidies and 'second wave' of feminism. Same courre as

\begin{tabular}{|c|}
\hline 490. Special Topics in Civilization (1-4) F,S \\
\hline Preerequisite: AMST 300. Intensive study of a selected major theme in American ciciliety
using materials drawn from a variety of using materials disiplines. May be repeated with a different
dise topic for elective credit toward the major requirements it atich apropiatice
area of specialization. Topics to be announced in the Schedule of Classes. \\
\hline \begin{tabular}{l}
498. Senior Colloquium in \\
American Studies (3) S
\end{tabular} \\
\hline Prerequisite: AMST 300 . Investigation of
significant problems in American civilization using intercisciplinary methods and materials and culminating in an original research paper or project related to the student's area of spepictone to the degree program and is open to seniors only. \\
\hline 499. Directed Studies (1-3) \\
\hline  \\
\hline
\end{tabular}

\section*{Anthropology}

\author{
college of Social and Behavioral Sciences
}

and engineering, foreign service, and pubic and social services
our own multicultural society. Such students will find that Anthropology provides a u applications in daily social interaction The Department of Anthropology lso offers a graduate program eading to the Master of Arts degree he graduate program is designed
o meet the needs of students who are: 1) seeking teaching credential where the master's degree is equired, 2) seeking to expand thei
nowledge and increase their competence in Anthropology, or 3) preparing for further advanced degrees, such as the Ph.D. or observing the general equirements for the M.A. degree as tated in this Bulletin. Prospective readuate students should consu egree in Anthropology which is vailable from the Department office oon request. It is also
tudents consult with the Graduate Advisor at their earliest opportunity. achelor of Arts (code 2-8505) Lower Division Requirements:
ANTH 110, 120, 140, 170, 202 . Recommended: PSY 100, SOC
00, GEOL 102, BIOL 200, MKTG 100,
380.
Upper Division Requirements: A minimum of 24 units in a program Mproved by the Undergradu
Major Advisor, to include the ollowing:
Required Core Courses ( 6 units):
NTH 313, 314
Comparative Cultures ( 3 units) ne of the following: ANTH 321, 336, 345, 347, 349 .
Biological Anthropology (3 units):
One of the following: ANTH 318 , ne of the following: ANTH 318 , 19, 363, 435, 480A, 480B. Sociocultural Anthropology (3
units): nits): One of the following: ANTH
\(351,352,353,416,417,419,421\), 351,
436.

Linguistics (3 units): One of the
ollowing: ANTH 413, 470, 475 . An additional 6 units of course work, selected from any upper division courses offered by th
In consultation with the adviso ust also be taken from any epartment(s) in the College of ocial and Behavioral Scie Minor in Anthropology (code 0-8505)
A minimum of 21 units in a
program approved by the major rogram approved by the major Lower Division Required: ANTH

Upper Division: Required Core courses: ANTH 313 and 314 : nthropology selected in units in onsultation with the advisor to meet he specific needs of the student. Master of Arts in Anthropolog (code 5-8505)
(1) A bachelor's degree in anthropology; or
(2) A bachelor's degree with 24 anthropology, comparable to tho required of anthropology majors at this University; (3) A B.A. degree in any field and raduate study in apthropriate Students whose background in anthropology seems inadequate may be required to fulfill specific admission to candidacy. admission to candidacy.
Deficiencies will be determined by the departmental graduate adviso atter consultation with the stude transcript records.
Advancement to Candidacy (1) Acceptance into the M.A. program by the department; (2) Satisfaction of the general advancement to candidacy
(3) Approval of the candidate's graduate program by the
departmental graduate adv (4) The candidate must have Aken ANTH 501 (Development of Anthropological Theory) and AN, or
510 (Proseminar) or equivalent, or must be registered in the courses the time of advancement to candidacy
Requirements for the Master of Arts:
(1) A minimum of 30 units of upper division and graduate 500-600 leve in 2 rogram approved by the Graduate Advisor. These 30 units must include the
following courses: ANIH 501, 510 (2) Up to six units of course wor Anthropology may be included in the An-unit total;
(3) Competence in appropriate research skills. These may includ familiarity with computer languages training and facility, or a reading knowledge of a foreign language,
(4) Either A) a Comprehensive

Courses (ANTH)

\section*{Lower Division}
100. General Anthropology (3) F,S

Generar introduction to anthropology induding for non-majors.
110. Introduction to Physical

Anthropology (4) F,S
Physical nature of human beings; relation humans to other animals; heredity and
pincipipes of biologgical evolution; human princicipes of biological evicution, Mumain
foosils;
significance of of phyical variaio in modern populations, the ooigin and
value of oultural behavior. (CAN ANTH \()\)

\section*{120. Introduction to Cu}

Nature of culuture; a comparative and histerican approact to the reilioion. social organization great variety of cultures arcund the world; the meanings of human nature. cultural universis
10. Introduction to Archeeology (3) \(F\)

Survey of methods used by archaeologitats to understand the growth and deverolopment human oultures; diocoveries in word-wion
prehistory from the Old Stone Age to the lron

150. Elements of Human Integration (3) s An integration of social, phyyiological and
poychological factors which infuence or poychological tactors which influence or
deetemine our dialy liwes: taught from an 70. Introduction to Linguistics (3) S
 202. Quantitative Methods in Anthropology (4) F,S This course is doesigned to help students
trengthen their quantitative skills. A broad lange of topics will be covered with emphasis being placod on the analysis of large datasoets,
computer graphics, research doesign, and computerer graphices, reseacroh dosign, and sottware programs. Datasets used in this class
have a multicultural base and are derived from vavaiety of fields including anthropology and histor. The courre eepperienco will assist
students in their efforst to develop research
 Upper Division
3051. Radical Social Analysis (3) \(F\) Prearequisies: ENGL 100 and upper dimion
 current critical theory and analysib. 3071. Modernization
Perspective (3) \(S\)

Prerequisites: ENGL 100 and upper division


 change which began with the accuance of
teahnology, the rise of capplalism, the technology. the rise of captailem, the
abandonment of "old values," the increasing complexity of bureaucracaly, and a lowering of
social bariers. Exploation of all facets of social bartiers. Exploation of all facets of
modeeninzation utiling filmma, iliscussions and
 and GEOG 307 .
311. Human Adventure (3) S Prerequibthes: ENGL 100 and upper division status. A synthesis of Anthropology and
Maxism; examination of the procesoses of Maxclution; exam reverutition in the provecospesent of humanity, tronal
perestoka
313. Peoples of the Worl (3) F ,

The origin of human beings and their cultures,
the development of agiciuturue, the growh of
 world- -ide pree
to the lion Age.

\section*{314. Peoples of the World:}

\section*{14. Peoples of the
thnography (3) \(F, S\)}
hocent and contemporary cultures around the vordd; a comporative survey of their eocologic adaptations, social institutions, technolog
subsoitence strategies, degroes of complexity nd patterns of change.
318. Human Genetics (3) F Prereaquisites: ANTH 110 or equivalent Biology
course, ANTH 202 or an equivalent quantitatin course. Genetio background for normal and human reproduction, peegnancy, penana human reproduction, pregnancy, prenat
diagnososis and bith defects; introcuction opplation and, evolutionary genetica applibation to social, moral, legal
*319. Human Growth and
Prerequistes: AnatomyPPhyiology 107 or 207 Anaysis of the sequence of events it the
 eath from

\section*{321. North American Indians}

Comparative study of traditional Nation American societies, socicial ragantizanalion, beoliel varieds andivionmentions: crats antural adapalation thanges in 322. California Indians (3) Survey of native Califonian groups: discussion It the diversity of aboriginal cuiture prior to estern contact as background for analasis of hercultuaral olelations

\section*{323. Peoples of Mexico}
suney of presentiday peoples of Mexico and Contral Americai; indigenous and mestizo cutitures and the
recent change.
324. Peoples of South Americ (3) \(F\) Sunvey of the present day peoples of South
America; tribal Indians, peasant communties

 Europoan, and Atrican heritiage
*331. Soviet Culture and Society (3) S

 patterns, polifici
Telations, and
modeent times.
*332. Chinese Culture and
Society (3)
Society (3)
Antriopologicical perspectives on revolution,
socialien and insitutional change in China
sethic ethnic diversity, family and kinstip patterns politis, economy, international relations, and
religion in premodern and modern times. *333. Cultures and Societies of st Asia (3)
Comparison of ecological, social, and symbolic
systems of mainland and island syuthe Asia Emphasis of traditional cultureseas of agricultural and small.scale societeses. Effects covered.

\section*{*335. Japanes
Society (3) F} Society (3) F
Cultural and social institutions; kinship, family
structure, religion, law.
structure, religion, law, polititse and economy
trom tradtional to modern times.
*336. Peoples of Africa
(3)
(3) F

Survey of the peoples of Atrica; social and cultural organiziatoon in 1 Oth and and 2ath conluturies;
problems of colonialism and development. \({ }^{* 345}\). Anclent Civilizations of (3) F

Origin and growth of the Azteo, Maya and other
civilizations of Mexico and Central Americe
347. Prehistoric Cultures of

North America (3) S
Archaoological evidenco of rigig and drowth of
the native American cultures north of Mexico:
tegional cultures and broad continental egional cultures and
patterns of development.
349. The Prehistory of California and the Southwestern Uniled and tates (3) \(F\)
Development of the native cultures of Califionia
and American Southwest trom the earliest 351 . Sex Roles and Cuttiod *351.
arboreal mammals; functional and evolutionary asporeal manmals, Lunctional and evolutionary offects of size: primate ecology; sunvey of the
Order PPimate:
Prosimii, Tarcoidea, World and Old World Monkeys, Hominoids. 4121. Culture and

Communication (3) F, Introduction to oulture and its influence on the
communication process in the \(1990^{\circ}\) s. Emphasis on proastical application to
Itoreutural and Ateroultural and multicultural situations. Atertion to cuturual patterns in America and communicative beheheviori; vultuaral dimenemisions of
 approaches to human interactio
*413. Language and Culture (3) S
Relation
problem Relation of language patterns to oocial life;
problems of meaning in croces culurual communication and language transestaturion: and religiopus contacto. Nusineses, government to students with crediti in ANTH 440 .
\({ }^{\text {(3) } F}\) F \(16 / 516\). Urban Anthropology
Comparative analysis of development and role
of urban centers in ancient and modern culturese interelelationshipso of urband and rural populations; patterns of similarity land
differeno en in urbais of contrasting cultures;
implications for aniut 417./517. Applied Anthropology (3) S trerequilites: ANTH 120 and upper division the instructor. Applications of anthropopogogical theory. knowiedge and skills to problem
elated to community development, education medicine and publico hearment with speciel
ieferenco to cooss colturual porblems. 19./519. Concept pand
419./519. Concepts and
Theories of Ethnic Identity (3) F Prerequistes: ANTH \({ }^{120}\) (3) upper-division/graduate standing or permission of the instructor. An examination of omscopets and theories of ethnic identity and
coculturation/assimilation, as well as the acuses of ethnic contifict and the means of the
asooution. Traditional grading only. solution. Traditional grading on (3) F . Education Across Cultures
crose cultural perspectives on aducation in on-wostern
435. Human Evolutio (3) S
reerequisistes: ANTH 110. Fossil evidence for man evolution witura consideration of the mporance of cultura factors. \({ }_{\text {* }}^{\text {436 }} \mathrm{S}\). Medical Anthropology (3) S Prerequaistes: ANTH 353 recommended
interation
environmental elements in human response to disease; emphosisis on an eacosystem appoproaeh
with evolutionary and comparative *450. Archaeological Field Methods (4) S
Methods of recording field data including mapping, drawing and photography; pratico
in the use of field equipment; particiopatio in
 easible. May be offered on Saturcdays. 451./551. Laboratory Techniques
In Archaeology (3) S Prerequisites: ANTH 140 ar Prerequisites: ANTH 140 or consent of the
instructor. ANTH \(451 / 551\) is designed introduce studentst to the techniqueses uesed io
procoesing collections in an archaodolical
 evevant to the kinds of analysis current archaeology today. Considerable emphas
will be placed on the kinds of behaviora Inferencos that can be derived from labovaton analysis of artifacts and other culturaratitem
(animel bone, plant seods, etc), ats well as the

470./570. Linguistic Flel

Methods (3) F,S
This course introduces the stududent to the Throuctioal study of help of antaniliar language non-Europeoan language, the stucentenk will learn how to witite down the sounds of the languag
and how to determine the structure of the anguage. Po deteremine thete: an itructure of ither Iguistics course. (Leecture/Disacussion: 3 hour) *475. Language and Gender in
Cross-Cultural Perspective ( 3 ) Analysis of men's and women's communication An ityssis of men's and women's communication in interperting corveratational interactions in the U.S. and eisewhere: accuisition of gender
differencos;


\section*{*480 F}

Introduction to skeletal anatomy, measureme
 \(* 480 \mathrm{~B}\). Ostre and morphome \(* 480 \mathrm{~B}\).
(4) S

\section*{(4) S \\ Presercuisites: ANTH 480 A or consent} instructor. Osteoclogical anayyis of onsent
matereials; deteection of patholocical
 archeological sites
*490. Special Topics in Topics of ane (3) Topics of current interest in anthropology
selected of intensive development. May be repeoted tor a maxivum of siximentit. Mopics wil
be announced in the Socheodule of classes.
495. International Perspectives: ducation in Cultural Continuity and Change (3) S
Explorese varying interpetations of the role of
education in society: as a transmitite of outure andor as an agent of political, ecoconomic and social change in economically developing 99. Guided Studies in thropology (1-3) F,S
Aopes in anthropoology and preparation of osearch report. May be repeated for aximum of 6 units.
Graduate Division
501. Development of
(3) F

Prevequisites: Serior or graduate standing. A Unthropology as a a os the dentifovelopment of and of leading onthropoplogistst, , past and presen 505. Practicing Anthropology
(3) F

Terequisites: Graduate Standing. History of ractiaal contributions by anthropologisita mphasis on ettnicacadinomity getrings, in the United States. \(\begin{gathered}\text { Coverage } \\ \text { inchiques. }\end{gathered}\) of research
interliciplinary
linkages ommunication skellis and action strategies en field. Traditional grading onls.
ferequisistes: six units of upper division anthropology courses, consent of instructor unthesing of antata, datata manipulataion and the Mrting of technicaa and interperputiare eeporta. No pen to students with credit in ANTH 502 . (3) F Comporative anaysis of deveroppment and role
of ruban conters in anciont and modern
outures; interelationships of urban and rural uitures: intereleationships of urban and rur

17./417. Applied Anthropology
(3)
ferequisites: ANTH 120 and upper division standing or graduatas standing op permission of meory, knowedodoe and skilis to problemen heory, knowledge and skilis to problems
lelated to community development, ducation.
medicine and publica heath with special medicine and public heath with
reference to crose-uitural problems.
19./419. Concepts and Prerequistes: ANTH \({ }^{120}\) an ppper-division/graduate standing or permissio af the instructor. An examination of concopopt culturation/assimilation, as well as the
causes of ethnic conflict and the means of tis
resolution. Traditional grading only. 522. Applied Anthropology Practicum (3)
 (may be taken concuruenty), or permission of
the inhtuctor. Communtit-based group pooject empheasizing methods of data a colletion and
analysis in applied anthropology. Protesosional anaysis in applied anthropology. Protiessional year. May be repeated once with different
topi. 551 in Archaeology (3) S Preseracuistes: ANTH 140 or consent of the
instuctor. ANTH \(551 / 451\) is designed to instructor. ANTH \(551 / 451\) is designed to
introcuce students to the techniques used in procossing collections in an archaeoological labooratory and idedentising atrtibutuse of artiracts
relevant to the kinds of anaysois urrent in relevant to the kinds of anapysio current in
archanoology todya. Considerable emphasis
 inferences that tran be derived trom laborotary
anayyis of artitacts and other cuturual tiems
and (conimal bone, plant seods, etc), as well as the
context of labocatory
opeations
 560 A. Qualitative Research in Anthropology (3) \(F\)
Prerequistes: Graduate standing or consent of
 methods (tarticiparnt-observation, the ease
stucy, interiewing, and content, trace, and

 research probems and eethics,
ethnographic report wititing. Tradtional grading
ondy 560 only. 560B. Quantitative Research in
Anthropology (3) \(S\) Antiropology (3)
Prerequisithes: ANTHS60A or permisesion of
instructor. Techniques of quantuative research

 poychologoical/cogntive tests)! sampling
procedures, data analysis, statistical tests, data interpretationvexplanation, presentation of
reeuts in reports, and research probleme. resuats in reporis, and

\section*{570./470. Linguistic Field}

Methods (3) F
This course introduces the student to the Through the help of a natiliar languages non-European language, the student will learn how how to dow the sounds of the language languawe. Preresquiste: an introductorn
linguisicis. corrse. Leecture, diccussion 3 hours.)
597. Directed Readings in
Anthropology (1-3) F,S

Prerequistites: Senior or graduate standing and consent of instructor. Solected topics in
anthropology \(\mathbf{y}\) will be studied in dopen anthropology will be studied in depth. A wither
00. Seminar in Ethnology and Topics of substantive and theocetical Toples of substantive and theoretical six units. (3) s

Prerequilistes: Six upper divion units in important recent discoveries; contemporary Ideas, trends and droblemme. May be repeated

\section*{630. Seminar in Anthropological} 630. Seminar in A
Linguistics (3) F

Preerequisite: Consent of instructor. Areas and valuation and intensive scoutiny. May be ed for a maximum of six units. 640. Seminar in Physic
Anthropology (3) S

Preerequiste: 6 units of upper division physical anthropology or other upper division work in the
biologgical sciences. Materials and methods of iosearch in humman evortution, May be repeated or a maximum of six units. 675. Internship in Applied
Anthropology (3-6) Prerequistes: ANTH 510, 522, 417517, Prereaquate
4400500 \(\qquad\) .nhance professional preparation in applied. nhtropology. May br ropeated onco for credit
CrodiliNo Creodi grading only, Course may be opeated for a maximum of 6 units.
,S
Prerequisist: Consent of department. Resear
in anthropocogy on an individual basis. 698. Thesis (1-4) F,S Preerequiste: Consent of department. Planning.
preparation and completion of a thesis in 699. Thesis Seminar (2) F Presentation and cititiue of student writing with mphases on contitent and sty.e. Must be texken twice for credit Mraditional grading only.
Counse may be repeated for a maximum of 4

\section*{Asian and Asian American Studies \\ college of Social and Behavioral Sciences}

with foreign language training and an understanding of Asian culture and civilizations. Language study useful in advanced study. ducational enhancement, self-development. Asian language courses are also appropriate majors offered by the University.
Students in all programs are encouraged to integrate the study of Asian peoples across the Pacific with that of Asian American
communities in the United Sta and to support the study of culture and society with appropriate anguage training.
The department curricula provide students with knowledge and occupations and careers including teaching, school adminisistration,
social work planning, communications and the media, foreign business and trade (2) professional work in the Asian American community, (3) exploring emphasizing and focusing on ethnic minorities.
Through courses of its own and those of cooperating departments,
the Department of Asian and Asian American Studies offers the B.A. and M.A. in Asian Studies, a Minor in Asian American Studies, a Certificate Asian American Studies, and a Certificate in Japanese. The department also offers a Concentratition in Asian American Studies under track II of the Bachelor of Arts in Liberal Studies. (See Additional information and Bulletin.) elative to the programs are available through the department office,
FO3-340 Bachelor of Arts in Asian Studies code 2-8508)
choosing an Asian options for the select one of two may concentrate in an area study a social science and humanities
based study of one or more specific Asian societies, such as China,
Japan, India, or Southeast Asia the student may choose to focus on sian American Studies an Americans as ethnic minorities wit supporting investigation of the
countries of their historical origin.
Requirements for the Bachelor of
Required of all students
(1) ASAM 220 or ASAM
(2) ASST 3001,3011 and 492
(3) three semesters (or the (3) three semesters (or the
equivalent) of a single Asian language, chosen from courses in Chinese, Japanese, or an Asian language approved by the
undergraduate advisor.
Upper Division: A minimum of 2 units; students should select one o the following two options:
1. Area Studies Track: 21 units o
upper division work, including A/ST 492 (Proseminar in Asian Studies) and additional courses selected from the list of approved electives with the following provisions:
more than nine units shall be counted in a single discipline as art or history, (2) no more than 9 units shall be credited that Asia, chosen from among the Sollowing: China, India, Japan, Southeast Asia. No more than, 6 can be applied toward this equirement (N.B. In the case seminar, thematic, or variable topic
courses, the assignment of a disciplinary and/or geographic category will be made by the undergraduate advisor in consultation with the appropriate
faculty member ) faculy member
II. Asian American Studies Track selected from the lisist of appork, electives with the following provisions: (1) A/ST 492 (Prosemina
Asian Studies [3 units] (2) nits of upper division Asian American Studies including ASAM
310 and 345 ; (3) the remaining
per division units focusing on one eographical area of Asia, chose geographical area ol Asia, cho
Tom among the following :Chi
ndia, Japan, Southeast Asia. Minor in Aslan American Studies Requirements for the Minor in Asian American Studies (code 0-8430):
A minimum of 22 units which
must Studies 200 or \(319,220,310,345\) : (b) nine units selected from among the following: ASAM 330, 340,
\(350,370,371,380,490,499\). , Cortificate in A
A student may earn a Certificate Aslan Studies with a concentration on either China, Japan, India, or Ourses used to meet the certificate equirements also may be used to satisfy the General Education quirement and the major and eaching minor requiremen
Requirements for the Certificate in Asian Studies:
(1) A bachelor's degree, with a ajor in a discipline other than Asian Studies. May
concurrenty;
(2) A minimum of two semesters or its equivalent of an approved Asian language which is to be selencentration: of concentration
(3) A/ST 3001, 3011 and 12 units of pper division work divided among wo or more disciplines. These are to rea of concentration and in consultation with the student's dvisor. No more than six units in ny one discipline shall Certificate in Aslan Am Studies (code 1-8010) Students pursuing any approved degree or credential program of the University may at the same time ear a Certificate in Asian American
requirements may also simultaneously be used, wher applicable, to meet General degree or credential requirements of cooperating departments. Certification of successtul
issued upon the reco
Requirements for Certificate in Asian American Studies:
1. A bachelor's degree with a major other than Asian Studies. May be completed concurrently; 2. A minimum of 30
distributed as follows:
\[
\text { (a) ASAM } 20000
\] (a) ASAM 200 or
370 (required), plus (b) additional courses selected from: ASAM \(310,330,340,34\) 350, 371, 380, 490, 499. (See approved list of courses
below). Interested students should apply Interested students sh
to the Department Office. Certificate in Japanese
(code 1-8080) The Certificate Program in Japanete offers stuedents an
oppotunity to develop spoken and written competency in modern Japanese, and to acquire a broad introduction to various aspects
raditional and modern Japan. The program is designed for
students who intend to pursue a career in the private or public sectors, for which knowledge of
Japan and the command of the language is useful or necessary, language is usetu or neecssary,
also for students who intend to pursue a graduate program in which such knowlec are required
Requirements for the Certificate
(1) A bachelor's degree (may be earned concurrently with the
certificate) certificate);
(2) 15 units of 400 level Japanese language courses,
(3) 12 units of Japan-related upper division work from at least two
disciplines. These units must be selected with the approval by a Approved Courses
\[
\begin{aligned}
& \text { For Major in Asian Studies, Minor } \\
& \text { in Asian American Studies, }
\end{aligned}
\] Asian American Studies, Certificate in Asian Studies and
Certificate in Asian American Studies: AST 3001, 3011, 310, 320, 406, \(544,551,592,610,695,697,693\) \(544,551,592,610,695,697,698\)
ANTH \(311,322,333,335, * 419\),
 ART \(113 \mathrm{~A}-\mathrm{B}, 466,467,468,469\),
\(470 * 497,598 \mathrm{~V}, 598 \mathrm{~W}, 598 \mathrm{X}, 590 \mathrm{Y}\)

5982, *611; ASAM 190, 200, 220,
310, 330, , \(440,341,345,350\)
371, \(380,490,49,49,23,320\),
 HEA 325,326,
\(406, * 490, * 499\)
* on an approved Asia-related topic.
Master of Arts in Asian Studies The master of arts degree in Asian studies is an interdisciplinary legree offered by he Asian Studie epartments. It is especially departments. It is especially air eaching, foreign service, or foreign rade.
Prerequisites
(1) A Bachelor's degree with a ajor in Asian Studies; or (2) A Certificate in Asian Studies, as evaluated by the or its equivalen as evaluated by the Chair of the American Studies. Equivalency will. normally, be granted for work Asia-related studies at CSU and/or at oner academic
instiutions, including a minimum of
18 units in no more than four 18 units in no more than four disciplines with a minimum of six
units in each of two disciplines of concentration plus two semesters o an approved Asian language. O
courses with a substantive courses with a substantive Asia-related content are acceptable (3) (3) A bachelor's degree in one of humanities, or fine arts with 24 units of upper division Asia-related
courses. These courses must be ourses. These courses must be major in Asian Studies at this University. Deficiencies will be after consultation with the student and after study of transcript records Students whose undergraduate prerequisites are inadequate will be before advancement to candidacy
and will receive unclassified graduate status until all deficiencies
Advancement to Candidacy:
University requirements for advancement to candidacy;
(2) Completion of 6 or more he required units (not including anguage) with a minimum 3.0 verall GPA
(3) Approval of proposed orogran or stuay,
Wrting Proficiency Examination of the Requirements for the Master of Arts in Asian Studies (code 5-8508):
(1) A minimum of 30 units of approved upper division and 592 and ASTT 610. At least 18 units must be in the \(500-600\) series
composed of units earned at this Composed of units earned at this raduate seminars, Directed Research or Thesis. Seminars can total of six units of Directed Studies or Readings may be used to atisty degree requirements. A maximum of six units will be given
or AST 698 for those following the hesis option.
(2) A minimum of three upper division units in each of two disciplines of concentration must be aken preparaory to seminar work.
Students should take at least six units of 500/600 level work in each
of the two disciplines o
concentrations:
(N.B. Determination of the Studies or any other courses taken at CSULB or other academic sstitutions shall be at the discretion onsultation with faculty, sylabi and reading lists, assessmen of transcripts, etc.)
examination in each con written disciplines of concentration or thesis. Students must have received permission of the graduate advisor, faculty adviser and prospective allowed to file for the thesis option. Once selected, a student may not change his/her option.
(4) Six units (beyond the B.A Asian language orpprovaed by or the Graduate Advisor approved by the quirement, either by transfer of redits from another institution or by asessment of proficiency by
the Graduate Adviso of the epartment of Asian and Asian American Studies.
Upper Division Courses Acceptable for the Master egree in Asian Studies
AST 406, 543, 544, 551, 592,
S10, 695, 697, 698, ANTH 331, 332,

 598X, 598Y, \(598 Z, * 611\), ASAM 490,
499, C/LT \(403, * 499, * 522 * 550\) CHiN \(331 A-B, 370,4412-\mathrm{B}, 490\), 499, ECON 370, GEOG 326, *494, \(* 497, * 650, * 697\), HIST 384, 385,
\(386,407,488, * 498, * 510,682\) 386, 407, 488, *498, *510, 682, 405A-B, 441A-B, 490, 499, *LING
\(539, *\) PHIL 499, *697, POSC 362 , \(364,366, * 489, * 4997\) * \(449 * * 600\)
\(* 610\) *PSY 539, *W/ST 490, *499. (*) course must be on an
approved Asia-related topic.

Asian Studies (A/ST)

\section*{Upper Division:}
300. Traditional Asia (3) \(F\) Prerequisites: ENSL 100 and upper division
status. Introduction to traditional civilizations of China and India with somee referernce to to Japan and southeast Asia. Cutural aspects will be emphasized to
diversity of Acia.
3011. Modern Asla (3) S

Prevequisites: ENGL 100 and upper division
status. Emphasis on the development of Asia status. Emphasis on the development of Asia
since the 1 ish century and it since the 1 ith century and its rote in the
modern word, with some attention to the experience of Asians in the U.S. Continuity and change, reform and revolution in culture.
politiss and the ecconomy will be inclucded.
310. United States and Asia (3) F,S

This is a course designed to answer the basic
question: How is Asia important to the United question. How is Asia important to the Unitec
States and vice versa? Focusing on the Slates and vere versa? Foxusing on the
post-1945 period and addressing the question of deopendence eva interdependencese four main
areass will areas milt be examined: (1) key reifiousus, social
and political patterns in Asia; (2) crose-cultura)


320. China and India in Fiction and Film (3) F,S
This courre focuises on Asian-Western
interactions and particularty on Asinan West interactions and particularly on Aslan-Western
perspectives of this interaction as manifested in
fimen film and works of fiction. The focus will be China and India, although considideration will bo 406. Asian Women (3) S Historical experience of women in Asia, with
emphasis on Chinese and Japanese societies
linke emphasis on Chinese and Japanesese societies
links with the experinco of Alian Amerian
women. Same course as HIST 400 and WIST \({ }_{406}^{\text {women. Same course as HIST } 406 \text { and W/S }}\) 424./524. Principles of Asian
Health Sciences (3) F,S Prerequisite: \(\begin{aligned} & \text { Upper } \\ & \text { Presents the phision standingophical, historical, clinical }\end{aligned}\). and scholarly qualities of Asian heath sciences
to promote heath, prevent disease and tre
 Asian and western health care systems and
individual heath practices. Traditional grading only ( (same course as HSC 424,554.) *490. Special Topics in Asian
Studies (1-3) F,S Studies (1-3) F,S
Topics of special interest in Asian Studies
selected for intensive stucty. Topics will be selecoed of intensive study. Topics will be
announcod in thens scheodulu of Classes. May be
repeated with different topice to repoeated with different topics to a maximum a
six unit. 49 . Studies (3) F,S
Prerequisites: Consent of the instructor
Introcuuction to research methods; intensive study of solected concopoptual and theoretical
troblems in Asian or Asian American Stuiees Area and dibciplinine of empheasis will vary trom year to year.
4951. China Heritage (3) S Prerequisites: ENGL 100 and upper division
status. Cultural heritage status. Cultural heiritage exploperd through
history, philosophy, religion and scienco, sicd history, philosophy, religion and science, sidd
by side with the fine arts; seen as the totality of a people's humanistic experience. (Lecture,
dicaussion and fim) discussion and film.).
499. Directed Studies (1-3) F,S Preterequisite: Consent of Instruttor. Directed
studies to permit individual students to pursue stucies to permit indididual students to pursue
opics of special research interest. May be be repeated for a maximum of six units. Tradtional grading only
Graduate course descriptions are found in the departmental listings in which they are offered. Graduate
courses applicable for the degree (onsly when the focus is on Asia) are
A/S 524, \(543,544,551,592\) AST \(524,543,544,551,592,610\), 695, 697, 698, ANTH 517. 511, 570
597, 697; ART 598V 598W 590,
 GEOG 650, 67\%; HIST 510, 682 H/SC 424 LING 533 ; PHIL 697

\section*{524./424. Principles of Asia}

Prerequisiste: Upper division standing Presents the phibosophical, histotical, diliciaa
and scholarty qualtites of Asian heath and scholarty qualities of Alian heatht ciciencos to promote heath, prevent diveease and treal
ilines. Comparisons are made with selected Asian and westem heatht care systems and individual heath practices. Traditional grat
onty. (Same course as \(\mathrm{HSC} 524 / 424\). 543. Religions of China (3) F,S Ancient Chinese religious thought; the penertation of Indian Buddhism and Cr'a (Zen): popular religion and the reiligion of the
scholar-fficial. Emphasis will be on origina lexts in translations: Not open to students wit credit in RSTT 343
544. Religions of Japan (3) F,S The tranemisision of continental ccilization to Japan; shinto, Budahism and Tokugawa
Neo-Confucianism; Genroku culture; and the New Religions. Emphasis will be on original texts in transatations.
creacit it \(R\) RIST 344 .
551. Hinduism (3) F,S

Survey of ancient, clasical and medieve
Hinduism.
Emphasis on analy linduism. Emphasis on analysis
Upanishads, Bhagavad Gita and the vaiou Ppanishads, Bhagavad Gita and the variou
path of Yoga. Not open to students with credi
in \(\operatorname{FST}\) T551. in RST 351 .
Studies (3) F,S
Prerequisites: Consent of the instructo
 study of selected concoeptual and theoreticicia
problems in Asian of Aspian American Studied Area and diecipinine of emphasis will vay too year to year. May be
of six units.
610. Sen

Selected topics in Asian studies. Area an dseipline of emphasis will vary trom year to studies. Graduate studuents in other diocoipline may enroll with consent of instructor. Mand
repeated for a maximum of six units.
695, Directed Readings (1-3) F,S
Prerequisites: Consent of Graduate Adviso
basis.
697. Directed Research (1-3)
F,

Prerea
Prerequisites: Consent of Graduate Advisor.
Research in Assian Studies on an indivivual
698. Thesis (2-6) F,S

Preerauiste: Consent of the Graduate Advioor. Planning, preparation,

Aslan American Studies

\section*{Lower Divisio}
070. Language Skills (3) F,S Not open to students with credit in LSK 170 .
 creatil only. Counts as part of stadident course
load but does not carry graduation crodit. 102. Aslan American Experience (3) F,S

Quest tor identity of the Asian minorities in
 which contrinent the Asian American. Emphasis
on smal group interaction and counseing of Indvidual students.
170. Language Skills (3) F,S Preerequisit: A recorded total score of 151 or
above on the English Placement Test, or credit above on the English Placemenent Test, or crodit
in ASAM 070 (or tor sequivient and consent of
ine instucto F Focien the instructor. Focuses on organizational
metheds and techriques for writing methods and lechniques tor writing grammar, and some c citical reading tecchniques
for term papers. Primarily for Asian American for torm
students.
and 190. The Tao Primer of Basic Reasoning (3) F,S
This course focuress on the natural language of
Tho aphorimms used for informal and tormal
 besic anaybic stipese of cloas, ratical, and
creative thinking: and applying the Tao creative thinking: and applying the the
ppinipieses and processes of reasoning to contemporary. commonplace, and intercuilural
issues and pioblems logically and practically 200. Asian American Inter-Ethnic 200. Asian Americs
Relations (3) \(\mathrm{F}, \mathrm{S}\)

Sehavior and orientation of Asian Americans as a minoritingoroup: emphosis on the natiuns of
their relations and their pattern of interaction theit relations and their patterna of interaction
with ofher minorities as well as the madointy
uiture. cuture.
220. Aslan American History
(3) F, S (3) \(\mathrm{F}, \mathrm{S}\)
History
of History of the arrival, settiement and
experiences of Asians in America from the
180) experiencos of Asian
1840 's to the present. Upper Division:
310 . Education and the Asian American (3) \(\mathrm{F}, \mathrm{S}\) Examining problems and potentials of a
muti-1-racial classerom for the understanding of muti-1-aciac classocom for the understanding of,
and relating to students of, diverse cutural
 Ameican. Smal group intera
counseling of individual students.
19. The Ethnic Experience in the J.S. (3) F,S

Einnic Studies 319 is an examination of the cuturual society, emphasking stucy of the foul Asian American, Blicack Amemicican. Mosicien
American, and American Indian) and theicit American, and American Indian) dand theit rom
 319, AIIS 319, BST
Lectueroliscussion.

World War II (3) F, S
Background to and impact of vacuation and Icarceration of Japaneses Americans during
 340. Aslan American Family (3) \(\mathrm{F}, \mathrm{S}\)

Study of the Asian American family as a social
institution: emphasis on the infuence and nstrutition: emphasis on the infifence and
consevuences of the tradtional Asian values nd the impact of Western culture in
ormation of a distinct family fie stlye.
41. Asian American Women
(3) \(\mathrm{F}, \mathrm{S}\)

An intercisociplinary examination of the roles
expectations statutuand and contributions of Alian omen in the experiencce of Asians in America. 345. Asian American Community Analysis (4) F
Socioeconomile, poltical and cultural profile of of community organization. Treining in com 50. Ind (3) F,S

Introduction to the languages, culture, socio vietnamese, Cambodian and Lactian peopole bing to the United States, and the problem and issues related to their new homeland.
370. Asian Man and Woman in America (3) F,S
Roles as indididuals, as sexval counterpartis majoitity culture. Small group interaction and Malority cinturere. Smali group pind 371. Holistic Health and Asian mericans (3) F,S Focuves on the Asian and Woestern holistic
phyyical, social and mental-heath priniplipes are peresiar ot mentia-heath pinciples
anderstanding of such issues as stuxuality. understanding of such isves as sexuality.
 dindual's dalily ife-style plan. 380. Asian Philosophies and
Religions in America (3) F,S
 and reficions in the Ameicican environment. indindual and social values in America.
490. Special Topics in Asian
American Studies (1-3) F,S

Prerequisite: Consent of instructor. Topics of
current interest in Asian American Sudies
Ond selected for intensive development. May be
epeated for a maximum of six units. Topics will be announced in the Scheocule of CClasses. 499. Directed Studies (1-3) F,S Prerequisite: Consent of instructor. Directed
studier so permit individual students top ourrue
topics of special research interest. May be epeated to a maximum of s six units.

\section*{Chinese (CHIN)}

\section*{Lower Division}

221A-B. Fundamentals of Chinese (4,4) F,S
Preerequisite for 221B: CHIN 221 A . Introduction
to pronunciation, reading, wititing, conversation, and grammar. Students, with previousersation, training
Upper Division:
331A-B. Intermediate Chinese (4,4) F,S
Preerequiste for 331 A : CHIN 221 B . Prerequuisite
for \(331 \mathrm{~B}: \mathrm{CHIN}\) 331A. Continuation of firs year Chinese. Further development of syntax,
grammar and sentencee pattems, reading, witing and convereation. patterns, sudents tingth
previous trining or or native speakers of Chinese
may not enroll.
370. Chinese Literature in
English Translation (3) S

Readings in translation of representative works
of the major Itierary genres in China covering Poth the classical and the modern period. Previus knowledge of the
deasiable, but not necoesary.
41A-B. Advanced Chines \((3,3)\) F,S
Prerequisite: CHIN 331 B and consent of the Chinese inviviling advancoed patterns and expressions, Emphasis on reading.
comerehension,
idiomatic usace
vocabulary building and
490. Special Topics in Chinese
(1-3) \(\mathrm{F}, \mathrm{S}\)

Prerequisiste: consent of instructor. Independent
study undor superisiol of of a faculty member.
May be iepeated tor ay be repeated for a maximum of 6 units. 1-3) \(F, \mathrm{~S}\)
(1) Studies in Chinese Prerequisite:


Japanese (JAPN)
Lower Division
221A-B. Fundamentals of apanese \((4,4)\) F,S Prepequisiste for 221B: JAPN 221A. Introduction and structure of the language. Native speakers of Japanese may not enroll
00. Calligraphy (3)

History and Theory of Shodo (Japanese calligraphy.) Practioe in acthual wititn with a
brush to develo skills in kanit and kana. brush to develop skills in kanii and kana
Pussit of simplifed yet multidimensional beauty by means of one color which is sum
hik. Previuus knowledge of Japanese is helpuly ink. Previous knowledge of Japanese is helpful
but not required. (Leeture 1 hour, laboratory 4 houra.)
31A-B. Intermediate Japanese
Preerequisite for 331 A : JAPN 221B; prerequisite
for 331B: JAPN 331A. Continuation of frist year appanese.. Further development of listering structure of the language. Continuation of first year Japanenese. Progressive dillicon syyntax and grammar and sentence patterns: reading
transiation and composition. Native spoakers of Japanese may not entroll.
350. Japanese Language,
Culture, and Communication (3)

S
Study of Japanese language and cultur inrough sociosinguisticiage and culture
perspectives Exploration of the intererelationship between the
language and cutirue fy focusing one erbal
and nonverbal communicative behaviors. language and oulture by foccusing on verb
and
Tradtionanal gradiding omly.
370. Japanese Literature in
English Translation

Readings in translation of reperesentative works
of the maior literang genres in Japan covering Readings in translation of representative works
of the malor ilierary gennes in Japan coving
both the ciasicical and modern period. Previnus
 ours.)

\section*{05A-B. Conversational}
apanese \((3,3)\) F,S
Preerequilite: JAPN 331 B or its equivalent as determined by the the ingtructor. Advanced
study in modern \(\begin{aligned} & \text { spoken Japanese and } \\ & \text { Japanese communication. }\end{aligned}\). \({ }^{\text {and }}\). 441A-B. Advanced Japanese \({ }_{(3,3)}^{441 \text { F }, \mathrm{S}}\)
Prerequisite: JAPN 331 or it it equivalent as
Petermined by the instructor. Study of moder
 spoken and wititen Japaneses. involing
ackanced patterns and expressions. Emphasis
on reading comprehension vocabulan on reading comprefension
451. Japanese Civilization (3) F Prerequisitios: JAPN 441 B or equivalert
Introduction and exploration of characteristio eeatures of Japanese owilization and curctistur rough stucying selecteded topiciss and themem social sciencoes. Tradtional grading only for
maileraminors. alos minis.
60. Selected Readings/Writing Japanese (3) F,S Prerequisitio: Japanese
instructor.
Readings
44B contemporary witten matetials intion iduing
Iiterary works, poetry, magazines, newspaperse iterary works, pootry, magazines, newspaper
eports, instructional and technica explanato materias. May be repeated under differert

1-3) \(\mathrm{F}, \mathrm{S}\) Prerequiste: Consent of instructor. Selec
opics related to advancoed Japanesese study. 499. Directed Studies in
Japanese \((1-3)\) F,S rerequiste. Consent Preerequisite: Consent of instructor


\section*{Certificate in
(code 1-8425)}

Students majoring in other departments of the University but interested in Black Studies may at the same time e pursue a program leading
to a Cettificate in Black Studies. Courses used to meet the certificate equirement may, where applicable General Education requirements or the major and minor requirements of cooperating departments.

\section*{Requirements
Black Studies}
1. A bachelor's degree with a major in a traditional discipline. (Certificate can be completed prior to or
simultaneously with completion of the simultaneousty with
2. A minimum of 24 units of which at least 12 must be in upper-division courses, with two or more courses selected from each of the following:
Group A: B/ST \(110,210,325,330\), 332, ,330, 370, 420; Group B: BST
160, 340, 343, 346, 363,450 : Group
160, 340, 343, 346, 363, 450; Group
C: B/ST 120, 121, 200, 201, 304, 337.
C: B/ST
Requirements for the Minor in
Black Studles
A minimum of 24 units of which east 12 units must be in upper-division courses, with two or more courses selected from each o the following: Group A: B/ST 110,
\(210,325,330,332,335,370,420\);

200, 201, 304, 337, 400, 410

\section*{Courses (B/ST):}

Lower Division:
070. Language Skills (3) F,S Not open to students wiht crevidit in Language
Skilis 1770 A. FCocuses on intensive develocoment of
 Counts as part of studentits course load but does not carly graduation croodit.
110. Introduction to Black Studies 3) \(F, S\)

Survey of maior themeses issues and concopts of Black Studies. Emphasis given to majoro schools maior scholars of the ditacioliline. Special astention mailo scholars of the discipiline. Spocial attention
will also be given to the histocical evolution and academic rationale for Black Studiee.

Black Studies
115. Introduction to African 115. Introductio
Politics (3) S

A review of recont dovelopmentis or changes in
the government, paatioe, political ideologies
 120. Afro-American History to 1865 (3)
Survey course which presents a description and
analysis of Atrican colitzations shorty before the coming of the European. It will aloo focus on the impact, significance and role played by the
Atrican from the colonial period through the American Revolution, to the Cril War. 121. Afro-American Histo 1865-Present (3) S Preerequisites: B/ST 120 or permission of
instruct. Impact of social, economic and political. changee on Blicacksial. in Amernomica anter the
Reconstruction period Black and Reconstruction period. Black migration
education, oultural development and busines ectucation, cultural develop
entieprises will be examined. 140. Introduction to
erican Literature
(3) \(\mathrm{F}, \mathrm{S}\)

A study of selected or representative ilierature of Ahe Atican-American witer. Snecivel aterention wil
be given to style, content, methodology and th 150. Critical Thinking and th
Minority Experience (3) S Provides anaytical tools for appling critical
thinking to the development of academic skill and to the anayysis of social lisues. Include instuction in inductive and deductive reasoring analyzing types of meaning (denotative
connotative) and their retevance to social issues
 trom opinion
155. Afro-American Music (3) F Nontechrical survey of Atrican-American music
Some attention given to the impact of social some attention given to the impact of social
movements on the musician and the music
procucued. Gospel., iazz and well produced. Gospel, jazz
defivatives will be highlighted.
160. Introduction to Black Arts (3) F,S
A prosentation of prevaliling themes,
methodocogy concopts and meaning in Atican
att Equal methodology, concopts and meaning in Atican
att Equal time is give to contemporary art and
att of recent histor. The work of at of et econt histor., The work of some Atican
artists highlighted as appopiate. 167. Exploitation of the Black 167. Exploita
Athlete (3) \(F\)

Study of the socio-dynamics of amater
 United Stateses as it itelates to the Atrican-American
community. Case studies of well-known Black athletes will also be presentied.
170. Language Skills (3) F,S Not open to students with credit in Language
Skilis 1778 P. Preevaquite: A reocrded total score
of 151 or above
 creadit in BST O70 (or it equivalent) and consent
of the instruct. Focuses on organizational
methods and techniques for witing methods and teccuniques for wition wing
compostitional and expository prose, acvanceed grammar and some cititical reading techniqua 180 . Black Langu in students. (3) \(F\) (3) F
Historical, phonological, and sociological of theal, languagogogical, and sociocioloical aspects
Ebonicics trom eariy use in in Ebonics trom early use in trading off west coase
of Africa; linguistic development from lingua of Africa; linguistic development from lingut
tranaa top picgin and creole; linguistic symbols
 190. Racism In the American Military (3) S
A concibe review of the alternate policies of
excclusion,
restriction,
segregation
and exclusion, restriction, segregation and
conseripion of the African-American in the ammed
and consaripition
200. Ancient African Clivilizations (3) S

Prerequisite: BST 120. A study of ancient African mpires and kingdoms. Tupics incolude migration cultura transmission and commercial trade. 201. History of Slavery (3) F,S Historical examination of the transA.Alantio slave Hemisphere, with maior emphasis on the nature of slavery in Africa, Greece, Haly, the Caribbean,
the Middie East, South America, and the United States. Slavers's athermathen on social integration America and other countrin
(3) F,

This course will examine the social structure and
changes in the community life African-Americans as compored to other ethnic
 demograaphic changes, social movements, an
community organizational programs affei community organizational programs, affect
Blacks. Several cass studies will be periesented to
underscore the stemgnt and resiliency of the underssore the stren
Black community.
240. African and African American Folklore and Culture (3) S An examination and prosentation of material
folktikere, ololk tales, and folk heres sin the Black community.
mythology.

\section*{70A,B. Elementary Swahil} 4,4) F,S
For those students who would like to learn the

 mastering the erammar and devevoping reading udent should be able to converse using prop

Upper Division:
304. World Colonialism (3) F A survey of comperative historical and Westem Europe and America that influescoed in focus on Africa, India, and China.
310. Black Male and Female Relationships (3) S
A compretenensive study of malefemale patterns
of interation in the Black community. Some of interaction in the Black community. Some
attention given to institutional impact, rde changes and projected images of relationsthips. 319. The Ethnic Experience in the
U.S. (3) F,S Ethnic Studies 3 Ethnic Studies 319 is an examination of the
dynamics of the development of our mutioutur sycietye emphaszing stucucy of the four distinal ethnic, strands of Ameican socierty (Asian
American, Slack American American, Black America, Mexician American, maintenancoe of oultural diversity in the United
States States. Same course as diversity in the United
319. ASST 319 . AIS Lectue/Discussion. CHLS 319, W/ST 325. Psychology of Minorities (3) \(\mathrm{F}, \mathrm{S}\) Prierequisite: B/ST 110 or PSY 100. This course
develoss the Using comparative of techniquesity peychology. lecturers, this course introducces the student to experience of being a minorityequerson. 330. Politics of the Black Community (3) F,S Prerequisist: BSTT 210. Study of the perspectives stries, problems and cynuamics of politicalal activity in the Black community
331. Black Juvenile (3) F,S Prereqcuisite: B/ST 210 or consent of instructor
Cititaca appraach to the problem of juvenie
justice in the black communty justice in the black community. (3) F,S Rights and the Law
\[
\begin{aligned}
& \text { Designed to provide the student with a basic } \\
& \text { Dunderstanding of the inteaction between }
\end{aligned}
\]
Designed understanding of the interaction with a between the ather minorities, system and civil rights of Black 335. Economic Development in the Black Community (3) F,S Prerequisite: B/ST 121. Development of business
and dakking institutions in the Black community.
and and banking institutions in the Black community. factors on development. 337. Cultures of the Pan-African
Peoples (3) FS Peoples (3) F,S Preerequiste: B/ST 2 2u0 or consent of instructor. emphaszing geography, migration and culture similarties.
340. Research Topics in Arican-American Literature (3) F,S

Preerequisite: B/ST 140. In-depth presentation and analysis of selected issues and dominant
personalities in Atrican-American literature: personanality and insuue to be matiched. 343. African and Caribbean Literature (3) F,S
General survey of contemporary African
Caribbean, and Afro-American literature within the context of the political, social, ecocounomic, and cultural movements. Comparisoon of Pan-Afician 345. Politics of Black Pow
345. Poiltics of Black Power
Systematio analysis of the Black Power
movement of the 1900 , induding contributions movement of that 1960 os, induluding contributions
and contraditiono of malor organizations,
leadership, and ideoologies. 346. Black Theatre (3) F,S An introductory survey course of Black Theatre as humanisitio, literaray, social and cultual heritage sit relates to Africa, America and the Caribbean. 353. Black Religion (3) \(F\) The nature and use of reiligion in Aftica and their
manifestations in historical and contemporary manifestations in historical and contemporary
Arican-American communtites. 363. History of African Art (3) F,S antiquity to the presennt, with principal focus on antiquity to the p
370. Black Images in the Mass Media (3) F,S
Prerequiste: B/ST 121. Examination of the pontryay of Black. preople in the mass media, past nd present. Primayy em
30. African Political Theory (3) S Prerequisite: B/ST 115. Examination of theoritse
and theories which shape Atrican poltical hilosocies which shape African political
Special attention given to the concoepts of Pan-Afticann
Negitude and revolution.
381. Blacks and Party Politics
(3) S (3) s

An analysis of Black participation in the U.S.
poltical party proceses. polticial party process. Special features will
include intomation on Black participation in the
Repulinen Reppublican, Democratic and tinitict.party
organizations. Material and discussion on organizations. Material and discussion on
indeendent Black political party efforts will also
heindude be included.
400. Afro-American Social

Thought (3) S
Survey of Atrican-A
Sunvey of Aftician-American intellectual history.
with empheasis on social theories and opposing
schoolis of intellectual thought.
404. Contemporary Issues of the
Third World Nation (3) F S (3) \(\mathrm{F}, \mathrm{S}\) study of the shiting power and internationel
status of the Black world. Geo-politices and the diplomatio policies of solectect countries will bo highiighted.
410. The Black Family (3) \(F\) systematicic stury and a social historicial analysoin of the structure and function of the Black family
the United States. There will also be socilogicicaltheoreticical analysuls and review of the modelos of family units, rolese and interpersonal
elations in society. The theoretical perspective will provido a tramework to oompare and contrast
the Black tamily and other family units in America. 420. Black Childr
Schools (3) F,S

Theories, concoepts and principles relating to the
intellectual growt, development and learning of intellectual grow
Black children.
423. Problems in Psychological Assessment of African Americans (3) \(\mathbf{F}\)
Prerequistes

Prerequibites: candidiates must have a working
knowedege of statistical concoepto
 instructor. Examination of issues, problems, and practicicen.

\section*{424. Advocacy for Black Child} Mental Health (3) S Prerequivites: Upper-division standing or consent heathth neoteds of Atro-American csentidrem, theil logal and educactional ights as well as preventive and remedia measures. Throughour he courso
amphasis will be place on many facos of
acrocacy - the building of a system of dellen acrocacy - the builing of a system of doliven phevertive and remedial needs.
in the Twentleth Century (3) \(\mathbf{S}\) The course is a cortical examination of Aticate
search in the zoth contury for national liberation

 leaderstip concoepts and/or styies, and moden
forms that have evoved since contact with the Europeans, will be undertaken. Focus will bo o selecteon countries and maior. Atricion leaders Lusophone, Francophone, and Anglophone
Atrica. The content of the leaderss ideas will be anayzed; socio-porition- Coconomic forcoses giving 432 Advanced Studies in 4fro-American Music (3) F,S Prerequivite: B/ST 155. Stucy of the development,
 450. Black Writers Workshop (3) s

Trerequisiste: ENGL 100, B/ST 170, or equivalen.
This course This course reauires extensive witing in four
maior areas: pooty, drama, fiction and docoumentariese it at assumes that tecenhical ac grammatical problems of writing heve besen taken
care of and focuses on themes which are Afrocentric
451. Black Legal Remedies (3) S Prerequiliste: BSTST 331 or 332 A A review of current
or recent laws and court decisions which directly
 judicial procesure and obtaining assistance tion
law enforcement agencies will be covered in consideratabe detail.
452. Ecology of Black Crime (3) \(F\)

Prerequiste: BST 210, 331 or 332 . Study of the intereleationships between the black criminal, the
minorotiy community and the criminal fustice
460. African Thought (3) F Prerequisite: Backround knowedge of Atrica
trom history, policical science, anthropology
 philooophical and reiligio
475. Racism and Sexism: An
Analytical Approach (3) F,S Prereauiste: B/ST
instutuions and a stucy of log exibation which has been witten and implemented in consequence of raciem and sexism in American sociely. Social
theories used to support concoents of racism and theories used to support concer
sexiem will aloo be presentec.
490. Special Topics in Black Studies (1-3) F,S
Preerequisite: Consent of instructor. Topics of
current interest in black studies selected tor current interest in black studies sopected for
intensive devalopment. May re repaed for maximum of six. unit. Topics will be announceed
in the Scheduie of Classes. in the Scheoruie of Classe 495. Research M
Studies (3) F,S Prerequuisites: BST 110, SOC 255 or equivalent
statisitise course, and six units upper statistics course, and six units upper-division
work in Black Studies. This course is for the Department maior. It will present information on the use of scientific methods in Black Sturiee
research theory, research design, sampling research theory, research design, sampling
measurement and science techniques. \(1 t\) mil also
tecis tocus on instrument construction as well as
reiliabily and validity. reliabirity and validity.
Prerequite: Consent (1-3) F,S
 research interest. May be repeated to a maximum
of six units. of 9 ix units.

\section*{Chicano and Latino Studies}

Department Chair
Adela de la Torre
Department Office: FO3-310
Telephone: 985-4644
Faculty: Professors: Federico A. Adela de la Torre, Jose Lopez Rodolfo D. Torres; Assistant Professor:
Victor Valle.
epartment Secretary:
Students desiring information
should contact the department office or referral to one of the faculty

Adela de la Torre
The Department
Chicano and Latino Studies courses are designed to provide a and culture of the Latinos in the United States. The department ofiers programs to serve the entering a variety of occupations including urban studies,
government, journalism, social work timinology, law, foreign service, and other related areas, (2) teachers, ounselors, administrators, (3) majors in other fields such as history sociology, psychology, economics include additional scope to their field of study.
Bachelor of Arts in Mexican
equirements for the Bachelor of Arts in Mexican American

Lower Division: A minimum of 15 units distributed as follows: Core
Courses ( 15 units, required). CH . 00, 101, 105, 205, 230; Cultural studies (electives): 040, 103A,B 104, 203, 205; Social Inquiry
(electives): 100, 101, 105, 230,
Upper Division: A minimum of 2 Units distributed as follows: Core Courses (12 units, required): CHLS
courses (12 units, ré
Upper Division (continued): 12
units selected from Cultural Studies units selected from Cultural Studies
(electives): \(390,395,402,405,420\) 30, 490, 498, 499; Social Inquiry (electives): 300, 310, 319, 340, 350,
\(352,380,400,415,443,490,498\), 499. Social and Behavioral Sciences
Requirement: The student will select six units of coursework in the Social
and Behavioral Sciences from the options listed below, according to he area of concentration selected within the major. These courses
shall be in addition to courses selected to fulfill the requirements of ny General Education Category. Group I (Humanities): AIS 340 ,
ASAM 380, B/St 340 , SC 485 , WIST 410; Group |I (Social Sciences): AIS 200, ANTH 345 ,
ASAM 345 BT ASAM 345, B/ST 400, HIST 364,
GEOG 470, POSC 359 , SOC 445, W/ST 401. Group III (Education): /ST 420.
Departmental Requirement: Two years of college Spanish, or a grade
of \({ }^{\prime} C^{\prime}\) or better in \(C H L S\) 203, or the uccessful completion of a Spanish proficiency examination are required ff all majors. (If the student is quirement may be met by uccessful completion of the
roficiency examination.)
Minor in Mexican America
Studies (code 0-8817) A prerequisite to taking this mino panish courses, recommended by e Chicano and Latino Studies Department advisor or the intermediate Spanish proficiency xamination
Requirements for the Minor Upper Division: a minimum of 24 units distributed as follows: 12 units 310, 350, 498; 9 units selected for the following Cultural Studies 390,
\(395,402,405,420,430,490,498\), \(395,402,405,420,430,409,498\)
499 ; and Social Inquiry 300,31 499; and Social Inquiry 300, 310,
\(319,340,350,352,380,400,415\), 443, 490, 498, 499 .

Certificate in Mexican American tudies (code 1-8817)
Tepartment program which estabilished a program which offers students
interested in this field the opportuniy o pursue courses leading to a ertificate in Mexican American Studies. Courses used to meet this certificate requirement may be
counted also, where applicable oward the General Education equirements and the major and cooperating departments. Requirements for the Certificate Mexican American Studies: (1) A bachelor's degree with a (2) A minimum of 24 units distributed as follows: 24 units core requirements: CHLS 300, 310, 350, 498; 9 units selected for the ollowing Cultural Studies 390, 395 ,
\(402,405,420,430,490,498,499\) and Social Inquiry \(300,310,319\), and
\(340,350,352,380,400,415,443\)
\(490,498,499\), 90, 498, 499
Spanish and English:
A 24 and English
A 24 -unit minimum, 15 of which
must be upper division, 12 of which may also count as part of Liberal Studies Core. (These courses should be designated as applicable
to the appropriate categories.) Lower Division: SPAN 201A (4) or CHLS 203 (3), SPAN 201B (4). Upper Division: SPAN 312 (3),
SPAN 313 (3), ENGL 420 (3), CHLS 402 (4) or SPAN 427 and 425 (6) SPAN 322 (3)
Note: ENGL 420 should precede
CHLS 402 . SPAN 313 is prerequisite for SPAN 322.
Courses (CHLS
Lower Division
040. Bilingual Communication Skills-English (3) F,S
Prerequisite: To be taken concurrently with
CHLL 103 B Basio fundamentaus of English
communication for students of bllingual
 part of student's course load but does not carry
100. Introduction to Chicano Studies (3) F,S This is an introductory-tevel course designed
with two goals in students with the most important social Chicano experience in the United Stateo. The second gooal is to disocuss these ideas Clationship to their historic celevanco tiem. Traditional grading only.
101. Introduction to Chicano Life (3) F,S

This course is designed to introduce students
to the study of chicano cuture and socien in the southwest U.S. from 1540 to the 19800 . Th. course will emphasze three topicis: 1 1) The
cultural formation and transtomation oid Chiciano community) 2 ) trane relationship
between culture and identity; 3 ) The dynamic
 role of women in shapi
Traditional grading only.

\section*{103A. Billingual Comm
Skills-Spanish (4) \(F\)}
rerequiste: Plecen ( \(F\)
Prereauisite: Placement. toest. Deeigned for
those students from a Spanish spoaking
those students trom a Sparish ssopakin
backeround who have mininama ability in the
103B. Bilingual Communication
- Spanish (4) S

Prerequisiste: Placement test or completion of
103A. Designed for those students from a Spanish-spoaking background who have an
opal-aural communicative skill in the language oral-aural communicative skili in the language
Students completing this course may enroll in \begin{tabular}{l} 
stu \\
203. \\
\hline
\end{tabular}
104. Bilingual Communication
kills-English (3) F,S
Prerequisiste: A recorded total score of 151 o
above on the English Placement Tees, or creodit in CHLS 040 (or its equivalent) and consent of
 105. Identity and Assimilation in Chicano Life (3) F,S
An interdisoiplinary introcuction to the study of infural and historical Chisuens that have trom pre-Columbian times to the present. survey of Mexican American regional cultureo and development of oscietal divisions based on grading only.
203. Spanish for the Native Speaker (3) S
Meets the needs of blilinual students whose cultural backround has prepared them to
special foms of accelerated Spanish special torms of accolerated spanion
instruction. The succeasstu completion of ttis
lower lower division course will enable the stul
enter upper divioion classes in spanish. 205. Introduction to Chicano

Literary Studies (3) F,S
Introductory surney course in Mexican and
contemporary literary stries and forme from
selected translated Mexican and Cricano readinge.
230. Chicano Community
(3)

Anayysis of Chicano, community groups;
emphasis on development of community organizational techniquía
300. Chicano History (3) F, Chicano's role in the settiement and
 coni rights mous.
310. Chicano Thought (3) F Study of the ideas, philisophies and events affecting Chicano lifie; identification and
examination it the chicano wordid view, of a
Chicano reality. Chicano reality
319. The Ethnic Experience in the
U.S. (3) FS. U.S. (3) F,S

Ethnic Sudies 319 is an examination of the myuticulurual of society, emphesasingent of our four distinct othnic), strandsos of Amperican soociey Asian American, Black American, Mexican
American, and American Indian) and their role
 Unitec States, Same course as SBS S20, AMST
319, AIS 319 ASAM 319 , BST 319 , WST 319 .
340. The Chicano and Education (3) F Analysis of the falure of achool systems to
meet the needs of Cricano studer and consideration of the changess in and consideration of the changess in
philiosoph, curicium, methodogy and
ehating and guiciance procodures that must be nade.
350. Sociology of the Barrio
(3) F

Anaypois of social institutions in the Crica community. Surrey of educational, political
celigious, economical and religious, economical and social systems. Field
work will be required to provide
relative experiencos.s. Seame course as soc 340 . 352. Central American and (3) S

Sunvey of the socioc
uitural life of the



 is otiered. Similartites with and dififerences firom examined. Same course as SOC 341 . 380. History of Pre-Columbian
Mexico (3) F Mexico (3) F History of Meso-America trom pretistaric times
to the Spanish conquest. emphasking the stuuty of the societios and the reiligious and Intlectual life of people of ancie

3901 The "Hispanic" Southwest Historical and Literary Images

Prerequiste: Junior Standing. Ciritical
 southwest as depipted in historicial and iliterary
works by both Anglo- and Mexican-Americans .ecture
95. Latino Cultural Images in

Film (3) F
Cititical. intercisciplinary examination of
selected Latino cultural trats and values as these are depicted in motion plat
documentaries, and other types of film. 400 Chicano Roots in Modern Mexico (3) S
Etiects of the political and cultura evolution of nodern Mexico on the Cricanos of the
southwest as demonstrated by the concueset War of indopenonosictate, the revolution and
Contemporary times.
402. Bilingual Linguistic Studies
(4) \(F\)

Prerequiste: \(T\) Two years of colloge lever
Sparibe. Stucty of the Sparisish and English Inguissio patererss of the C Cpicano, specifically
the suuthwester Unitid tstates.
405. Chicano Literature (3) Prerequiste: Reading and listering
comprehensioin of Sparaish language plus any upper division Ilierature class. In depth stuy hemes and gornese of the iliereaturue of the
Chicano and by the Chicano in English and Chicano and by the Chich
415. La Chicana (3) F,S

This course is designed to sunvey the historical movement on the Chicano communty Comilas work will include the analysis of the unique actors of Chicana Feminisem as comporered to 20. Chicano Heritage in the Ar of Mexico and the Southwest (3) Historical and philooophical analysis of Inciar Lestzo and Cricano plastic arts, music and Chicano heritage
433. Psychology of the Chicano
(3) F, S

Pereaquiste: CHLS 100 ar consent instuctor. Significance of the "ppi' phenomemena conative development of the Mexican Ame and \(i\) the segregated barrio and integrate Physiological and pyschological theories Pincipipes and practices relative to the ar a comparison of Mexican. and Westet athoolocoy in educational and posychologicical wsearch endeavors. Traditional grading only


Director: Kathleen M. Maher Public Affairs (SPA), Room 206
The Department
The Computer Studies Program operates the Social Science
Computer Laboratory in SPA 206, and Computer Laboratory in SPA 20 program and courses.
Certificate in Computer
Applications in the Liberal Arts code 1-8050)
This program offers a broad computers to prepare students to be 24 to 27 units variety of areas of computer use. Skills to be acquired include: -Knowledge of computers and formation systems sufficient to permit graauactes somputer experts.
effectively with comer - Ability to serve as a liaison etween colleagues who lack computer expertise
- Ability to run applications
programs and explain the results to colleagues.
- Skills in the use of information ystems.
- Ability to identify needs for and benefts derived from implementatio of computer systems in a
applications area.
Requirements for the Certificate in (1) Ater Applications: (1) A bachelor's degree (2) Completion of at least eight courses (with a grade of 'C' or better) (3) Approval from the Director of the ertificate Program for the student's Course selections.
The coursework for this Certificate is The first four categories contain required courses and students must complete all of the courses in the fir
four categories for a total of 15 or 16 our categories for a total of 11 emester units. The ematine course categories include elective course
courses, including at least one from ach category, for a total of twelve substitute upper division courses on computer applications which apply directly to the student's major area of
study (or a directed studies course for this purpose) for one of the elective categories. Such substitutions requir program
Most students will take nine courses (27-29 units) in order to obtain the
Certificate. Students entering the Certificate. Students entering the program with sufficient prior compute
experience may mit the introduction - Computers course if they recei approval fiom the Director of the only need to complete eight courses or the Certificate. Students seeking he Certificate in conjunction with a courses taken to complete the Certificatet toward completion of their major (or the University general applicable.
Required Course Categories: Students must complete all of the
courses in these categories for a total of 15 or 16 semester units.
(1) Introduction to Computers and Computer Programming: C/ST 200 or equivalent (3 units), and one of the
ollowing: C/ST 280 ( 3 units). or MATH 272 (4 units), or MATH 273 ( (3 units);
(2) Social Impact of Computers.

CSE 345 ( 3 units);
(3) Seminar in Computer
Applications: C/ST 493 ( 3 units) (4) Information Systems: EDST 452 3 units)
Elective Course Categories:
Students must complete four of the ollowing courses, one of which must botal of 12 or 13 semester units:
(1) Human/Computer Interface: 551 (3 units each):
(2) Data Analysis CIST 210 or 477 (2) Data Analysis: C/ST 210


345. Computers' Roles in Today's

Society (3) F,S
Prerequisite: CSE 242. Study of the impact of
computer technology on contemporary society. Introcuution technology on contiomporary society.
the technology: hardware and
percoettion software Perceptions of computers.
Appications sunveyed in various fields. Design of systems with considieration of human. factorsi.
naterials fee may be charged. Same course CSE 345 . (Leecture-problems 3 hours). 477. Advanced Data Analysis (3) s

Pererequisite: One course in research methods,
wo courses in statistics, plus a course in
 of SPSS and BMDP to perform a wide variety
data analysis methods inoluding multivariate anaysois. Sample design, data screening and
information retrieval techniques with special Information retrieval toconhiquues with speci
consideration for handling large data bases.
490. Special Topics in Computer
\[
\begin{aligned}
& \text { Topics of special or current interest in omputer } \\
& \text { sotulies selected for itenive stuy. }
\end{aligned}
\] (Lecture-disocussion 3 hours.) May be repeated to
493. Seminar in Computer Applications (3) S
Prerequisite: Senior standing and at least three
computer clasees. The cuilmination of work tor the computer clases. The culmination of work for the
Cerifitioate in Computer Applications. Students Ceritificate in computer Applications. Studertis
will study computing failitites avalabie in their
choen chosen application area, prepare oral and witten
reports of their findings and demonstrate a selected example computer program.

Economics

Department Chair:
Depeph P. Magaddino Science/Public Affairs (SS/PA),

Telephone: 985-5061 Beaumont, Charlies L. Cole, Simeon Crowther, Constantine Glezakos, oseph P. Magaddino, Marshall \(H\). Medoff, Dennis D. Muraoka, Robe F. Rooney, Elbert W. Segelhorst,
Gene R. Simonson, Davinder Singh, va Lee Skov, Andrew Stern, Associate Professors: Roy C. Anderson, Alejandra C. Edwards,
Michael J. Farrell, Judith A. Roberts, Assistant Professors: Peter B. Grifin, Lisa M. Grobar, Jack W. Hou Emeritus Faculty: Eldon J. Dvorak, J. Richard Powell, Rober Debbie Rose
The Department
Students desiring information should contact the department or referra to one of the facult Crowther; Undergraduate Advisor: Muraoka; \(G\)
Segelhorst
When resources are scarce, difficult choices must be made on how esources are to be divided among social science that addresses the allocation of scarce resources. When of individuals as consumers,
managers and government oficials. When applied to society as a whole, predict the economy's total output, vel of employment and price level nflation).
Bachelor of Ar
(code 2-8510)
The bachelor of arts degree with a major in economics prepares the tudent to qualify for a varie
overnment. The degree also
provides the foundation for teaching eld for more advanced study in
economics, business, law and other
Requirements for the Bachelor of Arts in Economics
Lower Division: ECON 201, 202,
ACCT 201, C/ST 200, and MATH. 115B. Student declaring Economics as a major in upper-division status may substitute ECON 300 for
201 and 202 with departmental consent.
Upper Division: ECON 310, 311, ourses in acono aditional upper division courses in economics of which al The following courses may not be sed to satisty the elective requirement in economics: ECON
\(300,303,308,3091,352,495\), and 499.

The Department also requires a Economics (totaling six or more units) in addition to courses fulfiling any ategories of the General Educatio equirement. Students may take any departments listed below, or any of he following lower division courses
ANTH 100. GEOG 100: HIST 131 . 32; MATH 117, 122, 123, 224, 246 POSC
100.

While students may freely choose m the Department's upper division ourses, exclusive of the courses and the Department strong with the undergraduate advisor in lanning his or her program. The hat students select a program of study that satisfies their intellectual nosity and serves their career reas* have been devised to aid students in selecting upper division business or government are advised 0 select at least two courses from Group 1: Business Economics -
ECON \(320,333,422,430,432,434\), 55; at least one course from Group Quantitative Economics - ECON 20, 481, 486; and at least one Accounting-Finance - ACCT 310,

410, ECON 433, FIN 362, 464, or C E
Pre-Law Economics: Students hterested in preparing for a career in aw are strongly recommended to \(313,320,430,432,434,450,451\), nd 455 General Economics: Student background in economics are encouraged to take at least one groups:
\[
\begin{aligned}
& \text { roups: } \\
& \text { Group I: Economic History, } \\
& \text { Svstems }
\end{aligned}
\]
\[
\begin{aligned}
& \text { Systems and Institutic } \\
& 313,3601,3611,368 .
\end{aligned}
\]
Group II: International Trade and evelopment: ECON 465, 471, 472 conomics: ECON 441, 444, 445 oup IV: Public Economics: ECON 437, 450, 451
CON Quantitative Economics ON 420, 422, 481, 486, 483. preparing for graduate training in ECON \(313,320,420,481,486\), and ecommended to enroll in the ollowing mathematics courses: 381. Students considering graduate study in economics should consult an enior year.
*Not all program areas are available or students enrolled exclusively in the evening. Evening students should graduate advisor in planning thei

Minor in Economics (code 0-8510) The economics minor is designed to itroduction to the methods of introduction to the methods of students planning careers in many elds including primary and or government. A minimum of 24 law units which must include: Lower Division: MATH 115B, ECON 201 and 202. Students declaring the minor CON 300 for ECON 201 and 202
ECO with departmental consent. Upper
Division: \(E C O N\) 310, ECON 311 or

320, and at least three addition upper division economics courses, of evel. The following courses may not be taken as upper division electives in economics: ECON 300, 303, 308,
3091, 495, and 499.
Minor in Business Economic ode 0-2775)
The minor in business economics is baccalaureate degrees in
The minor provides students with a strong concentration in the techniques f economic analysis most closely elated to business decision-making
A minimum of 24 units which must Aclude:
Lower Division: ACCT 201 or MATH tomputer departmentally approved computer science course, (Student declaring Business conomics as a minor in upper-divisios status may substitute
ECON 300 for \(\operatorname{FCON}\) 201 with departmental consent.)
Upper Division: ECON 310 or 333 , 11 or 320 , and any three of the 434.

\section*{Master of Arts
(code \(5-8510\) )}

The master of arts degree in conomics is designed to provide industry, governmentiont, consulting agencies and teaching. The emphasis
is on the immediate application of s on the immediate application of
nore advanced principles of analysis o business, management and government. Candidates are responsible for observing the general
requirements stated in the Bulletin as well as requirements specified by the Economics Department. Detailed information on requirements may be
pbtained from the department graduate advisor.
A limited number of graduate
assistantships are available to
Prerequisites:
(1) A bachelor's degree with a major
in economics; or
(2) A bachelor's degree with
units of upper division courses
major in economics at this University Deficiencies will be determined by he Economics Department.)
(3) A minimum undergraduate GPA
of 3.0 (B) in upper division economics
courses. (A student who fails to meet

Record Examination scores on the verbal, quantitative and advanced
economics sections, and pettion the Economics Department for a waiver.) (4) Graduate students must consult with the graduate advisor for information concerning department course of study before entering the course of study before entering the
master of arts program in economics. Advancement to Candidacy:
(1) Satisty the general requirements
of the University for advancement to
candidacy. candidac

\section*{Arts:}
(1) Thirty units of upper division and graduate courses approved by the Economics Department (courses
marked with an asterisk). of which 24 must be in economics with a minimum of 18 units in the 500 and/or 600
series. All students must develop series. All students must develop
three fields of concentration in economics, including economic theory (micro and macro); (2) Satisfactory completion of ECON 50, 511, 581,586 and 583 (3) A comprehensive examination in completion of course work in two elective fields of concentration with
grades of ' \(B\) ' or better in the grades of ' \(B\) ' or better in the completion of a comprehensive examination in compomic theory, one
elective field of concentration, and a thesis.

\section*{Courses (ECON)}

Lower Division
201. Principles of
Microeconomics (3) F,S,Ss Business organization, price theory, allocation of
resources,
distribution of income resources, distribution of income, publio
economy. (CAN ECON 4) 202. Principles of

Macroeconomics (3) F,S,SS Money and banking, price changes, national
income analysis, business cycles, economic
 trade. (Not open to students with credit in
Economics 200), (CAN ECON N)
Upper Division
300. Fundamentals of Economics (3) F,S,SS

Designed for non-majors. Presents basiataining in economics for social studies teachers or udgment about economic issues in public attaris. Content generally same as ECON 201 202 in condensed form. Not open to studen of the Ecconomics Department.
303. Current Economic Thought \({ }^{\text {(3) }}\) s Covers ideas and philosophies of tamous
economists and liaeding preeent-day schools of

 sweery. Miees, Hayev, Rathbord, and semevaral
thers. Emphasis on modern instutionalist school, post-Keynesian school, Chicago
monetarist school, neo-Maxist radical school 308. Consumer Economics (3) F

Consumer demand; advertising and other
infuencess affecting demand; consumer sovererignty; patterns of ocmensumer econsenumidur) soveretignt; patterns of consumer expenditure;
the connumer proteotion movement; consumer
texese, family incomes and relateod public policy texaes, famiy incomes and related public
issues. Legal and Economic Environment Selected Topics (3) F,S Preerequisites: ENGL 100 and upper division
status. A general consumer sunvival course with status. A general consumer sunvival course with
consideration of selected topicics including the consummer as byyer of goods and serices, the consumer as an iinvestor, and the consumer in
personal and HEC 3091 .
310. Microeconomic Theory
(3) F,S,SS rerequisites: Aerequisites: ECON 201, 202, and MATH 1158 .
Analysis of economic concopts and their applications to business situationss Emphasis on
supply and dimand analyis supply and demand analysis, costs of
procuuction, variations of competition and monopol,', revenues, prices, proffis and losese,
and other aspects, of the operations of the and other aspectis
business enterpise.
311. Macroeconomic Theory (3) \(\mathrm{F,S,SS}\) Prerequiuites: ECON 2011, 202, and MATH 115 E .
Determinants of levels of income, employment, and pricess: of seecular and cyclical changes in acoonomic activit; and of the eficaects of opublic
policies upon aggregative economic experience. 313. History of Economic Thought (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: ECON 201 and 202, or 300 . Prorequision os ecconomics as a a science. Doctrines of
the different schools of economic thought Suty the different schools of economil thought. Study 320. Money and Banking (3) F,S,SS

Preerequilites: ECON 201,202 and MATH 1158 .
Nature and functions of money and its relation to prices: the monetary systemo f the United States;
the functiono of banks, bank credit, foreign
exchange and monetay control.

\section*{333. Managerial Economic}

\section*{(3) F,S,SS}

Prerequisites: ECON 201, 202 and MATH 115B
(Core requirement for business students):
 Appications of mirroeconomic and
maccoconomic theory to manaegial docisisns
and planning. Anaysis of the fims'
resource and
output docisions. Pricing strategies undor various
market constraints. Investment in fixed aseeto.
 alculation of solutio.
355. Law and Economics (3) S Terequisist:: ECON 201 and 202, or consent of instructor. Analysis of economic concoptsi and Emphasis on property law, contract law, accident
law, crime control and uvicial administration.
\({ }^{3601 .}\) American Economic History
(3) \(F\)

Pereqequisites: ECON 201 and 202 , or 300 .
Economic analysis of growt and welfare in the merican economy from and welfare in the Industrialization to the erpesent, with emphasis ranstormation of our economy since the earty
nineteenth century. \({ }^{36}\) (3) \(S\)
Prerequisites: ECON 201 and 202, or 300 . European ecconomy trom the Industrial Revolutition the present, with emphasis upon the problems of economic growth, capital formation and era.
363.
363. Latin America and
Industrialization (3) S
dustrialization (3) S
Prerequisites: ECON 201 and 202, or 300 . processs of economic dievelopment and Ifustrialization of Latin America. Analyzes
ifferent approaches to economio development: the relelationship between economio growh and
international trade: the import substitution Iterational trade: the import substitution policies of industialzation and hne malien
libeorization efforts of the late 70 's. Case study
one countri.
68. Comparative Economic
ystems (3) s
Handling of economic problems in diftreing veral and coptual trameal contextex. Combith with the study of
of
370. Pacific Rim Economy (3) F Preerauiuites: ECON 201 and 202. Examines
economic backgrounds and resource bases of economic backgrounds and resource bases of of nations comprising the Pacific Rim, patiens
of growh in trade among the Pacific Rim countries, fiows of capital, activities of trade policies among the Pacific cimm ocuntions.
tand thure and hiture prospects of trade opportuntioes and Tradtional grading only
380. Economic Statistics (4) F,S Prerequisites: MATH \(115 B\) and CIST 200 . Use of descriptive and inferential statistical concoppts for economics include measures of central tendency and dispersion, probababilyy theory, discorete and
continuous probability distributions, hypothesis testing, regression and correlation anayysics testing, regression and correitaion

410/510. Advanced
Prerequibetes: ECON 310,311 and consent of the instructor. Applications of microcconomic theory. Detailed examination and analysis of particular
markets and contemporary lisues in inght of economicto theory. Spoecific emphasis is inh policy analysis for goverment and buvinese decicioion
his course is designed for exceptional This course is deesigned for excoptional
undergraduato students who intend topursua
graduate odegiee in economics. Tracitional graduate degree in economics. Traditional
411./511. Advanced
(3) S

Prevequisites: ECON 310,311 and sotructor. Applications of macrococonomice monetary and forecasting theory to operational government and business. This course is designed for exceppional undergraduate students hho intend to pursue a graduate degree in *420. Forecasting (3) F,S
Prerequiste: ECON 311 or 320 . Principipes and methods of forecasting, Evavuation of the
reliability of existing torecasating techniques. Also coverist use of ot the macraecoconomic moceli as a basis for forecasting andocthe role of forecasts in
the tormulation ot antional 420. Tormulation of national economic pol 422. Macroeconomics
Management (4) F

Prerequistes: ECON 311 and C/ST 200 Managerial applications of macrocconomio
concoepte. Emphasis on developing tois to analzze and prodiat aggregate economic activity and on promoting understanding of
 docibion making. Topics inctude: macroeconomionio and sourcose of economic data; modeling the maccrocconomy; structura, or supply-side, changese affecting the maccrococonomy; business
cycle forecasts and the use of econemic
 *430. Industrial Organization F,S erpequasites: ECON 310 or 333 . Exploration of nd performance of the relatituluely few large onterpisest hhat orignate more then two- thirds of guments for and against big businesos. mplications of separation of ownership and contol Corporate social responsibility and the
offt motive. The dilemma of ske versus compettion.
*432. Ec
(3) F,S
Prevequisites: ECON 310 or 333. The attempt of sovernment to prosucee superior aconnomio urpoctedy more compertivie makiket structures and behavio patterns on business firms. An conomic anaysis of the leading judicial
decisions comprising the modern law of antitust.

A rigorous examination of the undertying presupposition of antitrust that compoution is the
beset modil for economic activity. The future of best model for economic activity. The futurue of
antitust including a discuasion of propocals for antitrust including a diliocusion of proposals for
logistative overhaul, including repeal of existing
antitust antitusus law.
*433. Capital Theory and
Financial Analysis (3) S
Preraquilites: ECON 311 or 333 , Capital
 pptimal arapital structure, mergers and nfluences on managerial economics.

\section*{\({ }^{*}\) (3) S}

Pereverisites: ECON 310 or 333. The attempt of covernment to intervene in the eexistitemp makhel
sector for the purpose of protucing competitive and socially of pacopotabicing more practice compotitive and socially acceptable practices ccale economic organization. A Acomperehensite
surney of the past,

 egulation and derogulation and the creation, changing conccopt of the pubbicio interest. 437./537. Urban and Regional conomics (3) S
Prerequistes: \(E C O N\) 310 and 311 , and consent
of instrotor. Examines the location, spatial
organtiation
 Application of analuatical toold metropolititan regions Application of analytical
the Los Angeles region.
*441. Labor Economics (3) F Prerequisite: E ECON 310 . Manpower rescurcoes
and their labor unions, collective bargaining and rialato production, employ
income distribution.
445. Economics of Health (3) F Preerequiste. ECON 310 . Anayyulis of health as esourres. Use of tools of ecconomic theory in stuacy of special problems of heath resources
 \({ }^{*} 450\). Public Sector Economics (3) \(\bar{F}\) olequistes: ECOO 311 and 311 . The economic
ole government Analysis of the theory of
 resources between the pivate and the public
sector Pposible repponses of government
 451. Economics of State and ocal Governments (3) S
Preerequistes: ECON 310 and 311 . State and
local fiscal systems; economic anayasis of


formulating and sooving economic problems. This course as designed ior exceptional
undoraraduate students whin intend to pursea a
graduate degree in economics. Trastional grading only.
486./586. Introduction to

Econometrics (4) F,
Prerequivitios: ECON \(310,311,380\), and consent
of Instructor. Elementay exprosesion of economic theory. Combined use of
mathematios and statistics mathematios and statiatics to sobve economio
problems. Use of econometric models for tommulation of economic policy. (Leoture 3 hours, laboratory 2 hours.)
Economics (3) F/cs
Preerequistite: Consent of instructor. Topices of current interest in economics selected for intensive development. May be repeated for a
maximum of six units. Topicis will be announced maximum of six unitis. Top
*491. Senior Seminar in Economics (3) F, Prerequisites: Senior status, ECON 481 or 486 ,
and consent of the instuctor Provide opportunity for students to integrate their and computer stuciose. Designed as a semminaric in and computer stuciose. Dosionned as a seminarin
research where students will bo expected to wite a paper and present their research reautho orally.
Research topicse must be approved by the instructor.
495. Field Studies Practicum
(3 or 6) FS
(3 or 6) F,S
Prerequisitites: ECON 310 or 333 and consent of
instructor. Obseration and instructor. Obseevation and practical experience,
at a menagerial level, in an appropiate business or oovermment enterpise. Applications for
permision to enroll must be filed with the pecmonics Dopartment at least six weeks prior to
E. beginning of the semester involved. Course may
be ropeated for a maximum of six unita.
499. Directed Study (1-3) F, S

Prerequisite: Consent of instructor. Independer study under the superision of a faculty member.
May be repeated for a maximum of six units of credit.
Graduate Division
500. Business Economic

Workings of the price system in the allocation of resourcos, and the odetemination ot the level and fluctuations of aggregate economic acthity, with
speceial emphasis on the role of business encterpise in the economy. Analysis of the oconommic implications of various forms of
industrial organization and the application of public policy to business activity, including antiturust policy and regulation
students majoring in economics. 510./410. Advanced Microeconomics (3) Prereqquistes: ECON 310 and 311 , or consent of
the instructor. Applications of micreconomi theory. Detailed examination and analycie of paiticuar markets and contemporay bssees in
light of economic theor. Speofifo emphasis on

\section*{policy analy
decisions.}

\section*{511./411. Advanced}

Macroeconomics and Forecasting
Prerequisites: ECON 310 and 311 or consent of The instructor. Applications of macroceconomics, monetary and forecasting theory to operational
management and planning decisions of management and plam
537./437. Urban and Regiona Economics (3) S
Prerequisites: ECON 310 and 311 , or consent of instructor: Examines the location, spatial
organization, economic adjustment and
development of development of urban and metropolitan regions.
Application of analytical tools to the problems of Application of anayytical
565./465. Economic Development (3) \(F\)

Prerequisites: ECON 310 and 311 , or consent of
instructor.
Economic and instructor. Economic and social factors
undeotying
economic development. Analysis of problems associated with the economic growh
of the less developed countries. Evaluation of

\section*{\(571 . / 47\)
(3) \(F\) \\ (3) F . International Economics} Prerequisites: ECON 310 and 311 , or consent of the instructor. International trade and exchang of
rate theory. Types of trace conte exchange manipulutition, monopopolies. Basic U.S. and European commercial policies since 1930 . 572./472. Inter
Finance (3) S

Preerequisites: ECON 310 and 311, or consent of the instructor. Pure theory of trade.
Consequencess of balanee of Consequencoes of balance of payments
disecuilibrim for national income and prices. Tarifts, cuustoms, unioios and the theory of
commercial policy. Forelign exchange maket and commercial policy. Foreigne exche
international financial institutions.
581./481. Intermediate Economic Statistics (4) \(F\)
Prerequisites: ECON 310 and 311, or 330 or or
consent of instructor. A rigorous, tratmen of of statistics emphasking aspects relevent to economimes. Statistical inference, probablity distributions, application of simple and multiple
regression analysis to economic problems, regression anaysels to economio problems,
analysie of variance and structural anaysis of
time eseies. (Leeture 3 hours, laboratory hoous). 583./483. Mathematical 583./483. Mathematic
Economics (3) SS

Prerequisites: ECON 310 and 311, or consent of Instructor: Applications of calculus, linear algebrat and other mathematical tools in
formulating and soling economic problems. 586./486. Introduction to Econometrics (3) S Prerequisites: ECON 310, 311, and 380; or consent of instructor. Elementary mathematical
expression of eocnomic theory. Combined use of mathematicos and statititics to solve economic
 laboratory 2 hours.)
97. Directed Studies (1-3) F,S Pretequisite: Consent of instructor. Intensive
reading and/or practical research in economics. 636. Seminar in Urban and egional Economics (3) Prerequisites: ECON 437 or consent of instructor. and problems in urbian and regional economics and finanace.
650. Seminar in Public Sector
conomics (3) \(F\)
instruपuistor. Seleecected topicis in the theory of publico finance: theories of budgetary policicy, tax fustice,
shiting and incidence, other effects of taxalion, shititing and
fiscal policy.
670. Seminar in international
Trade and Development (3) \(S\)

Prerequisite: ECON 471,465 or consent of
nstructor. Solected topics dealing with current problems and solutions in intemational trace, problems and solutions
finance, and develomen.

\section*{686. Seminar in Econometrics}
ferequistes: ECON 486, 583, or consent of satructor. Development of methods for the stimation and testing of the relationships among mourposes. for prediction and economic policy 690. Se
90. Seminar in Economics
(3) \(F, S\)
tepicicu of curte: Consensent interest instructor. Seminar on apeated for a maximum of six units with different 697.
(1-3) F, S
rerequisite: Consent of instructor. Independ asearch under the guidance of a tacuity 998. Thesis (2-6) F,S Prerequivine: Consent of faculty advioor. elated to fo feeld in economica.


\author{
College of Social and Behavioral Sciences
}

he purpose of planning caree bjectives. * At the time of nrollment in 494 or 497 the studen nust obtain whiticter departmental meet systematic or methods and echniques or regional requirements
or the major.
Minor in Geography (code

\section*{\(0-8515\) )}

A minimum of 21 units consisting
of Geography 380 and 18 units chosen in consultation with an
advisor. At least 12 units must be in dvisor. At least 12 units must be in
Certificate in Cartography (code 1-8040)
Director: Dr. Judith Tyner Geography)
Advisory Committee: Dr. Robert Alexander (Civil Engineering). Dr.
Franklin Gossette (Geography). Dr Robert Kunss (Industrial Education), Greg Armento (Library) The Cartography Certificate
program offers specialized trainin program offers specialized training
in a variety of theoretical and apolied cartographic techniques. The program is designed to provide experience in communication hrough maps and serves as a
supplement to standard degree programs. It provides essential training for those seeking map naking careers in

\section*{\section*{Requirements for} \\ in Cartography:}
(1) A Bachelor's Degree, which
may be earned concurrently;
(2) Consultation with the Director
of the Program;
4) \(32-33\) units distributed as ollows:
(A) Core: 18 units (of which 9
must be taken at CSULB):
GEOG 380, 482, 483, 484, 485
and IA 352
(B) Areas: \(14-15\) units from the
following gre following groups. Group A: Mathematics and
Computers - 9 units: GEOG 400; C/ST 200; EIT 315, 315LL; MATM
101, 115S, 116, 120, 170.

Group B: Graphic Techniques and Reproduction - One course: IA 141,341 , or 454.
Group C: Fieldwork - 3 units:
CE 225, GEOG 486.
Certificate in Urban and
The Urban and Regional Studies rogram conducted by the Department of Geography and
aculty of several other departments ffers training in a variety of significant urban and regional problem areas. The certificate exposure to the analysis of urban and regional problems and serves an excellent supplement to andard degree programs at both the undergraduate and graduate
evels. It offers essential training for those seeking both private sector
and public sector careers in fields
concerned with the urban region, its
development, problems, and special communities.
Because urban and regional
problems cut across such a variety f disciplines, the program is approach. This is accomplished
within the core curriculum
tilization of faculty with
experience and within elective
elements of the certificate curriculum
by allowing students to draw
courses from a variety of other
departments. The result is a
program that provides essential regions. This approach assures a common core of essential knowledge, while allowing flexibility o each student in designing an using electives drawn from a variety of relevant disciplinary
oncentrations. The Certificate
Program in Urban and Regional
Studies is a 21 -unit course of study comprised of 6 units of core
requirements and 15 elective units.
A brochure describing the Urban
and Regional Studies Certificate
Program in greater detail is available
in the Geography Department Office.
Faculty Advisors: August Cerillo
History), Joseph Krause (Art),
Richard Outwater (Geography), Gary eters (Geography),
Economics), Eugene Ruyle

\section*{(Anthropology), Paul Schmidt
(Political Science), Elbent (tolsience), Elbert Segelhors} (Economics),
(Geography)
The University/Community Mode California State University, Long Beach is ideally
development of
deviversity/community proge ocusing on the development and problems of urban regions. Located in the City of Long Beach
(population 350,000 ) in (population 350,000 ), in the County, the University has ready access to the greater Los Angeles/Orange County metropolitan area. This large urban the study of a broad spectrum of urban/regional situations, ranging from a variety of concerns relatec areas, to the development of outtying areas of housing commercial, and industrial park uses Urban Internship Program
The Urban Internship Progra implemented through U/ST 494 . Through the program students have the opportunity to work directly in sector agencies working on significant urban problems and/or projects in the Los Angeles/Orang Placements are made in su diverse areas as land use planning, urban redevelopment, environme impact assess
(commercial/industrial), housing and community development,
transportation, historic pr transportation, historic preservation planning and management, delinquency and probation, health care systems, the urban elderly and many others
Community Service
It is the intent of the Center for coordinator to act as a both physical and huma resources attempt to direct attention in toward the concerns of urban communities and regions. Individuals, citizen groups, private sector institutions and public agencies are encouraged to direct inquiries
concerning the needs of urban communities and regions to faculty

Working within the center. Students terested in the Urban and Regiona Studies Certificate Program should apply to the Director or Urban and
Regional Studies, Department of Geography.
Requirements for the Certificate
in Urban and Regional Studies in Urban and R
(code 1-8120)
(1) A bachelor's degree
(2) Consultation with the director of the program;
(3) Twenty-one units distributed as follows:
Core requirements: U/ST 4011
and either Geography 466 ar 467 . nd either Geography 466 or 46 Elective Courses: 15 units to be more than six units taken from any
one department: AIS 310; ANTH one department: AIS 310; ANTH 469; ART 367; Asian American
Studies 345; B/ST 210; 442; PSY 375; SOC 347, 349; ECON 300 , 334, 436, 437, 441, 451; FIN 448 452; GEOG 304, 466, 467; HIST
468, 4741: HEC 342; MGMT 425: 468, 474); HEC 342; MGMT 425;
MEXA 350; POS \(327,426,442\);
UST 402, 446, 468, 490, 494, 499.

\section*{Master of Arts in Geography}

Prerequisites
(1) A bachelor's degree in geography; or
(2) A bachelor's degree with 24 geography substantially equivalent othose required for a geography major at this University; or,
(3) A bachelor's degree in a upper division courses in a combination of geography and
approved courses in related
disciplines:
(4) Completion of a beginning statistics course substantially CSULB.:
(B) An undergraduate GPA of 3.0 B) or better in geography, or graduate work:
(6) File with the department a declaration of intent to seek the
master's degree in geography. master's degree in geography.
Advancement to Candidacy
(1) See the Geography Graduat
Study Handbook:
tudy Handbook,
(2) See the general University

Requirements for the Master of
Arts In Geography (code 5-8515):
(1) Completion of courses
required to remove prerequisite
required to remove prerequisite
deficiencies;
(2) Passage of the Writing
Proficiency Examination;
(3) Completion of 30 units of approved upper division and graduate courses. A minimum of 24 units of Geography courses. If not
already taken for undergraduate arready taken for undergraduate
credit, a Cartography course (GEOG 482 and \(485 / 585\) qualify) and a Fiel Methods course (GEOG 486
qualifies). A minimum of 18 units qualifies). A minimum of 18 units of
500 -and 600 -level courses, which 500-and
must include GEOG
and
6 units, 2 , seminars and 6 units of thesis (GEOG 698). Courses (GEOG)
Lower Division
100. World Regional Geography
(3) F,S

An introductory regional geography of the
world, treating the maiol countries in terms of
their population,
resocurces, their population, resurroes, economic
development, phyyical environment and geographic problems. Especialty 140. Introduction to Physical Geography (3) \(F, S\) Systematic study of the physical environment
with an emphasis on human-environmental with an emphasis on human-environmental interaction and percoptions of environn
hazards and resources. (CAN GEOG 2) 152. Introduction to Economic Geography (3) F,S
Location and organization of the world's maior
types of procuuction, including agriculture, types
mining,
forest
products
 industries.
160. Introduction to Cultural Geography (3) F,S
Geographic aspects of culture, including the
past and present social, poltical and economic past and present social, political and economic
factors that are related tom mans pereption,
organization and use of his environment. (CAN organization
GEOG 4)
200. Introduction to Research Methods for Geographers (3) F Not open for credit tor those who already have
completed a first course in statisicics. An completed a first course in statisticio. An
introduction to the scientifio method in
and geography, with an emphasis on basic (Lecture 2 hours, Laboratory 3 hours).

Upper Division Regional
These courses examine the relationships among peoples,
cultures and their landscapes in specific areas of the world. There are no prerequisites for these
courses; their broad scope provides courses; their broad scope provides
the student with a better understanding and appreciation of the world in which we live. Thus, they are ideally suited for general
education and liberal studies. 302. The World of Wines and Vines (3) F
Not applicable to the geography malor.
Pereequiste Students must be t least 2 years
old. This course provides studentis with an old. This currse provides students with an
overiew of the world's maior grape-growing
and wine and wine-producing regions, from Calliforia to
France, from Argentina and Chile to Australia France, from Argentina and Chile to Australia.
The focus is on the requirements, both natural The focus is on the reauirements. both natural
and cultral, that must be met in order to
develop wine regions. Furthermore, the course devevolo wine regions. Furthermore, the currse
will consider world patterns of trate in wine, ae
it flows between and it fowe beetween and among aprod incing, and
consuming consuming areas. Course activities will includ
at least two organized wine tastings. 303. Southern California (3) s Spatial features, issues and problems that
characteize the Southerm Califoria urban environment. Attention is focursed on the
 portions
counties.
304. California (3) S

Califonia's diverse natural and oultural
environment with emphasis upon social and environment with emphasis upon social and economic problems and
to enviromental hazards.
\({ }_{\text {(3) }}{ }^{\text {306. United States and Canada }}\) (3) F,S

Common social, economic and political
interests of the major human use regions of the Unitied States and haman use regions of the
describes and interprets the culture patterns of ond

3071. Modernization in Global Perspective (3) F,S
Prerequistres: ENGL 100 and upper division
status. An exploration of the ways in which the status. An exploration of the ways in which the
Current psychological and material problems in current pyychological and mateitial Problems in
modern society (both westean and Third Worlo)
can be traced to a process of accelerating can be traceed to a process of thiccelerating
change which began with the athence change which began with the advance of
technology, the rise of capitaism, the
tend
 social barriers. Exploation of all faceets o
modernization utilizing fims, discussions and

(3) s

Prerequisites: ENGL 100 and upper divisio Pereequisistes: ENGL 100 and upper division
status. Human and environmental setings of
Africa Suoth of Sahara and the oultural demographic, economic setolement \&
politioal relationships that characterize them. 3091. The Middle East and North Preerquiusites: ENGL. 100 and upper division
status. Human and physical settings of the starus. Human and physical settings of the
Middle East and North Alt economic, settlement Arica and the cultural relationships that characterize them stremesing
thooe factors which underie the region's
tinstablity and dobil 3121. Eastern and Southern Asla (3) F Prerequis Preerequisites: ENGL 100 and upper division
status. characteritico tiatus. Characteristics and probolemse of pivpusula-
tion, cultural pattems, resource utiliztion economic development in eastern and southern
Asia from Nam.
316.
316. Europe (3) S The human and physical patterns of Europe
Current cultural conditions and envirionmental problems.
318. The Soviet Union (3) F,S Systematio and regional study of the physical,
economic and cultural geography of the Soviet econon
Union.
3201. Latin America (3) Prerequisistes: ENLL 100 and upper division status. Human and environmental character-
istios of Midde and South America wite istics of Midalil and South America with a focue
on the historical-utitural factors which shaped
their on the histoticaa--a sutural factors which hheped
their present-day societies and the problems of
popletion population growth, rees
economic development.
326. Pacific Ocean Area (3) F,S Regional synthesis of the physical and cultural geography of Australia, New Zealand and the Systematic Geography
These courses deal with diverse subjects and are organized to
provide the basic framework for the provide the basic framework for the he discipline.
352. Geography of Travel and
Tourism (3) \(F\)

Spatial characteristics of
Spatial characteristiss of recreational and
tourist activit. Factors of tourism, travel

440//540. Land and Water
Environments (3) S
Prerequisites: GEOG 140 and 380 or consent of
instructor. Landioms and related soil and instructor. Landtorms and related soil and
water resourcos as physical components of the
human enviromment. (Lecture-probbems and water resourcess as physical componentit of the
human envionmens. (Lecture-problems and
field experienence).
*442. Blogeography (3) F Prerequusite: GEOG 140 . A course in biblogy is
strongly recommended. Methods of mapoing strongly ereommended. Method of mapping
plant and animal dilitributions, spatial interaction with environmental liminting factoon
and man's and man's rote in temporal and spatial variation
of ecosystems. (Lecuro-problems and fielic experience.)
*444. Climatology (3) F Prerequisite: GEOG 140 or GEOL 463. oscriptive and explanatoroy analysis of the the world with emphasis on Callionia and
North America. (Lecture, problems 3 hours.) \({ }^{* 452}\) (3) Economic Geography
(3) \(F\)

Prerequisite: GEOG 152 or consent of
instructor. Location theory and its application to
 economic activities, international and inter
regional changes in the spatial structure of regional changess in the spatial structure of
economio activitee and the role of these chanoses in international and regional
development. (Lectura, problems.)
*455. Man as an Agent of
Environmental Change (3) Spatial variations in environmental change
 analysio at both
(Lecture 3 hours.)
*460. Population Geography (3) \(\mathrm{F}, \mathrm{S}\)

Introuuction to the geographic study of
population. nocludees growth and distribution of population. Includues growt and ciantibution of
word population; results of changing bithe Wortd poppulation: resuuts of changing birthe composition: related problems such as 1 tood *466. Urban Geography: Principles (3) F Examination of citioses their location, shape,
structure and function. Selocted world structure and tunction. Sal and pratical
population clusters, theoretical and
application of turan planning and the evolution apppication of urban planning and the evolution
of ofties are studied. (Lecture problems).
467./567. Urban Geography:

Prereavisite: GEOG 466 or consent
Prevequisite: GEOG 466 or consent of
instructor.
Geocraphic
compenents
 housing, evolution of ghettos, urban peaception and behavioral pataens will be discussed in
terms of theoretical and practically applied terms of theoretical and practically applied
urban planning solutions. (leature, problems 3 urban pla
hours.)

\section*{*470. Political Geography}

\section*{(3) \(\mathbf{F , S}\)}

Prerequisite: GEOG 100 or consent of
instructer. Comparative study of the eatht's instructor. Comparative stucy of the eatth's
politicall organized regions and related systems. Varied approachesesere explored, such
as
power anaycis, genetic anaysyis and as power anaysis, genetic anayysus and
functional anayysis of political units. Steses is upon popititalal osoographic concopts uved in
analyzing the viability of states and nationa anayzzing the viability
(Lecture, problema.)

\section*{Methods and Techniques}

These courses develop skills in graphic and statistical
communication and field analysis which are used within the various sub-fields of the discipline. 380. Map Reading and
Interpretation (3) F,S

Interpeteation and understanding of maps as
graphic communication, with particular graphic
cmphasis onmunication, with particiciculiar

 400. Geographical Analysis (3) S Preerequisistes: Geography 200, or Math 180, or equivient. An examination of acranced quantitative technicues commmonty employyed
by
phenomanapheners in in the analysis of spatial
 mutitivariate statistical methods as modelis for
geographical anayyisis. Emphaasis will be placed geographical analaysis. Emphasis will be placed
on the papplications of thes techniques in
ond computerics where appropiatiat.
*482. Elements of Cartography
(3) F,S

Prerequistes: GEOG 330 , consent of instructor.
Theory and
tecchniques in the design and Theory and techniques in the design and
construction of thematic mape, including experienco in the use of tasic cartographic tocls. (Seminar 2 hours, laboratory 3 hours), *483. Aerial Photo Interpretatio
and Remote Sensing (3) F Trequiste: Coneent of intucto Prerequisine: Consent of instructor. Intuduuction
to the interpereation of air photos and other
temotery
 determination of scate and height, accuivition of imager and the electromagnetic spectum. Special emphasis is placod on the recognition
of physical and cultural features. (Cecture 2 of physical and cultural faturues.
hour, laboratory activies 2 hours.)
484./584. Advanced Cartography (3) S

Preerequisite: GEOG 482. Advanced theory and lechniques in cartorapaphic communication,
including map
teriception
 computer mapping and oolor. (Lect
discussion 2 hours, abocratory 3 hours.)
485./585. Computer Cartography (3) S

Prerequilistes: GEOG 330 . Theory and methods
of mapping geographic data with a computer. of mapping geographic data with a computer.
 maps by line printer, ploterer and CRT. (SSeminar
2 hours,
abocratory 3 hours.) Tradtional grading 2 hours,
only.
*486. Field Methods in
Landscape Analysis (3)
Prerequisite: GEOG 330 or consent of hotuluding formulation of field plans, recording direct obeseration, fifild mapping, sampling schniques, interivewing, and organking and valuating data for presentation. (lectureours.)
488./588. Geographic information ystems (3)
Prerequisites: GEOG 200 or Math 180; GEOG
380; and GEOG 4855 or permision of instructoon undamental concoppts and tecchniquess of Gils are introduced and their applications in
geocraphy are explorece. Experience in the use of both microcomputer- and minh
computer-based programs for the analysie and
 ained. TTaditional grading only. (Leecture
aours, Laboratory 3 hours).

General
*494. Special Topics (1-3) F,S Prerequisite: Consent of instructor. Application
of geographical conceepts and methodology to selectedraph conctempoccarayts problemem. Thelomes will be repeated for a maximum of stix units with repeatod for a maximum of six. units wh reditied toward the major in geegraphy withou enrollment.
497. Directed Studies (1-3) F,S Prerequiste: Consent of instructor. Indiwidualy directed stucles of special problems six units with consent of departmen chaiperson. May not be credind toward the consent in acvance of enrollment.
Graduate Division
540./440. Land and Water

Prerequistes: GEOG 140 and 380 or consent of
 vater resourcose as physical componenents of the
human envionment. (Lecture problems and
teld experienecce) feld experience.)
567//467. Urban Geography:
Metropolltan Problems (3)
Preteruiuste: GEOG 466 or consent of

 and behavioral pattorns mill be discussed terms of theoretical and practically applied
urban planning solutions. (Lecture, probloms 3
hours.)

\section*{585./485. Computer Cartography}
(3) \(F\)
terequisites: GEOG 380. Theory and methods of mapping goeographic data with a compute.
noclucesi problems of acquiring and processin
 (Lerture-disc
grading only,
588./488. Geographic Information Systems (3)
Preerequibites: GEOG 200 or Math 180; GEOG
380 ; and GEOG 485 or permision of instructo undamental concopts and tercechiquiuses of Glis are introcuced and their applications in of graphy bore expliber.. Experierecce in the use mini-computer-based programs for the analysis
and diesplay of geographic information will be
and gained. Thartitional hracding only. (Leoture
ours, LLobratory 3 hours).
96. Literature and Methods In
596. Literature and

Prerequisite: Consent of instructor. Prosemina
In the methods, theory and teochicumes of

600. Seminar in Regiona

Geography (3) S
ethods of stusury common intrutor. Regiona lesearch, and their coutization to in deveveloping
640. Seminar in Physica Geography (3) S
study of areal variations in the Advancea landscape. Research menthods and roseurces. May be repeatedion once with consent of
650. Seminar in Cu

Prereauiste: Consent of instructor. Systematio investigation of human occupancy in its varie environmental and regional settings. May be
repeated once with consent of department
652. Seminar in Economic

Geography (3) F
Prerequisiste: Consent of instructor.
Fundamental reseurces and basicind the modern world. May ber repeated once with
consent of depeatment advisi.

\section*{666. Seminar in Urba}

Prerequisite: Consentt of instructor. Geographic concopts and techniquess of reseearch appplied to specific urban areas. May be repeated onco
with consent of department advisor. \({ }_{F}\) 697. Directed Research (1-3) F,S
Prerequisite: Consent of instructor. Research in
geography superiised on an individual basis. 698. Thesis (1-6) F,S preparation and completion of thesis for the master's degree.

\section*{Urban Studies Courses (U/ST)}

\section*{Upper Division}
4011. Urban Life and Problems
(3) F S (3) F,S Prerequisites: ENGL 100 and upper division
status. Not open to students with credit in 50 C
 urban scene: urban life-styies; community
patterns of land use and design; population patterns of land use and design; population
trends; oonflicts in the increasingly multioutura setting of the central city, housing and
community development: suburbancentral ity community development: suburban-central city
relationships; human utilization or urban lifo spacoss; examination of the
urbanists; and aturuet trends
446. Land Use Planning (3) F,S Not open to students with creditit in UST 490 Land Use Planning. This course provides an
examinetion examination of urban land use planning trom
the perspective of protessional urban planners. The course will focus on planning issues and areas: land use: coast following majo areasi: land use; coastal zone plannin
resource planning; urban growth, speculation and economics: design and aesthtetio isusues;
planning parameters for residences, shopein planning parameters for residdencos, shopping
centers, and induustrial parks; revitalzation of built-up core areas and transportation. 490. Topics in Urban and Regional Studies (1-3) F,S
 sele ated for intensive development. Topicics will
be announced in the Sechedue of 499. Independent Study (1-3) F,S
Prerequisite: Consent of instructor
Independent sturd under the supervision of
faculy member

\section*{Department Chair:} Department Office: Faculty Offices (FO2), Room 106
Faculty: Professor: Rifaat \(A\) Abou-El-Haj, Dorothy deF.
Abrahamse, Stephen E. Berk, David Abrahamse, Stephen Elack, David Boutelle, Albie Burke, Augustus Cerillo, Jr., Keith E. Collins, David A Cressy, Edward A. Gosselin, Albert
F. Gunns, David C. Hood, Arnold P Kaminsky, Keith I. Polakoff, William F. Sater, Donald Schwartz, Sharon L Sievers, Arnold R. Springer, Jack
Stuart, William R. Svec. Willam A. Weber; Assistant Professor:Patricia A. Cleary, Kenneth R. Curtis. Emeritus Faculty: IVing F. Ahlquist, Robert W. Frazer, John E. Higgins, Lipski, John M. McFaul, Halvor G. Melom, Theodore E. Nichols, Donald
W. Peters, James F. Ragland, W. Peters, James F. Ragland,
Richard H. Wilde, David A. Williams. Department Secretary:

\section*{Patricia Warren}

\section*{The Department}

General students desiring
information should contact the
department office for referral to one of he faculty advisors: Undergraduate Coordinator: Gunns; Graduate Advisor: Schwartz (SBS); Coordinator Social Science Certificate Program. Schwartz (SBS)
History
The study of history is intended to serve as a cultura backround
preparation for graduate work in history and the other social sciences, or as a foundation for those planning outer teaching, law, librarianship
government, foreign sevvice, and government,
related fields.
History majors who are
contemplating graduate work in
contemplating gred that many
master's degree programs and mo doctoral programs require competency in foreign language(s). interested undergraduates should as possible.
The Stuart L. Bernath Memorial
faculty, is awarded annualy to the
student who writes the best essay some aspect of histor. The essay on consists of a modest sum, a certificate and an entry on the officia transcript of the recipient. Further
information may be obtained from the information may be obtained tro
prize committee of the listory Department.
The Department of History offers graduate study leading to the mas responsible for the observation of the general requirements stated in departmental requirements stated departmental requirements stated Arts Brochure, available from the History
request.
Graduate assistantships and departmental reading positions are persons. The graduate assistant works closely with a member of the graduate faculty, but is not
responsible for instruction.
General Education Requirement in United States History:
Baccalaureate students may satisty the requirement as follows: Lower 62B or 172 , or 173 , or 174 A an dis Requor Ars in Requirements for the Bachelor
Arts in History (code 2-8525): Lower Division: A minimum of 12 units, except that History majors may 172, 173 , and 174 to the degree. Upper Division: (1) HIST 301; HIST (2) 21 additional units, which must include either nine units in each of two of the following areas or six units in each of three of the following areas:
(a) Ancient and Medieval, (b) Modern European, (c) Russian, (d) British, (e) Latin American, (f) United States, (\$) Asian. With the approval of the department, students may design a
topical area as a substitute for one of the geographical areas.
Breadth Requirement: The total 39
units requirement for the maior must units requirement for the major mus the following areas: (1) Modern

In order to graduate with Honors in history a student must: (1) Complete all regular
equirements for the history major:
(2) Complete 3 units in HIST
497H:Honors Colloquium, or HIST 01;
(3) Complete 3 units in HIST 498H:
Honors Research.
(4) Complete 3 units of HIST 499H: Honors Thesis;
(5) Complete 6 units of additional
course work chosen in consultation wourse work chosen in consultation such courses normally will require two analytical papers or a research pape vel of performance; (6) Complete U.S.P. 499 Synthesis, requirement of 6 upper-division units (1);
(7) Have at the time of graduation a
cumulative GPA of at least 3.3 and GPA of at least of at least 3.3 in history. and Students admitted to the program nust maintain a file in the University Scholar's Program which will includ
opies of proposals for 498 H and
Minor in History (code 0-8525) A minimum of 21 units which mus include:
Lower Division: A minimum of six sequence from the following: HST 12 and 110 or 111,131 and 132 , Upper Divis
Upper Division: A minimum of 12 inits in each of two areas as defined or the major.
Master of Arts in History
Prerequisites
1. A bachelor's degree with a major
in history, or
2. A bachelor's degree with 24 units These courses must bes in history. hese courses must be comparable at this University. Deficiencies will be determined by the graduate advisor after consultation with the student a
after study of transcript records. Advancement to Candidacy is a statement of how the student plans to complete all courses and sequirements for the degree, including setung a date and a committee for the done as early as possible and it must
take place before the end of the emester preceding the examination. semester preceding the examination
Students witing a thesis are
advanced to candidacy at the time

Requirements for t
Arts (code \(5-8525\) ) 1. A minimum of 30 units upper-division and graduate courses
including at least 18 units from 500 and 600 -level courses. Six units may come from other departments if they
suit the student's program and are suit the student's program and are
approved by the graduate advisor. All approved by the graduate advisor. Al
students must take History 501 and History 590 . Twelve of the remaining units must come from among the
following area offerings: \(510 \mathrm{~A}, 510 \mathrm{~B}\), oliowing area ofterings: 510A, 510 B ,
\(510 \mathrm{~F}, 510 \mathrm{G}, 611,631,673,682\). 2. The student may select one or
two fields of specialization distributed as follows:
Alternative I. Single-field option. Fifteen units, including at least one class in the 510 series, in one of the Europe; Modern Europe (in Europe, Modern Europe (including Those who take the single--field option
must also take at least one 500 -level mourse in a second field.
Alternative Il. Two-Field Option. A minimum of 9 units in each of two of the above geographical areas, each.
The courses for Directed Study
(695), Directed Research (695), Directed Research (697), and
Thesis (698) may be applied to the unit total only with the permission of the graduate advisor. A student may propose a tield other than those cited the consent of the Graduate advisor and her/his graduate committee. 3. A reading knowledge of German,
French, or other foreign language French, or other foreign language candidate's program of study as recommended by her/his graduate committee.
4. A comprehensive written examination on two periods, unless Department to substitute a thesis for Courses (HIST)
Curser (ivision
ower Divisio
110. Historical Beginnings: World Aistory in Antiquity (3) A introduction to the earliest stages of human
culture and civilazion fom paleolithic timee
down throunh the eqtabliom
 111. History of World Civilization, 111. History of Worid C
\(500-1700\) A.D. (3) F,S The development of word civilization from the
end of the ancient wordd to 1700 , with emphasis on the intearations of maior culturues. Topics wiil
include migration and settlement patterns, the
cote of universal reiligions, maijor metieval
civizations, technologegy and the global effects of 112. The World Since 1700

F,S
A look at the old regimes in maior world
cuilizations at the start of European expansion Chwirations at the start of European expansion. conquest and moloomization; science, technnology and industrialization; the netion state; classical
liberal and the copotalist world
ystems; challenges to these ideasa and systems) and the
impact of these upon the non-EUropean world. 131. Early Western Civilization (3) The his The history of western civilization from its origins
through the 16 (6th century. Stresses the society.
 Near East, the classical world, the medieval West
and renaissance and feformation Europe. (CAN
HIST 2) HIST2)
ern Western Civilization (3) F,S

European society from the 17th century to the reshaped the political, economioc and social
structures of the west and thent structures of the west and their inpacat through-
out the world. Emphasis on the intelectual, social and pyychological transformation of modern life.
(CANHIS 4
151. England: Earliest Times to
1688 (3) F,S English society from earliest times to the Gloribus Revolution. Anglo-Saxons: Norman rule; medieval
ideas, institutions and life: Tudor and Stuart England; Anglican Church corigins and the Puritan revolt: overseas exploration and relations
with Wales, Scotland, Ireland and the continent. with Wales, Scotland, Ireland and the continent. Emphasis nine evolution or values and of legal
United States. 152. Br
\(\mathrm{F}, \mathrm{S}\)

Britain from 1688 to the present. The ideas and Wrtain from 1688 to the present. The idoas and
way of life of the Georgian, Victorian, Edwardian
and 2oth-century peoples of the and 2oth-century peoples of the Bititish bslese
Political parties and the evolution of parilamentary caabinet government, tito disemination
to colonies ; mercantist duels for empire: first to colonies; mercantilist duels for empire; first
induatrial nation; urbanization, democratization, tree trade, imperialism and the development of
the welfare state: tow world wars and Bitain's mparative History of the United States and Latin America ( \(\mathbf{3 , 3 \text { ) } \mathrm { F } , \mathrm { S }}\)
The history of the Western hemisphere from
European contacct to the present, with emphasis on institutions and traditions. (These two courses together meet the State of California requirement
in U.S. History)
172. Early United States History (3) \(F, S\)

Sunter of the political, social, economic and
cutural development of the United States from discovery through reconstructition. Attation trom the
colonial era, establishment of the new nation, sectional probbems, national growh, disunion
chronologically or topically. Fufilss the general to students with creditit
and 174. (CAN HIST 8)
173. Recent United States History (3) F,S Sunvey of the political, social, economic and
cultural develoboment of the cultural development of the United Stateses from
roconotruction to the present. Attention to the rise of industrial America, the United States as a
world power, welfare democracy and the cold world power, welfare demorocacy and the cold
War era. Material may be coveres chronologocically or topically. Fufflls the general ducuation students with crediti in HIST 1628 or both 172 and 174. ( (AN HIST 10)
174. Major Themes in the United tates History (3) F,S Examination of maijo ibsues, problems and crises contemporary values and institutions, placing hhem in historical perspective. Fulfils the general
 both 172 and 173.
80. Eastern Civilizations (3) F A introduction to the cultural heritage of the maijor Asian covilizations of China, India and
Japan. Students will read selected literary, philo-
 201. Facts, Evidence and Explanation (3) F,S Critical examination of eididence supportive of
inferences drawing: differences between direct. hireunce errawingy dififerenceces betreven dirinoc the determination of relevanay of facts: whether acts are objiective, whether they exist independ laden.
290. Special Topics in History 1-3) \(\mathrm{F}, \mathrm{S}\)
Topics of current interest in history. May be
epeated with different topics to a maximum of six unita.a Applicability to mpiaco reacuirements will be
speceifed in desciption of individual topics, as speocified in descipistion of indididual
announced in the Schedule of Classes.

\section*{general}
301. Methodology of History (3) F,S
criented socilal and
Tractional grading only
402. Oral History Methods (1) F,S Through a series of warkhhops and through fiel which will enable students to use oral histo othter tor their oun personal use in tamily history
of for class projects in their specific field. (Sami of tor clase propects
course as SBS 485.)
\(408 . / 508\). The History of the Family
(3) S (3) \(\mathbf{S}\) History of the family trom the medieval pericd to the zoth century, with emphasis on its changing coonomic, social and empotional functions. The
historicial developonent of womenis hood, marriage patterns, domestic labor and ein lended fanily relations will be considered, with special ateontion to contrasting developmentin
during different tistorical periods and within differertt chilizations. Emphasis will vary between Europe, the U.S. and East Asia but with speciel
attention to the early modern era. Students wil have the opportunity to work on a tamily histor project.
484. Topics in W
History (3) F,S

Using oral history, this courree will focus an women's experience in different periods in the zoth contury. Different topisis will be emphasize
acch semester, including a study of women changing history throush a comparion "a
generational groups, the "teminine myvitiou"" of generational groupe, the "Ieminine- mystique"
1920 and 1950: Aosie the Aiveter, women during World War II. May be repoeted with different topies for
WST
U05.)
490. Special Topics in History
\({ }_{(1-3)}^{49, S, S}\)
Prerequishe: Consent of instructor. Topics of
current interest in history solected for intensive
development. May be repeated with difterent topics to a maximum of six units, but no more
 requirements to the maior. Toppiss
announced in the scheodive of Classes.
*491. Modern and Contemporary Africa (3) F,S Conquest of Atica by European states
 solffogvernment or indopencoldonee. porobiems o
sconomic and political development, and race teconsions in areas of white settlement. 492./592. Proseminar in World
History (3) F History (3) \(F\)
Prerequiste: Consent of the instructor Discussion and anaysyis of recentily publisher history perspective.
maximum of six untits.
*495. Colloquium (3) F,S
Prerequisene: Consent of instructoc. Analysis and interpeetation on signinicican documentans and work
of histor. Individual works disusused will conter of history. Indididual works divocused will center May be repeated with ditferent topisis to maximum of six units, but no more than three
units may be used to astisy the equirements toi unte majo.

497H. Honors Colloquium (3) The development of History as a disosipline, malo
scheols of historical interpretation, and recen developments in analysio and theory. Emphas on the interelationship of History to other
*498. Directed Studies (1-3) F,S
 stuay be repereated dupe to sixicu units. 498H. Honors Research (3) F,S Research for and witing of a senior thesis und
the direction of a departmental advios. 4980. Directed Studies in Oral History (1-3) F,S
Permission of faculty required. Directed study on
a research topic using the methodology of of history. May be repeated for a maximum of 499 H.
Preereq. Honors Thesis (3) F,S pereguistate: HIST 498H. Research, writing, and
direction on t a senior honors thesesis under to INTERDISCIPLINARY COURSES

\section*{(3) F,S \\ (3) F,S} Prerequisites: ENGL 100 and upper division
statu The young rebels of the depression decale grew up to become the parents of the examine the generational confict of the turbulent years as a clash of values, exploring the niture of hooses values, the haped them antural and some key waid infuences that shaped. them, and some key way on four areas: Social Change, Litestylyes, Popula
Culture, and High Cuture with emphasis on Iiterature and theater. (This course may not bo taken to tuifili the 39 -unit requicement in History major,
306. Legal Responsibility (3) \(s\) Prerequisites: ENGL 100 : upper dinision status
An exploration of how sociery does and should hord peoplet responsible for theese and shouls toward
society (erimes) and toward other people (torts).
 and the principles and policies upon which it is is
should bee based. No pervious stucy of law required.
3071. Modernization in Global Perspective (3) F,S Prerequistes: ENaL 100 and uppor divion status. An exploration of the ways in which th
current poychoorocical and material probilems modern sociery (both western and hirit W Worter
can be traced to a process of hacceleating can be traced 1 a a process of accolearation
change which began with the advance of technology, the rise of capitalism, the
abandonment of "old values," the increasing
 modernization utilining filims, dicucussions and
readings (ficioion and madngs (hition and nonfiction). (This course
min not thenen tistory tufill the 39 unit ten

3081. Law and Civilization
(3) \(\mathrm{F}, \mathrm{S}\)
treequisites: ENGL 100 and upper division
status. An exploration of law as an intellectual
fort to define latur. An exploration of law as an intelloctual
effort to define direct and administer luman
 knowledge, language, meaning, mental
proceseses,
organization,
porsonen
 analysis and decision-making in the courts as This course may not be taken to tufifil the 39 -uni. the History major
10. The Greek World (3) FS

Prerequisites: ENGL 100 and upper division
status. An interdisciplinary examination of maioo events and ideas in the socioty and oulture of he ants, and the historical forcess at work. Toppics iclude the foundations of Greek culture, Minoa and religion, Yyico poetry, the Peesiain Wars, the Golden Age "f Athens, the Peloponenesian, War Hellenistic culture and the contributions of the
Greeks to the modern world. Same course as
2231. The Renaissance World 3) S
rerequisites: ENGL 100 and upperdivision
tataus An interdiscipilinary view of selected topicics of Renaissance cuture and society, emphasizing the arts and ilierature within the historical contiexd
the era. Topics span social, economic of the era, Topics span social, economio ssues and their infuences on musio, att,
terature, and philosophy. (this course may not
 atory majer.) Same course as MUS 3651. 4041. Social History of Musical Life
(3) \(F\) Prerequistes: ENGL 100 and upper division
tatus.
ocial
vevolotion of musical life - publics, Istutions, professionon, and taste - in Eubicope and the U.S. (hhis course may not be taken to 4141. Medieval World (3) F,S Preerequisites: ENGL 100 and upper division latus. An interdisciplinary examination of majo
themes in medieval society and culture with emphasis on ilierature the arts.and the histroical iceses at work. Topics will include the Roman
leitage of the middele ages, barbarian culture heritage of the middile ages, barbarian culture pilgrimages, commerce and catheralas, and late
medieval poblems. (This caurse may ot be
taken to fuffill the 39 unit recuirement in the aken to fuffill the 39 -unit requirement in the
History maior.) Same course as CLT 3491 . Upper Division - Areas

\section*{ANCIENT AND MEDIEVAL}
313. Ancient Greece (3) F,S History of the Greeks and the Greek world from 14. Roman History (3) F,S History of Rome and the Roman world fom the
Eighth Century B.C. to the Fith Century A.D.
*316. Early Middle Ages (3) F History of Western Cililization from the fall of the
Roman Empire in the West to the Crusades Germanization of the West, evolution of Christian Germanization of the West, evolutition of Crisitian
institutions, Slavic expansion, Byzantinization of
the Eastern Empire. the Eastern Empire, Islamic civiliation
Cardingian age, fucudal and manorial institution *317. High Middle Ages (3) S History of Western Crilization from the Crusade
to the end of the Middle Ages. Revival of trade growth of towns and of capitalism; origini
modern political institutions; and medieval modern political
leaering and art.
*318. Byzantine Empire (3) Political and social development of the Byzantine
Empire from the 4th century A.D. to the fall Empire from the 4th century A.D. to the tall the Roman Empire in the eastern Mediteraranear
religius controvesises and the develoment on veligious controversies and the development o
eastern Christianity; relations with Islam and medieval Europe.
*351. Medieval England (3) F
Analysis of English political institutions, society.
religion and economy in the Anglo-Saxon eligion and economy in the Anglo-Saxo
Norman, Plantaganet and late medieval eras. 4111. Early Christianity and 411. Early Chri
Society (3) F
Prerequistes: ENGL

Prevequisities: ENGL 100 and upper division
status. Development of Cristianity trom the New
Testament Testament period to the Renalisancee with emphases on the growth of doctine, church institutions and the role of Christianity in ancien
and medieval society. Same course as PSTST 4711

\section*{ASIAN}

382A. Imperial China (3) Introduction to the classical csilization stresing
 hertage. Not open to students with creditit in His?
382B. Modern China (3) S Chinese sodiety since 1800.1 impact of
imperialism, reform and revolutionany movements.
 383A. Traditional Japanese Civilization (3) F
Japanese cinlization from its origins to the 19th
Century. Emphasis of intellectual and cuitural Century. Emphasis of intelectival and cuitura
developments on the selective adootion and developpenents on the selective adoption and
modififation of Chinese culture. Not open to
students with 383B. Modern Japan (3) Japan from 1850 to 1945; colappe of Tokugawa
bakutu and riee of the Meiii state:
industriaration; social change and
 *384. Contemporary Japan (3) S Japan since 1945; impact of Hiroshima and
Nagasaki; American coccupation of Japan; Japar's "sconomic miracle," social change and social criticism in literature and film: Japan's sol
in the contemporary wordd: conflict with the U.S.
*385. History of India (3) F This is a sunvey of the history of the South Asian
subcoontinent from its historic roots, through the founding and oonsolidation of the great Mugheal
Empire, to the beginnings of Western imperialism and the establishment of the Birtish Rai, ending With nationalism and the course of events in
post-independence ind ind
India, Pakistan and Bangladesh.
*386. History of Modern Southeast War (3) F This is a surve
history of the peopreses io the podiritical southd culturaal
After an ovenia Atter an overiew of traditional conilizations, the history or modern Southeast Asia (from roughly
\(1815)\) will
mphasize expansion of European influence in the political and economic spheres,
the growh of nationalism and the process of the growth of nationalism and the process of
decolonization in Southeast Asia, and the post-WVII confifuuration of the area. Both
mainland
Southeast mainland Southeast Asial Mietnam
CambodiaKampuchea, Laos, Burma, Malayia) and insular Southeast A Asia (Indonesia,
Phhilippines) will be sunveyed.
391. The Making of Moder

This courre surveys the history of sub-Saharan Atrica trom the early 19 histotry of ough the mahe midrant centuries. We will study the rapid changes which
destabizized many 19h ceentury societies, the European concuast which followed, and the
entenchment of a colonial situation which entuenchment of a cololinial situation which
robbed generations of Africans of theit abiliy to contol their own political and economio destinies. Our emphasis will be on how Africans
themselves perceived these proceoses, how they adiusted to thenem, and the continuing relevance of
these experiences today these experiences today.
392. Contemporary Africa
1940-Present (3) F, S The challenges tacing Atrica today can seem
bevildering in their variety and complexity. In this course we will examine the political., \(\begin{aligned} & \text { conomico, } \\ & \text { social, and ecological conditions of the Atrican }\end{aligned}\) continent by studging their histricial genesis in
the second half of the wenetieth century The the second half of the twentieth century. The
main focus will be the difficutios that have been main focus will be the e ilfifiulties that have been
encountered in overcoming the legacies of colonialism in Afric
*406. Asian Women (3) S
Historical experience of women in Asia, with
emphasis on Chinese and Japanese societes; links with the experience of Asian-American women. Same course as AST 406 and W/ST
406 407. Japan and the United States in the 20th Century (3) S Examination of relationships between Japan and
the Unite States emphosiring culturu, economic
and ese Revolution (3) F, Odd Years

Preerequisite: HIST 181 B or 3828 of consent of
instructor. Theory and practice of cenlutiona instructor. Theory and practice of revolutionary
sociaism in the People's Repubicic of China, histotical and ideoologital background of the
Chinese revolution, Mao and Maousm poltich Chinese revolution, Mao and Maoism, politics.

RITISH

\section*{353. Tudor and Stuart England} (3) F,S Social, cultural, religious, political, and dynastic
history of England from 1485 to 1714 Renaisance and Reformation; Coovn and Pariament, owid war and revolution: the
preoindustrail economy, relations with sootland
treland, reland, Europe, and America.
356. Georgian and Victorian Britain (3) \(F\)
Social, cultural, relifious, political, and
constitutional history of Bitain from 1714to 1901
 population; Parliamentary democracy; Intion
problems; relations with America, India, Europe and the world.
357. Recent Britain (3) F,S Social, culturala, economic, and political history of
2oth- contury Bittain. Govermments and people labor, party politicse, and the weltare state; two world wars; problems with ireland and Europ
the end of Empire; race relations; mass media
 and popula
*451. Special Topics (3) S
Topicis in British Empire and Commonweath
history in two basio formats. (1) comparative stucies of maior Commonweath nations, e.f. South Atrica and Canada; (2) the rige and tall
the e ititish Empire examined in the light of various the British Empirie examinined in the light of varion economic development. May be repeated for
maximum of six units it topics deat with ar maximum
different.

LATIN AMERICAN

\section*{362. Colonial Latin America} (3) F
beerian preparation for overseas expansion discovery and conquest in America; evolution of
colonial institutions; dymamic 18th century deovelopmentis; wars of independence.
(3)
(3) S S
Poritica, economic, social and intellectual
evorution of Latin America in the 19 tan and 2 ath centuries. 366. Latin Americ
Literature (3)

Latin American history through the novel and film will integrate lieraturue and the cinema with traditional historical maeterial in inder to porsion
the student with a deeper understanding of the the student with a deeper Andica.

\section*{461. History of
Mexico (3) F}

History of Meso-America trom prehistorict times to History of Meso-America trom prenistoric unesio
the Spanish conquest, emphasting the study the societies and the erifigious and intellectual Iit of people of ancient
course as CHIS 380 .

\section*{*462. Mexico (3) F} Spanish conquest of Indian Mexico; settiement
and explocation; colorial fife and exploation; colonial life and institutions; the
achierement of independence from Spain retorm, foreign intervention, dictataoship in the
19th century; the Revolution of 1910 and atter 19st century the Reve contemporay Mexico.
*463. The Caribbean and Central
America (3) F America (3)
Alatory of the Caribboan Iblands and Contral
America from European colonization to Ameicaa from European oolonization to the
present, with emphasis on Cuba and Contra evico Economic, political and cultural *466. Topics in Latin American History (3) F,S
Solected topics in Latin Ametican History,
including: (a) Revolutionary Latin America including: (a) Revolutionary Latin America -
analyzing various 2 2oth-century
revolutionary movements, their social, politioal and cultural causes, and their internationaly mpact:
Slaver, Peasantry and Aristoctacy
analy examples of black slavery, peasant societeies, an elies trom the 1 tht century to the present; (o)
Comparative History: Argentina and Brazi, ot aheer pairs and groups of states - colon beginings with emphasie on geographical
economic, scocial, etthic, and vital instrutiona economic, social, ethnic, and vita institutional
elementa. May bo tepoeat, with different topices
for a maximum of nine units.

MODERN EUROPEAN \(\qquad\)
*332
Examinatio
poltical.
political, and and anayysis of intellectual, cultura 1 Sth-century thaian chilization. Peaticular
emphasis on interplay between
 *333. Reformation Europe Examination and analyyis of the "long terin century," trom the beginning of the traian War (1494) to the Peace of Westonalia (1648)
Emphasis on economic, institutional intelectua and religious criess, and on their resolutions *335. The Shaping of Moder Europe (3) F Moder Europe (3)
Europatan political. social, ecconomic and (1648) to the Frencch Revolution (17899). Emphasis
in the ise of statiom, the triumph of science and

 Frederick the Great). and philssophes.
Votarie), and the crisis of tradtional sociey.
*
*336. The French
Napoleon (3) S
End of the Old Reoime and the French
Revolution. Docline of the foudal monarchy
fature of enlightened despotiom, the rise
and revolutionary thought, Fiench Revovition, and Napoleonic imperialism.
337. Europe in the Nineteenth

\section*{entury (3) F}

Apogide of European power, infuencee and conlicence. Recovery from French Revorctitionay revolution, nationalism, unification of Germany and tion, nationalism, unitication of Germany
triumph of limerailm, chalenge of
socialism, outburst of imperialim, alliances and ar 1914 (3) F
World War I; outstanding changes in Europe ath the First Word War win particular stress on the
rise of Fascimm in taly. Nexism in Germany Communism in Russia, and Social Democracy Scandinavia and Great Bitiain; the fallure of tin League of Nations and the collapse of colletini
security. Wortd Wai II: the United Nation postwar problems
4001. Origins of Scientific Thought Prerequisites Preerequisites: ENGL 100 and upper division
status. An interdiciciplinary introcuuction to the history of science for both scientists and not
scientiats. Evolution of the scientists \(\mathbf{v i e w s}\) of 1 He means and ends of their own activities; the ways in which sciences is atfected by and affects con-
temporary cutures. Seme course as PHY 400 . *431. Arab and Islamic Civilization (3) \(F\)

History and culture of the Arab and Islamic world
trom early origins in Arabia, and the establioh trom early origins in Arabia, and the establish-
ment of the eariy Arab empires with emphasis on ment of the pary. A .
432. Modern Scandinavia and the Baltic Region (3) F
Poritical, economic, social, and cultural develop-
ments in Swoden, Dermakk, Norway, Finland.
 Keland, Emphasis on the emergenco of the modern
17eltare shate, neutraism in foreign policy. distinctive ascibocconomic and cultural patierms,
and maior contributions to the modern West and maior contributions to the modern Wes *433. Spain and Portugal (3) F Rise of Portual, Castie and AAgaon, and the alhoric Porugal and Spain in transition, the republics. Salazar and Franco.
4341. Formation of Mod
Christianity (3) F.S

Prerequistee: ENGL 100 and upper division status. Restructuring and renewal of Crisitianity

437. History of Germany 1871 to resent (3) \(F\)
History of Germany trom unification: the First
World War, the Weimar Republic, the National
Scialat fecher ocicialist Reich and the post-war tecovery. \({ }^{*}\) (3) F . History of Marxist Thought (3) \(F\) Sunvey of Maxist thought from the mid 19h
century to the present. intellectual precurrocrs of Century to the present. Intellectual precursors of
Maxism; basic concept of Max and Engels;
divergent paths of Maxism in the azat contury divergent paths of Maxism in the 2 2at century.
No pervious study of Maxiom will be assumed
but students will benefit from having some
background in the history of western industriad
RUSSIAN

341A. Foundations of Russia (3) F
Evolution patterns, and social structure, diverse cultural ancient Kiev Rusosiaia Itructures of Masocociated with atocracy and serffom; westernization and period
history.
341B. Modern Russia (3) S Interaction with the West from 1801; era of great
reforms and revolutionary movements; downfall sforms and revolutionany movements: dof greatal
of Imperial Rusia; establishment of the Sovie egime; chief poolitical, social, economic and cultural developmennts in the soviect era; role of soviet Union in word affaras. Cultural History (3) F Cultural development of Russia from the
beginning of massive westernization to the beginning of massive westernization to the
present; emphasis on values, attitudes and present; emphasis on values, attitudes and
sooiet as ssen trruagh litery, surces, maior
develolopments in painting, music, social thought.

UNITED STATES
300. The United States - Past and Present (3) F,S Concentrating on the rise of the U.S. to to xploret the contributions of various racial and othnic groups and of both men and women to polticoal, economic, and social institutions and alues upon that proceses.
372. United States: Colonial eriod (3) F
Discovery and settlement of the new world; European institutions in a new environment:
development of ocolonial government, economy and social institutions
and colonial America.
*373. United States: Age of
Clash between British atte
Clash between Birtish a atempts to control and tax
the colonies and colonial distaste for both; growh of an and independenial spisitast, the bor both; Consititution. problems of the new nation; the
*375. The United States Emerges
as a Nation (3) F,S
An analysis of the political, economi, social, and
intellectual forcess trom the adoption of the intellectual forces fom the
constitution through the 1840 .
*376. United States: Civil War and Reconstruction (3) F,S
Sectional rivaly, manifest dostiny, midc-century
divisive forcese, Chil War and reconstruction.
*378. United States History: 1877-1920 (3) S
The development of the u.S. as an urban
industrial, muticuturual industrial, multicultural society; progressive
reform movementa st the outy, state, and national
level fise of US a \({ }^{*} 379\). United States. Twent Depression, and World War (3) \(F\)

The prosperous 1220 s: the Depression yeara and
the beginnings of weflare demoeracy; the United the beginnings of welf
States in Wordd War II.
*380. United States Since 1945 (3) F,S The United States in the nuclear age: the
development of the Cold War and to dometion development of the COld War and its domestic
ramitications, the "poot-industrial" economy, the
chil tiots chill fiahts eroveruion, the rise of political dilsenent,
the Watergate atfar, and ater 468./568. Local Histor Communities (3) F,S Description and analysis of selected communitiee within the greater Los Angeleo-long Beach area trom an historical perspective, with emphasis on
population and
migration
patterns.
the population and migration patterns, the
development of economic forcos shaping the
raea and techniaues of cocal hisisory, *469. Ethnic Groups in Urba 469. Ethnic Groups in Urba Examination (3) F,S
An examination of the origin, migration, Sottiement and the assimilation problemm of ot he
various ethric groups in maior American cities various ethnic groups in major American silies
since the late 19th century. Emphais will be
upon the economic, scocial. poolitical and upon the economico, scoial, poolitcal and groups attempting to adiust to urban life.
470. Chicano History (3) F,S

Chicanos in the settlement and development of
the southwest and in contemporary U.S. society the Southwest and in contemporary U.S. socitety
Chicano experience as a U.S. minority group
emerging ovill rights movement of LL Raza emerging ovil rights movement of La Raza
Tradtional grading only. Same course as CHLS Tradtion
300.
*471.
4771. History of the Westward Movement (3) F,S
Anaysic of the frontier experience of the continent and its influencoes on American ideas and institutions, special antention givien to to explorations, movement of populations, effects of American development.
472. History of the South (3) F Survey of the economic, social, intellectual and Political devevelomentit of the South from colvonial
mes, with emphasis on the period from 1820 to mes, whith
473. California History (3) F,S Survey of California history from the arival o uiropeans to the present, with emphasis on
significant social, poltical and economic velopments
741. The Urbanization of Modern America (3) Pereqeauisites: ENGL 100 and upper division
teatus. Survey of urban America trom the colonial
period to the present, with emphasis on the period to the present, with emphasis on the
Procoss of urbanization, urban proboms and
poltics. Not open to students with creditit in HIST 474A,B. Un5. History of Business in the Prerequistes: ENGL \(\mathbf{1 0 0}\) Prerequisites: ENGL 100 and upper division
status. \(\operatorname{sith}\).titional devevoloment of the American business firm and the changing role of
entrepereueus and managers in American entrepren
society.
477A./577A. American Cultura
History (3) F History (3)
Development of American way of life treated in
terme of values, behavior and institution the ins terms of values, behaviver and instiution, themes
of individuallism, community, ethnicic diversity and
social reform. 4778/577
History (3) American Cultural History (3) S
Development of American way of life treated in
terms of values, behavior and institution, themes of individualussm, coemmunurity, ethnicic diversity and
*478. Foreign Relations of the U.S. (3) \(\mathrm{F}, \mathrm{S}\)

Foreign relations trom the American Revolution to
the present. Special attention the present. Special attention given to
isolationism and the Monroe Doctrine expansionism and manifest destiny, the Open
Door and the Far East, the war with Spain, the two world wars, the Cold War, and ate Origins and Early Development (3)
European sources of constitutional though
Colonial background, impact of the Americain Colonial background, impact of the America
Revolution, the traming period and the rise of
iudicial approach to judicial approach to oonstitutional interperetaion
under the Marshal and Taney Courts. Emphasia under the Marshall and Taney Courts. Emphasi as a working ideal in American thought and
institutions.
*480. Law and Fundamental Rights in American History (3) S Selected variable topies on ckill libertios issues addressing the historical development of
constitutional guarantees in the areas of treedom oonstrutional guarantees in the areas of treedom
of expression, privacy, church and state, due
process, and equal protection process, and equal protection.
4821. The American Religious 4821. The American
Experience (3) F,S

Prerequistes: ENGL 100 and upper
Pretequistes: ENGL 100 and upper division
status Survey of major themes in the unique
American
 significance will include the adaption of
European Christianity to novel Americal European Chistianity to novel American
circumstances, the proliferation of denominations
and the varied religious response to a dmamic
 485A. History of Women in the U.S. - Early Period (3) F Provides a survey of the roles and activites of
American women from colonial period to 1850 Amiety of female life expoeriencoss: slaven Variety of Iemaie life experiencos; slavery
immigation: relationships to the family economy
and political movements.

history for the major. Same course as AMST 490 4858. History of Women in the U.S. - Since 1850 (3) S Changing roles and status of women in
economic and social change: suffrage movement; women in union movement and W \({ }_{1} 1\); the docade of the sisties and the "second wave" of feminism. Only 3 units of \(485 A . B\) may be applied to a
histof for the main
and W/S \(488 B\).
*486. History of the Afro-American
*486. History of the Afro-Ame
in the United States (3) \(F, S\)
Sunvey of the role of the Afro-American Survey on the roie of the Afro-American in
American history trom colonial times to the present, including the African heritage, nature of
the American slave system, emancipation and the American slave syitem
*489. Topics in Legal History of
the United States (3) \(F\) the United States (3) \(F\) Case studies in Americian law from colonial timee
to the present: English common law heitioge to the present: English common law heritage,
puitan and frontior infuences, the legal
prent
 criminal law, totsts and. contracss, rand moded
trends in legal thought. May be tepeated wit different topics to a maxim
Graduate Division
501. Theories and Methodologies Th deverment of
The developmentant of history as a diccipiline, malic schools of historical interpereation, and receni
developments in will be placed on the interrelationships of histony wir be placod on the in the scoial sciences and
with other disciplines
himanties Required of all graduate students. 508./408. The History of the Family (3) S

History of the family from the medieval pericad to the 2oth century with emphasis on tis changing historical docelopment of childhood, marriage peattens, domesticio labor and

different chilizations. Emphasia will vary between
Europe, the U.S. and East Asia but with epecial
attertion to the early modern era. Students will Europe the U.S. and East Aia but wht spocia have the opportunity to wark on a tamily history
510. T
(3) F

Reading and discussion of major works and biblicographical aids. May bel erepeoteat for and maximum of tix units in an Anciert and Medieval (b) Moldern Europoan (including
Rusoia), (1) United States, (g) Alian
568./468. Local History
Communities (3) F,S

Doscciption and analasio of selectec communtities within the greater Los Angeleo-Long Beach area
trom an historical perspective, with emphais on
 development of ecconomich forcecs
area and techniquese of local history. 577A./477A. American Cultural History (3) \(F\)
Development of American way of ifife treated in
terms of values, behavior and institution, themem terms of values, behavior and institution, themes
of inddiviualism, community, etthic divesity and social reform.
577B./477B. American Cultural History (3)
Deverio of values, behericion way of life treated in Lerms of values, behariver and institution, themes
of individualism, community, ethnicic diversity and
social tetom.
History (3) 5 Comparative Prerequiatie: Consent of instructor. Selected themes in history iivolining crosos-utitural and
comparative approaches. May be repeated for a comparative approachee
maximum of six unita.
592./492. Proseminar in World History (3) F Prerequisite: Consent of the instructor
Discuasion and analysis of recently putblished historical works and materials trom a worl
history perspective May be repented to history perspoctive.
595. Special Preparation (3) F,S Special preparation for the MA. examinations under faculty direction. May be repeated for a
maximum of 6 units. Cannot be applied to requirement of gradauate
Garauate Adivor required.
611. Seminars in Ancient and Medieval History (3) S
Preerequibites: Six units of upper division anciont
or medieval history or consent of instructer. or medieval. history of consent of instructor
Solected topicies in ancient or medieval histon. May be repoated for a maximum of six units. 631. Seminars in European History
(including Britain and Russia) (3) (incl
Prerequisiste: Consent of instructor. Directed reading and research in the pollitical. economic,
social and cutural hisory of Europe. May be social and cultural hisory of Euro
repeated for a maximum of \(s\) si units.
673. Seminars in United States History (3) F,S
Prerequistite: Syix units of upper division United
States histor. Selected topici
 present. May be repeated for a maximum of six units.
682. Seminars
History (3) F

Prerequistes: Six units of upper division Asian history or consent of instuxtor. S.elected top tiss in
East Asian history. May be repated for a East Acian history.
maximum of
six units.
695. Directed Readings (1-3) F,S Prevequisite: Consent of instructor. Readings on 697. Directed Research (1-3) F,S Prerequisite: Consent of instructor Renearch on Prevequulise: Consent of instruc
an indididual basis. Planning, preparation and completion of
non-uuricular work in history for the master's
degree.

\section*{Human Development}

Acting Department Chair: Katherine Van Giffer
Department Office: FO2-229
Telephone: \(985-4344\) Teephone: 985-434 Bernstein Tarrow; Assoclate Professor: Katherine Van Giffen
Assistant Professor: Assistant Professor: Pamela Robens.
Department Secretary:
Carol Craven
The Program
The Human Development
Program is designed to provid Program is designed to provide
students with a fundamental interdisciplinary understanding of human growth and development throughout the life cycle. The the psychological, sociocultural and biological dimensions of human development and on the underlying
processes and structures which support that development. In addition a variety of experiences in community agencies and/or students to integrate knowledge with career goals in a variety of human senvice fields. The curriculum is
flexible and designed to help flexible and designed to help educational needs through a wide selection of courses appropriate to individual interests and goals.
Courses should be selected in Courses should be selected in
consultation with the program advisor.
Students desiring information should contact the department office for referral to the faculty adviso
Advising is a two step process: monthly advisement orientations are presented in the Student-Faculty Resource Center (FO2-219) for al new students and any student major or concentration. (Schedules are posted outside the center -FO2-219 and in the Program office
- FO2-229) Following initial orientation, students meet with the advisor to develop individual plans, file graduation check sheets, and obtain other advisement information,
as needed.

Students interested in Human Development may choose one of two options: B.A. in Human
Development or Liberal Stud Development or Liberal Studies
Major with Human Development Concentration. Graduate programs may be developed under the auspices
Program.
Brochures, course sequence plans, listings and descriptions of specific courses within each area
may be obtained trom liberal studi or human development program orfices. Students can plan a program geared to specific career requirements (i.e., Gerontology certificate, Children's Center Credential, Multiple Subjects Credential, or graduate work in human development and its related
disciplines). Early Advisement is strongly recommended.
The Human Development Student Association is an active group open to all students enrolled HDSA has regularly scheduled meetings and sponsors diverse activities including: community service, speakers, films, and
student-faculty parties. HDSA activities are announced in the HDSA Newsletter also available in the Program office.
Bachelor of Arts in Human Development
Requirements for the Bachelor of Arts in Human Development code 2-8014)
Lower Division: ANTH 120 or
SOC 100, AP 107 or 207, PSY 100
Core Courses (27-28 units):
(1) HDEV 250, 3071, 3571, 320

401, 402, 434 and 470 ;
(2) Three units from each
foundation area ( 9 units total) Biological: ANTH 318, 319, A/P Biological: ANTH 318, 3
3081, 400, 401; W/ST 440; Psychological: C/D 361, ED P
302, 305, GERN 4001, HEC 311 314, 411, HDEV 380, PSY 331, 332 333, 336, 337, 341, 345, 351, 356,

Sociocultural: ANTH 352, ASAM 340, B/ST 410, HEC 3121, 42, 413
CHLS 350, SOC \(320,345,464\),
GERN 4001
(3) Specialization: A minimum o 6 units of secondary specialization with the program advisor.
Courses (HDEV)
250. Elementary Statistics in the Soclal and Behavioral Sclences
(4) F,S (4) F,S

Prerequisites: Knowedge of mathematical procodure usually covered in elementary high
school algebra. Not open to students with school alagial Not OPen to students with
credit in ANTH 202, CST 210, MATH 180, PSY
and \(210, \mathrm{SOC} 250\) or 255, S SBS 250 . Introduction
10 descriptive and inferential statisitics and their
 research; performance of statistical exercives
by interacative computer. Emphasis upon by interactive computer. Emphasis upon how to interpret their results. (Lecture 3 ho
labocatory 2 hourra). 3071. Human Development: Child dhood Through Adolescence
(3) F,S (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisities: PSY 100 and SOC 100 or ANTH 120 plus AP 107 or 207 . 100 or ANTH
Beriogical,
psychological, and socicoultural aspects in the
 Relevent topici and ther ritial lasues will be
treated in an interdidocipipinary manner. Not open
to students with credit in NPSG RSG 307. 32. Research Methods in
Human Development (4) F,S Prerequisites: ANTH 120 or SOC 100, AP 107
or 207, PSY 100, HDEV 250, HDEV 307) Or 357 , or 207 , PSY 1 100 , HDEV 250, HDEV 3071 or or 3571
or concurrent encollment or concourrent enrollment. Resoarch methods in
human development. Includees methods and modells from anthropology, biology, peychology
and sociology as applied to research. LLecture 3 hours, laboratory 2 hours).
grading only for MajorsMMinors. 3571. Human Development: Adulthood Through Aging (3)
F,S F,S Prerequilities: PSY 100 and SOC 100 or ANTH
120 plus AP 107 or 207 poychologioal and 107 or oricultural 20 Beicological,
development of the ind development of the individual from lite
adolesconce or
youth until death will be dolosescence of youth untit doath will be
Considered. Relevant topoics and theoretical issues will
manner.

\section*{*380. Human Development
Issues in the World of Work Issue}

The undertying proceesess and structures of The underying procesoes and structures of俍 noental and phyyical wellbeing and oci--uturual factors releated to employment. 401. Cultural Influences on
Human Development (3) F,S

Herequistes: HDEV 3071 ,357. Study ot how
 various aspects of growth and developmen the effects of culturally related infuencese on
otal development. Discussion and seiected total development. Discuustion and seiection ackgrounds. (Leocture disoussion 3 hour 402. Development of Thought: Influences Across the Life Span (3) F,S


on the development of thought focusing on
bibogocical under

 problem sooving, language and thought, moral
developpment and educational inplications. All issues will be examined trom an
interdiciplinay perspective accoss the iffe interdion
span.
434 B 434B,C. Interpersonal Skills in
Human Resource Development \((3,4)\) F,S
Perecauistes: HDEV 3071 and 357. Desioned
to develop interpersonal akills identified as 10 develop interpersonal. taklls identified as
necosesy
to have effective human relations and statf resources development. tind includes a
presentation of theory and research applicable to procesesestion interperesochas functioning and
human relation. Didactio and exceriential humman relations. Didactic and experiential
earning anp aproaches. (Same course as \(E D P\) learning, 43 ,
470. Seminar/Practicum (4) F,S
 \(320,3571,401,402,434 ;\) and permission of
insturtor The currep provides for a sequence
it of obseveraions and supperised pparticipation
with individuals in a variety of comunity
```

agencies and/or educational sottings.
*)
490. Special Topics in Huma
Development (3) F,S
literequilite:: HDEV 3071, consent of ingtuctor.
Topics of current interest in human
dicerlopment selected for intensivestudy.May
of six units. Topics for a given semester wil
499. Independent Study (1-3)
Prerequisit: Consent of instructor and
M,
M

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\section*{Latin American Studies \\ College of Social and Behavioral Sciences}

Director: Norma Chinchilla Office: FO2-226 Office: FO2-226

Affiliated Faculty: Professors: Roland E. Bush (Comparativ (Women's Studies Program), Molly Debysingh (Geography), Adela de la Torre (Chicano and Latino Studies), Beverly J. De Long-Tonelli (Spanis (Political Science), Shirley Mangin (Spanish \& Portuguese); Associate Professors: Alejandra C. Edwards (Spanish and Portuguese), Ru Torres (Chicano and Latino Studies) Assistant Professors: Larry N.
George (Political Science), Claire E.
Martin (Spanish \& Portuguese) Manchez (Radio TV \& Film), Tony Sanchez (Radio TV \& Film), To
Topalian (Science Education) Certificate in Latin American les (code 1-8090) administers an interdisciplinary program which offers students interested in this field the opportunity to pursue courses leading to a Certificate in Latin American Studies,
Courses used to meet this certificate requirement may be counted also,
where applicable, toward the General Education requirement and requajor and teaching minor departments.
Students interested in pursuing a master's degree emphasizing Latin American studies should read the Special Major (Interdiccitilinar Studies) and consult the Director of Latin American Studies. Requirements for the Certificate (1) Th American Studie (1) The following are the Studies Certificate Program:
(A) A Bachelor's Degree with a major in a traditional discipline; may be completed concurrently with the ertificate;
(B) The successful completion of courses in Spanish any other language appropriate to the student's area of concentration college intermediate level proficiency exam in the language of the student's area of concentration (with the approval of the Director of Latin requirement with the certificate;
(C) Students must consult with and receive approval of (2) The instruction program
prams fir comprised of 24 may be coram is concurrently units, distributed as follows:
(A) Core (required of all students) 12 units: Anthropology: 3 units ANTH 323 or 324 ; Geography: 3 units - GEOG 3201 C ; History: 3
units-HIST 362 or 364 ; Political Science: 3 units -POSC 358 or \(359 ;\)
(B) Electives: 12 units from fields other than the student's major, Director of Latin American Studies (cannot duplicate courses taken in he Core): ANTH 323, 324, 345, 490*, 499*; C/LT 440, 499*; ECON
\(363,490^{*}\), 499*; HIST 162A, 162B \(362,364,433,462,463,466,490^{*}\) 498*; MEXA 305, 312, 380, 400 420, 425, 352, 490*,499** POSC
\(358,459,459497 * ~ 49 *: ~\) 341, 499*, 499*; SPAN 331, 445,
\(461,490^{*} 499^{*}\), 461, 490*, 499*, and appropriate |iterature courses from the student's area of concentration.
 and Direted Studies dasses must be in an

Director: Albie Burke (History) Telephone: 985-4458

Certificate Program in Legal Studies (code 1-8100) The Certificate Program in Legal
Studies is designed tor students who are interested in the study of law as a cultural product and as a field of program in para-legal education. The certificate may be earned in conjunction with any baccalaureate
degree and should be especially useful to those preparing for careers in government service, business, journalism and education. Courses taken in the program may be sed ther or general education requirements. No more than 12 units, how

Requirements for the Certificate in (1) Twenty-one units which must include HIST 3081 and an additiona 18 units from the courses listed
below. The courses taken in the program must be from a minimum o three departments. The selection of courses is made by the student in program;
(2) Project paper (3 units). To be (i) Project paper ( 3 units). To be
written during the senior year under the supervision of a faculty membe participating in the Certificate
Program. The paper can be either exploratory project (in which a subject is researched in a detailed and original manner) or an anaytic effort
(where fewer sources are used but the discustion of the material is developed more fully).

Legal Studies Courses:
B/ST 332; CRIM 301, 351; ECON B/ST 332; CRIM 301, 351; ECON
455: FIN 222 ,324, HITT 3066,
458,
479, 455, 479, 480, 429; PHIL 352; POSC
314, 315, 18, 376; 412 414; 415, \(314,315,318,376,412,41\)
419 S S W 350; W/ST 308.
Persons interested in the Program for Legal Studies should contact Dr Albie Burke, Director, Department of History.

Political Science
College of Social and Behavioral Sciences

Department Chair:
Department Office: Social Science Public Affairs (SS/PA)
Faculty: Professors: Sudershan Chawla, Robert L. Delorme, Rober E. Hayes, Stephen Horn, William M Noble, Ronald J. Schmidt, Christian ooe, Barry H. Steiner, A. Jay Stevens; Associate Professor Christopher Dennis, Paul C. Lary George, Lary F. Martinez Gerry Riposa, Edwin Roberts, Anne Stewart- Hill; Adjunct P Emeritus Facult
eroy C. Hardy, George V
Kacewicz, J. C. Lien, Hans P.
idder, Thomas P. Trombetas, A.
Department Secretary
Nancy St. Martin
The Department
Students desiring information or referral to one of the faculty office dvisors: Credential Advisor:
Schwartz (History); Undergraduate
Advisor: Robert Delorme; Graduate Advisor: Charles Noble
The political science major is designed to provide the student with a systematic knowledge of the nature and scope of political major in political science as apreparation for such fields as: college or university teaching, (2) aw, (3) government career servic (4) forteign career service, and (5) science major is preparation for general education, good citizenship Students interested in the fields mentioned above should consult with an advisor to secure aid in planning their progra
General Education
Requirements in
The Education Government each college graduate to meet (1) a federal government requirement and
(2) a California state and local
government requirement. Both of these requirements can be met by divisioan students) or Poolitical Scien 391 (for upper division students) It the student has completed the federal government requirement, bu not the California state and loca government requirement, the 326. Students who have taken American federal, state or local government at another institution should check with the poiticical
science faculy before enrolling Bachelor of Arts in Political Science

\section*{Requirements for the Bachelor of} Arts in Political Science (code 2-8536):
Lower Division: Political Science 100, 201, and two of the following
courses: POSC 210, 215, 220, 225, course
230.
Breadth Requirement: (21 units) Three upper division units from fiv of the following six areas plus six
units of upper division electives in Political Science which may incluc \(3951,4941,497,498\) or 499
International Relations
Comparative Politics
Political Theory
Public Law
Politics and Policy Formation
Public Policy and Administration Concentration Requirement: (9 units) Nine units from a sixth area including POSC 409, 419, 429, 449
469 or 489 .
Social Science Requirement: ( 6 units) Six upper division units. outside of Political Science taken in departments in the College of Social
and Behavioral Sciences, chosen in consultation with a Political Science advisor.
Option in Public Administration
(code 2-8540)
Lower Division core requirement
(15 units) POSC 100 and POSC 20 (15 units) PoSC 100 and POSC 201 POSC 210, 215, 220, 225, or 230 .

Breadth requirement: (21 units) Three units from each of the following five areas plus 6 units of upper division electives in POSC 498 or 499 .

International Relations
Comparative Politics
Poiltical Theory
Politics and Policy Formation Concentration Requirement: (15
units) POSC \(331,431,449\) plus 6 unitsditional units in the area of Public Policy and Administration. Bachelor of Arts in Pol
Science with Honors

\section*{Students with a maio}

Science may be admitto in Politica Sclience may be admitted to the
Political Science Department's honors program (option of the
University Schola's provided they have:
(1) Junior standing, completed POSC 201 and at least two upper-di
(2) A minimum of three semesters remaining before graduation; (3) A minimum cumulative GPA of 3.3, and 3.5 in Political Science courses
(4) Submitted to the Department Honors Committee two letters of
recommendation from faculty recommendation from facuity research or analytical paper witten for a previously taken course in
Political Science Political Science
(5) Received admission approval Committee.
In order to graduate with Honors
in Political Science a student must: (1) Complete all regular requirements for the maior in Political Science
(2) Complete 3 units of POSC
490 H : Honors Semine
(3) Complete 3 units of POSC

491H: Honors Research;
492H: Homors Thesis:
(5) Have at the time of graduation
cumulative GPA of at least 3.3 and a GPA of at least 3.5 in Political Science courses.

\section*{Minor in Politica
(code \(0-8536\) )}

A minimum of 21 units which must include:
Lower Division: POSC 100 or 391
Upper Division: Five courses
selected from POSC 308, 314, 322.
353,37
Minor in Public Administration in
Political Science (code \(0-8540\) )
A minimum of 21 units which
must include:
(a) POSC 331; (b) Nine additional
units selected from POSC 334, 336,
\(338,316,348,442,447,448,449 ;\)
(c) Six additional units selected from
the following: POSC \(320,322,326\),
327, 328, 420; (d) Three elective
units from any area in political
science cho
an advisor.
Master of Arts in Political Scienc
The Department of Political Science offers graduate study leading to the master of arts degree. The student is urged to becal requirements of the University and the specific requirements of the department as stated in this Bulletin. mportant supplementary in the master's degree in political science is contained in the Handbook Graduate Students, which is
available from the department upon request.
Before or soon after entering the program, the graduate student will normally consult with the departmen ate adviso
Atter beginning graduate study the student is responsible for obtaining the consent of three full-time members of the department's graduate eaculty
serve on her/his graduate committee: one of these committee members, the chair, will be draw from the student's major field of student's academic advisor while two others will be drawn from the second and third field o concentration respectively. The
student should seek to have
established her/his committee prior to the completion of the first semester or the first 12 units of work as a graduate student in political
science unless an exception is science unless an exception Graduate Committee. Prerequisites:
(1) A bache
(1) A bachelor's degree with a major in political science or a
bachelor's degree with 24 uppe division units in political science comparable tio pose required for a university.
(2) Completion of a minimum of one upper-division political theory course equivalent to POSC 301 or
POSC 303 at CSULB, with a grade of ' \(B\) " or better.
(3) Students whose undergraduate work is deficient in make up corain coursequi Deficiencies will be determin the Department's Graduate Committee atter taking into account each student's background and
goals. These courses will not coun goward credit in the M.A.
(4) A 3.0 ('B') GPA in political science courses taken as an undergraduate. (A student whose
GPA is less than 3.0 may appeal to GPA is less than '. may appeal to Committee for a possible waiver of this requirement.)
(5) Three letters of
(ecommendation (preferably from academic sources).
Advancement to Candidacy:
(1) Satisfy the general requirements of the University for
(2) In order candidacy: or advancement to candidacy students must obtain the written approval of their master's degree program of course work by their committee advisor. The program
must then be submitted to the department graduate advisor. Requirements for the Master of Arts (code 5-8536):
(1) A student's program is formulated in consultation with an department's faculty. A 30 units of acceptable upper divisio and graduate courses is required. All students are required to take
beth POSC 500 and POSC 550 . A
minimum of 15 units must be oncentrated in three of the field into which the department's curriculum is divided. An addititional Science or in another field of study losely related to the candidate's educational objectives. The program the \(500 / 600\) series of Political Science courses:
(2) The graduate student must complete one of the following requirements: (a) A comprehensive
examination in each of two fields of Political Science (b) A thesis and an ral examination on the thesis. Following completion of the thesis, he requirement for an oral examination);
Students following the
vill earnensive examination option OSC 697 and those writing a thesis will be granted three units of credit in OSC 698;
(3) In addition to completing the tudent must complete (or show that he/she has completed) one of the ollowing requirements; (a) A
minimum of two semesters of an acceptable foreign language taken at the college level with a grade of B' or better; (b) A demonstrated oreign language; (c) A minimum of wo semesters of acceptable course work in statistics with a grade of \({ }^{\prime} B^{\prime}\) or better.
interdisciplinary Minor in Public 0-8538)
The purpose of this program is to nable persons majoring in field broader understanding of the underlying social, economic and political factors related to policy alternatives, the dynamics of the process, the values impliciti in these decisions, and methods by which hese aspects of public policy may be analyzed
The minor consists of 21 units units and 9 units of electives. A naximum of 6 units may be taken in he student's major department, but major and the minor

\begin{tabular}{|c|c|c|}
\hline & capitalist democracy. Traditional grading ont for Majors/Minors. & \\
\hline \multirow[t]{3}{*}{Process by which administrative agencies decide quasi-judicial cases involving private rights, and make rules and regulations of a quasi-legislative nature affecting private rights open to students with credit in POSC 346 .} & 22. State Government & PUBLIC POLICY AND \\
\hline & Political structure and its oper state-federal relations, state-local relation perticular emphasis on California. & \\
\hline & & Administration (3) \(F\) \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
*318. Modern Legal Systems \\
(3) F
\end{tabular}} & & Principles and practices of federal, state and local administration. Traditional grading only. \\
\hline & & *334. Public Organization an Management (3) F \\
\hline Nature of law, pubilic and pivate, with the development of Anglo-Ameicican legal institutions and
profocesional stases
stury of law. & to such problems as poverty, conservation minority tensions, housing, transportation and crime. & Theories of organization and management with emphasis on their relation to administrative problems in civilian and military spheres of American government. \\
\hline \begin{tabular}{l}
412. Law and Social Change \\
(3) F,S
\end{tabular} & (3) S & \\
\hline \multirow[t]{2}{*}{lissues currently being dealt with in the American legal system (e.g., busing, affirmaive action, problems of the environment, sexual
disorimination). Examination of both the courts part in creating these problems and the degree which the courts have the potential to correct them.} &  & Survey of public personnel adminintration. including the growth and development of the Chil senice, the personnel agency, reccuitment \\
\hline & *329. The Policy Making & ams, employee ment systems. \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
*414. Jurisprudence (3) S \\
Fundamental legal philosophies, sources and classifications of law. Relationship of law to other disciplines and societal institutions.
\end{tabular}} & Examinatio of the procosess through & *338. Taxation and Budgeta Policy (3) \(F\) \\
\hline &  & social and political aspects of taxation policy. Current budgetary policymaking and \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
*419. Proseminar in Public Law \\
(3) F,S
\end{tabular}} & Traditional grading only & \\
\hline & & \\
\hline \multirow[t]{2}{*}{Prerequisites: Six units in public law coursees, consent of instructor. Intensive study of elected conceptual and theoretical problems in public law.} & & *348. Comparative Pub Administration (3) F \\
\hline & Analysis of factors influencing citizen's choices; methods used by candidates see electoral support; changes and trends & Theories, models, structure and function public administration in selected countries. \\
\hline POLITICS AND POLICY FORMATION & n & Program Evaluation Analysis (3) F,S \\
\hline & Formation and development of public opinio methods of measuring public opinion in political system. & Examination of the meaning and use of concepts and methods employed in public policy decision analysis, including an overview \\
\hline \begin{tabular}{l}
*320. Conduct of Political Inquiry \\
(3) S
\end{tabular} & *423. The American Presidency & the decision process, sources and methods handling policy-relevant data, and methods \\
\hline Problems of data collection and analysio. Impact of research methods on findings. & Roles and powers of the American presidency. & chniques of program evaluation and
analysis. Tradtional grading only for \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
322. Political Parties (3) F,S \\
Orgarization, functions and practices of political parties in inte Unimeastias. Anayysis of the part the political partios play in government and the importance of the two-party system in American government. Party respotimpation in other countries.
\end{tabular}} & & \\
\hline & Historical development of the legislature functions of legislatures; organization and procedure of typical legislative bodies; curren legislative and legislation tends; problems and the California legislature. & \begin{tabular}{l}
Policy (3) F,S \\
Critical examination of selected value choices involving how and by whom public policy is to be made, and choices involving what should be the content and goals of public policy. Traditional grading only for Majors/Minors.
\end{tabular} \\
\hline & 28. Political Behavior (3) F & *442. Planning Cities and Urban \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
323. Minority Politics in the United States (3) F,S \\
Systematic examination of racial and ethnic minority groups in the American political system. examination of selected public policy issues of significance to American
\end{tabular}} & troduction to the socio-poychological basi & \\
\hline & political socialization, politioal culture personality as explanations of political
participation, the development of political values and political action. & es and urban regions. Activtiess of federal e and local governments. Social and nmental consequences of land use, ing, transportation and design. Histori \\
\hline & &  \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
325. American Political Economy (3) F,S \\
History, structure and dynamics of the American political economy; the politics of economic policy; political responses io
\end{tabular}} & Policy Formation (3) Foric
Prerequibtes: Six unit in policica & *447. Public Administratio Tralnee Program I (3) F \\
\hline & formation courses, consent of instructor Intensive study of selected conceptual and politics. & Prerequisite: Consent of instructor. Internships in one of the various federal, state or local governmental units in the immediate area. an Credit grading only. \\
\hline
\end{tabular}
*448. Public Administration Trainee Program II (3) S Piereqquisite: Consent of instructor. Internships
in one of the various federal, state or local govermental units in the immediate area *449. Proseminar in Public 4u9. Proseminar in Public
F,S
Prerequistes: Six units in public policy and administration courses, consent of instructor.
Intensive study of selected conceppual and Intensive study of selected conceptual and
theorectical problems in public policy and administration.

COMPARATIVE POLITICS
353. Government and Politics of Western Europe (3) F,S Governments of representative European
democracies, with emphasis on governmentia demucturacies, functions and political proceesses and structure, finction and poltitcoa proces. *354. Government and Politics of
Scandinavian Countries
(3) Scandinavian Countries (3) F,S Comperative study of the politios of the
Scandinavian "social democracies" with particular emphasis on political structures,
processes and development in Sweden. procesoses and development in Sweden.
Cososational comparions with the poltical systems of other West European countries and
the United States. *356. Government and Politics of the USSR (3) F,S Investigation of the Soviet structure of
government and theory, legitimacy and practice of the Communist Party from its revolutionary beoginings to the present. Develo
Soweid ideology and Marixist theory. *357. Governments of Eastern Europe (3) s
Recent politial, eccanomic, consitititional,
governmental and interblco developments in Eastern Europe. Emphasis on the sesparate
roods to Communism and Communist

\section*{internationalism.}
*358. Contemporary Latin
American Politics (3) F
Role and characteristics of major socio-polticical
groups: major problems of develoment and Role and characteristics of maior socio-political
groups: maior problems of development and
underdeveloment underdevelopment.
Comparative Political Systems
(3) S

Government and politics of selected Latin
American countries, including Mexico and Cuba, with special altertion on revolution
evolution in the cuest tor modernization. *362. Society and National Politics of China (3) \(F\)
Developments in government, parties, procoess
of elections and poltical ideology of China.
*364. Society and National
Politics of India (3) F
Developments in government, parties, proccess
of elections and poltitial ideoling in dndia
*366. Government and Politics of Southeast Asia (3) S
Emergence and development of the
contemporary political systems of Southeast
\({ }_{*}^{*}\) Asia. . Governments and Politics
In the Near and Middle East
(3) F, S
(3) \(\mathrm{F}, \mathrm{S}\)

Comparatite study of political systems in the
Near and Midde East with Special Near and Middele East with special emphasis on
thenir
striticical forms, govermmental and social their politicid
structure.
\(* 455\),
*455. Comparative Revolutionary Change (3) S, Odd Years Roots of revolution. Emphasis on the historical
seting, ideockegy, socio-economic factors seting, ideotorgy, sociooconomic factors,
political beaderahip, organization and
nationalis. \(A\) Analysis of nationanlism. Analysis of revolutionary
conditions, courses and tactics past and conditions,
present.
*459. United States-Latin
American Relations (3) F
United States policiees toward Latin Americaa
and the poptical, economio, social and cultural effecto of theses policieles on Latin American
societies. Motivating tactors behind U.S. policy. 4611. The Politics of

Prerequisites: ENGL 100 and upper division Prerequisites: ENGL 100 and upper division
statuu. Problem. of polticaca devevicoment in the emeregnt nations of Asia, Arica and Latin
America. *469. Proseminar in Comparative Politics (3) F,S
Prerequisites: Six units of comparative politics
courses, consent of instuctor. Intensive stury courses, consent of instructor. Internensive structy
of selected conceptual and theretican of selected conceptual and theoretical
problems in comparative politics.

\section*{INTERNATIONAL RELATIONS}
371. Introduction to International Politics (3) F,S
Interaction of "great powers"; the influence of
belance of power, imperialism, prestige, and balanco of power, imperialism, prestige, and
the presevation of the status quo in the
international sphere Tadtiont *376. International Law (3) F Nature and historical development of
international law. Determination of rutes of international law. Detemination of rules of
international law. International community under law. Recognition of statem and
governments. Jurisiction. Settiement of international disputes. War aggression and
neutrality. *378. International Organizatio and Administration (3) S
Examination of historical development, of
international organization from the Concert of

Europe to the United Nations. Analysio of
contemporary international organazaiton, ths
functions, problems and prospects in the functions, problems and \(p\)
context of the word situation.
482. American Forelgn Policy
(3) S

Systematic study of the foreign policy of the
United States. Contemporary problems receive special emphasis.
*483. Foreign Policies of the
Major Powers
(3) \(F\) Major Powers (3) F Systematio examination of the national interestas
and foreign policies of the maior world powers and forieign policices of the malor world powers
in termmen of gobal political problems
Recommended: POSCC 371 . *484. Soviet Foreign Policy (3) Soviet forieign policy since 1917 - its origins,
evolution, dynamics and objeatives in selected evolution, dynamii,
areas of the world.
areas of the world
*485. Intern
*485. International Politica
Economy (3) FS Politico of giobal economic relations, including monetay and trade regimes, markets and
mutinational corporations. Emotasis on mutinational corporations.
issues of contriasis on
betren issues of controntation and
between countries regarding
 transfer. Prospective students are strongly
recomended to take PS 371 , ps 230 , Cos
300 or the equivalent. Traditiona 300 or the equivalent. Traditional grading on
for Major:Minors. *486. Natio
(3) \(\mathrm{F}, \mathrm{S}\)
Analysis of strategic posture with emphasis on miltary, por poltical posture with emphasis on
aconomic
interelationships as they infuence natione intererelationships as they influen
security
and
international yoplitics. *489. Proseminar in International Relations (3) F,S
 of selected concoptual and

\section*{GENERAL}
391. American Government (3) F,S

Formation of the Constitution, federalism, owil
liberties, politices,
 judiciary, state and local government. This
course satisfees the federal. state and boal
government ereauirement. Not open to studuents government requirement.
with crediti in POSC 100 .

\section*{(3) F}

Students will explore normative political issues
such as justice, alienation, and oppression
through a close examination of poltico lhen through a o lose exar
films, and ifterature.
490H. Honors Seminar (3) F
Prerequisites: Admission to the Honors
Program in Poolitical Science. The nature and
development of political science and ht
relationship to other diociplines in the social Scieincos. . Fecont dovevolopments in concocotua)
analysis and theory are emphasized. (Seminar.) analysis and theory are emphasized. (Seminar.
Traditional grading only. Course meets with \({ }^{\text {Traditional }}\) PSC 500.
491H. Honors Research (3) F Prerequiste: Admission to the Honors Program
in Politioal Science. Research for the wtining of in Political Science. Researct ho the witing of
an Honors thesis ander the diretion of a tacuity member. (Independent stucy Traditional grading onk
492H. Honors Thesis (3) S
Prerequisites: POSC 491H. Research and
writing of an Honors thesis under the direction of a dopartment taculty a aviour. (Indepenenden
Study.) Traditional grading vony. Study.) Traditional grading only
Preaquites. ENGL 100 Future (3) S Prerequisites: ENGL 100 and upper division
status. Study of presentiday global problems: status. Suty of proesint-day global probiems:
overpoputation, deppetion
resor enmionmental Cocay and thenif futurusp politicei
 technological
495. Public Policy and the Soclal Sciences (3) F
An intercilociplinary focus upon the relationship
of various disiciplines to public policy, especially
their contributions in terme of content and thechriquen Analysis of urban publiciopolicy trom the perspective of methoosologies uesed in

\section*{496. Washington Cente
Internship (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)}

Prerequisites: Upper division standing and
consent of instructor. Students who are
consent of instructor. Students who are
accepted by the Washington Center will be asosisted in locating a 30 to 35 hour-per-week Career related internship in a federal. copporaty
or independent seator agency bocated in O independent. seceor paency bocated learning contract. A final witten report in
required. Students must enrol concurrenty in an independent stuvies course to earan creodi an indopendident studiese course
for participation in the Washington Centerers seminar. CreditNo Crodit grading only.
Course may be repeated for a maximum of 9 Conrse may be repeate.
*497. Special Topics (3) F,S Prerequisite: Consent of instructor. Analysis of
selected contemporary issues and problems selected contemporary issuesi and probilems
May be repeated for a maximum of six untit with ififerent topics. Top

\section*{\({ }^{*}{ }^{4} 193\) ) Pr ,}

\section*{(1-3) F,S} Prerequisate: Consent of instructor and
dioparment chair persoon. Political or
governmental governmental experiercee supplementiod by
reading and reesarch under the direction of a reading and revearch under the direction of
factury member. May be repeated for maximum of sow units. .No morot than there units
may apply towad the majo in political science. may apply toward the major in political sciencoe
Not open to students with credit in POSC 447
 *499. Readings and Conference In Political Science (1-3) F,S Preeracuise: : Consent of instructor, Directed
reading to pormin independent pursuit by advancod students on toppisidot of pocial interest Hours to obe arranged. Graduate studdents who
have had this course as an undergaracuate may have had trpat t.
Graduate Divisio
500. Foundations and Scope of Political Science (3) S
Prerequisite: Graduate status or consent of instructor. Approaches applied to the
conceptual analysio of poltical phenomena cunceptual anaysois of popiticail phenomenena and change as well as methoodological
arguments about the nature of explanation in political science.
550. Research Methods in
Political Sclence \((3)\) S
olitical Science (3) S
Prerequistite POSC 500 . Methods of empirical
reeearch in political scienco includuing the
 standards of measurement and observation,
methods of data collection, research design metrocse of data collection
and logic of data anayysio.
590. Advanced Study (3) F, S Prereacuiste: Consent of Graduate coordinator
and Instructor. Study under the supenision of and instructor. Study under the supenision of
a facuity member.
Student must fulfill requirements of a selected upper division
 of the courres. May ber repeated to t a maximum
of six unts. Traditional grading only. Curse of six units. Traditional grading only. Course
may be fepopated for a maximum of 6 units wih may be reppated
different topics.
600. Seminar in International
Poitics (3) FS S Politics (3) F,S Intensive stucy of selected topico in
international poriticses such as andionaliom
 imperialis, Uuocicial setibemenent or international
disute, ocolectiv securty. Each semester a
different topic will be stressed. May be different topic will be strasend
repeated tor a maximum of six unita.
10. Seminar in Comparative
(3) F,

Intensivestudy of the political institutions and policices of selected foreign governments.
Emphasis on poltical partios and contemporary governmental policiy
620. Seminar in Political Theory (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisiste: An Uppor division courre in
pooticial theory. Anayblical and citical
examination of the malior concepte of poltical examination of the maitoc concoepts of political
theory. May be fepeated for a maximum of six
units.
640 . S
640. Seminar in American (3) \(\mathrm{F}, \mathrm{S}\)

Intensive study of topics and problems in
American government including issues in American government including issuves
constitutional law and the iudicial process. 697. Directed Research (1-6) F,S
 puciance of a taculty member. Three units advanceed to candicacy for the masterin teen in political science. A maximum of three units may be earned by students with creditin POSC
698. May be repeated to a maximum of six units.
698. Thesis (1-4) F,S

Planning, preparation and
lor the master's degree.
COURSES (PPOL)

Upper Division
350. The Policy Making Process Examination of the processes through which Examination of the procossess through wich
public policies aer formulated, adopoled and
implemented, and the polital implemented, and the polticical and
organizational contexts which condition these organizational contexts which condition
processes. Same course as POSC
P29. 400. Program Evaluation and
Policy Analysis (3) \(F, S\) Preerequistese: ENGL 100 and upper division tatus. Examination ot the meaning and use of
concopts and methods employed in publio policy decision analysis, including an overiew
of the decision process, sources and methods of the decision procoses, sour oses and methods and techniquess of programm evaluation and
policy analyuis. Same course as POSC 431.

Psychology
College of Social and Behavioral Sciences


Master of Arts in Psycholog General Research Option This 30-unit degree program training for further study leading toward a doctorate. Core courses include quantitative and research basic content areas of Psychology Students from our program who ter enter doctoral program nsistenty inform us that they find doctoral study as compared to other students.

\section*{Prerequisites}
(1) A bachelor's degree with a
major in psychology; or:
(2) A bachelor's degree with a units of upper division psychology substantially equivalent to those required for the baccalaureas degree at this University, including
PSY 310 , two of the following: 331 , 332, 333, 336, 337, 341, 342, 345 one of the following: 351,356 , 361; and one upper division
laboratory course or equivalent.
(3) Six units of college level work in chemistry, physics, biology or mathematics as approved by the graduate coordinator. No more approved mathematics course
Advancement to Candidacy
Prerequisites for advancement to candidacy are
1. Classified status. 2. An approved program of studies for the Master of Arts, 3. Satisfactory completion of the CSULLB Writing Proficiency Examination. Information is available in the Testing Office (SS/A-216). This be bet by requirement can also be met by the WPE while an undergraduate at CSULB or at certain CSU campus 4. A minimum 3.0 overall GPA and a 3.0 GPA in all units undertaken for the
6 graduate units).
5. Be enrolled in regular session.
6. Application for Advancement to Candidacy must be done prior to or 698, Thesis

Requirements for the Master of Arts (General Research Option) code 5-8130)
The student must complete, as
graduate student, 30 units of uppe graduate student, 30 units of
division and graduate courses exclusive of PSY 499 ,
1. If not taken previously as an prerequisites: PSY 310, two of the
following: \(331,332,333,336,337\) 341, 342, 345, and one of the
following: \(351,356,361,365\). No other 300 level course may be 2. At least one of the following:
\(533,537,542,545,551,556,561\); , A 1 , 12,512 graduate psychology (not includin graduate psychology (not including
PSY 697
or including only three units of PSY 678 ) including 696 C ; one course chosen from 631, 632, 634 or 637; one course chosen from
PSY 651, 656 or 661 ; PSY 698 , six units).
4. Completion of all requirement as establishe
5. A written comprehensive examination composed of three examinations taken in required seminars.
6. With the graduate coordinator's approval a maximum of six units substituted for six of the 30 units. 7. A preliminary oral examination on the thesis proposal and a final oral examination in
completed thesis.
Option in Industrial and Organizational Psychology
This program admits about 30 students per year. Students prepare or business and industrial position relations, human factors
(engineering psychology), employee and customer training, applicant and usually go directly into business and industry. A few have entered Ph.D. programs.
Prerequisites:
(1) A bachelor's degree with a chology;
(2) A bachelor's degree with a units of upper division psychology ubstantially equivalent to those equired for the baccalaureate
degree at this University, including Sh 310 and an upper division
Advancement to Candidacy
Prerequisites for advancement to candidacy are:
1. Classified status.
2. An approved program of tudies for the Master of Arts,
Industrial and Organizational degree
3. Satisfactory completion of the CSULLB Writing Proficiciency Examination. Information is available
in the Testing Office (SS/A-216). This requirement can also be met by evidence that the student passed the WPE while an undergraduate at
4. A minimum 3.0 overall GPA and a 3.0 GPA in all units
undertaken for the program (at least
graduate units).
5. Be enrolled in regular session.
6. Application for advancement to
candidacy must be done prior to or andidacy must be done prior to or
oncurrent with enrollment in PSY 698, Thesis.
Requirements for the Master of Requirements for the Master
Arts Option In Industrial and Organizational Psychology 5-8132)
The student must complete a minimum of 30 units of upper minimum of 24 units in psychology hcluding:
(1) If not taken previously as an ndergraduate student or to fulfill 18, 351 or 553,582 , 511 or 512 , nd two courses from PSY 331,332 , and two courses from
\(333,336,337\) and 345
(2) A minimum of 24 units in graduate level courses including and 515 or 696 L ;
(3) An oral examination covering he thesis;
(4) A maximum of six units from related areas may be substituted for of the 30 units with a maximum 24 -unit graduate-level course equirement, with the advisor's (5)
(5) Substitutions for required courses are permitted if a petition to Pubstituete is apprioved by the enrollment in the course.

Master of Science in Psychology The Master of Science in Sychology degree program covers kills in the areas of community clinical psychology and is specificall designed to meet California State equirements for Marriage, Family program provides training in a wide ange of professional skills, including prevention of mental health
problems, promotion of social problems, promotion of social disadvantaged groups, and development of counseling and sychotherapy sh
rerequisites:
1. A bachelor's degree with a major in psychology or a major in a
related field and 27 units of upper division psychology
2. PSY 310 Intermediate

Assessment or 315Princiiples of Psychological Testing, 332 Cognition or 333 Psychology of -earning (or course in Behavior Nomen or Ethnic Studies Course, 370 Abnormal Psychology, 351 Social Psychology or 375 Community Psychology, 361
Psychology of Child and Adolescen evelopment, 405 Field Work in Psychology (one semester) or 406 Applications in Psychology (one to Family Therapy, and 473 troduction to Clinical Psychology 3. Written application which is designed to screen applicants fo overall program including a statement of goals and past statement of goals and
experience in the field.
4. A personal interview conducted
y a selection committee.
Advancement to Candidacy
Prerequisites for advancement to Classified
Classified status.
2. An approved program of
studies for the Master of Science in Psychology degree.
3. Satisfactory completion of the SULB Writing Proficiency xamination. Information is available equirement can also be met by evidence that the student passed the WPE while an undergraduate at
4. A minimum 3.0 overall GPA and a the program (at least 6 units).
5. Be enrolled in regular session
6. Application for Advancement to Candidacy must be done prior to or oncurrent with enrolimen
equirements for the Master cience in Psychology

The program is a 49 -unit Master's degree. The following courses are equired: PSY 516,571 or 661, 572 \(595,672,673 A, 673 \mathrm{~B}, 673 \mathrm{C}, 678\) (6 units), 679, 698. Courses (PSY)
All courses in this department are raditional grading only unles therwise stated
00. General Psychology (3) F,S hatroduction to the scientific stucy of human be avior. Designed to provide the student with
asaio background for futher study and for poactical application in everryday lific. (CAN PSY
200. Research Methods (4) F,S Preerequisite: PSY 100 . Introduction to basic eserimentation, in naturalisticio. observation strelational studies. (Lecture 3 hours. 0. Introductory Statistics 4) F,S
rerequisites: PSY 100 and completion of a Educational credit. Calculation and meaning a tratisticical meaousures. Descocritive and infererentia tatistics: probability, normal cunve, correataion, ampling, hypothesis
230. Critical Thinking (3) F,S
the nature of critical thinking: models and rategies: common fallaciese of reasoning oll-regulation in the thinking proces 241. Psychobiology (3) F,S Prerequisite: PSY 100 . Introcuction to the study
of behavior trom a biological point of view. behavior fiom a biological point of viev ehavior, with emphasis on brain mechanisms esented in the context of fundamen Upper Division
001. Mind Control or Freedom

\section*{(3) F, S}
rerequistes: ENGL 100 and upper divien tatus. How people control upper division proaches Conilipuatione and coerchis pproaches. Consideration of basic procossese
persuasion, coercive persuasion and
coerche control: sources of power in society and the posychological and ettical implication
of freedom and responsibility in coping with controd attempts responsibility in is coping with
criends. goverment
*310. I
Prerequisite: PSY 210 or introductory statistic course. Basic theoretical conceptsts of stataisiticio and the use of these conceptst it the selection
and development of modeel testing, hypothesii testing and parameter estimation procedure Both single measure (Univiaita) and
correatation (bivariate) conconts are include (Lecturur 3 hours, laboratoroy 2 hourss).
*314. Psychological Assessment *314. P
F,S Prerequisites: PSY 200 and 210 . Principles of
assessment applied to the measurement o individual behavior and to programs intende to affect behavior. Includes interiews, teets and other methods.

Psychological Testing (3) F,S Prerequisites: PSY 210 or one statistics course Principioses and practices of group and individu
al testing in the fields of inteligence, apitude al testing in the fielicd of intelligenoes. aptitude
achievement, personality and interest. Empha sis on the evaluation of tests as measta
devices, their applicability and linitations. *331 Sensation and Perception (3) \(\mathrm{F}, \mathrm{S}\)

Prerequiste: PSY 200. Basio phenomena of the integration in complex perciceptual iudgments *332. Cognition (3) F,S Prerequiste: PSY 200 . Study of higher-order processes basio to the accuisistion of creatrivty, infiommation processing, decision making, judgment, concopts and imagination. (3) \(F\),

Preerequisite: PSY 200. Human and animm
learning with special emphasis on experiment learning with special emp
evidence and techniques.
*336. Psychology of Emotion (3) F,S Prerequisist:: PSY 200. Discussion of research,
theories and coping mechanisms of human *337. Psychology of Motivation (3) \(F, S\)

Prerequisite: PSY 200. Stituational and physiological determinants of human and
animal behavio, theories of motvaiton and emotion, discussion of techniques *341. Neuropsychology (3) \(s\) Preerequisite: PSY 200. Neurological correleteo
of behavior with special emphasis upon central nervous system structure and function. Experimental everidence on whic neurop
based.
(3) S

Prerequisites: PSY 100,241 , or equivalent. Thio of various medications on the cental nercou or various medications on the central nenvour
system and
behavior. This indude neurotranemititer functions, physiological and
biochemical mechaniems of drug action with emphasis on the effect of poychiatio
medications, common "street dugus" and thoose medications, common "street drugs" and those
sold over the counter; their potential for abues sold over the count
is also considered.
*345. Psychophysiology (3) Prerequisite: PSY 200 . Physiological activty
cocurring in humans during particular behavior states.
methododogical appopoacheses.

\section*{3461. Human Socloblology} (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisites: PSY 100, BIOL 200 or 210B, or
consent of instructor: ENG 1100 and consent ot instructor; ENG 100 and upper
division status. Human social behavior a seen in the context of evolutionary biology Topiss incluce the importance of kinship in human sexuality, parent-oftspring relations ethical and logal syster
course as BIOL 3081 .
3501. Psychology and

Contemporary Soclal Issue
(3) \(F, S\)

Prerequibites: ENGL 100 and upper division
status, PSY 100. Application of social
 maior contemporary issuie
351. Social Psychology (3) F,S Pretequisite: PSY 100 . Study of indididuals anc
groups as they are affected by social interactions. Incluces such toplitise as socicil cognition and learning, attitudes and
persuasion, social infuence (contormity
 loving). anti. and proscial behavio
(aggression, violence. altricem, coopopation and ocmpentition, leadership, group cynamics,
sexual behavior. Not open to students with sexual behavior. Not open
credit in SSC 3351 . \({ }^{352 .}\) (3) Fsyc
Prerequisite: PSY 100. Exploration of male rolees as they affeet interactions between men and men men and women, and men and children. Course is designed to enhance personen Understanding through an ee
353. Humanistic Psychology (3) F,S
Prerequisite: PSY 100. Examination of theories. findings and methods deerived fiom humanistic peycholology, including, encounter groups
mediation, sex roloes, ESP, droams, doath and application of humanistic approacheses to 3 a
institutions, education and pesychotherapy.
354. Psychology of Women (3) F,S

Prerecauisite: PSY 100 . Psychology of sexiem;
the biological and social determinantis of the poycchology of women.
men and women students.
356. Personality (3) F,S

Prerequisite: PSY 100 . Disisussion of theories,
research and assesment in personality. 359. Self-Observation and
Self-Development (3) F,S

Prorequisite: PSY 100 . Examination of personal
trata and behavior patterns as refected by obijective measures, group interactional
procedures and video feocduack Development
 experiencos, seef anaysis and mediation. 361. Psychology of Child and
Adolescent Development (3) F,S Prerequiuite: PSY 100. Methodological and
theoretical problems and issues in the study of heoretical problems and issues in in the study of developmental change procosses from prenatal
development through adolescence. Topical coverage includes physical-motoric, spocial.
physiological and ind
intelectual aspects of physiologicial and in 365. Psychology of Adult Development and Aging (3) F,S Prerequisate: PSY 100 . Methodological and
theoctical problems and issues in the study of heoverical problems and iseuses in the study of
develomental change procoseses trom young
duthood through old age. Topical coverage
 and
indudeses physical-motroic, social, physiological
and and intellec
functioning.
366. Fathers and Fathering: A
Psychosocial View (3) S

This cursed is for both women and men.)
Prerequistes: PSY \(100, S C O 100\) ol HEC 111 An overiew of the posychological fiterature on parenting with emphasis on fathersfathereing in the U.S. Focus on current iterature and
research regarding the perceived and changing
 effort to
370. Abnormal Psychology (3) \(\mathrm{F}, \mathrm{S}\)
frerequisate: PSY 100 . Abnormal behavior as it throws light on normal personality adiustment.
Consideration of the role of biological. paychologicial and social factors in bethavi,
disorders, together with the consideration of disorderss, together with the consi
basic principipes of mental hyyiene.
375. Community Psychology (3) F,S

Prevequisite: PSY 100. Basic concopops and kills of community pesychology, including
community
assessoment.
communty communty aspessmenti, community oplicy analysis, relationships between social systems and individual behavior. Emphaisi on
378. Health Psychology (3) S Prerequisiste: PSY 100 . Research and theor egarding atitiucles, beliefs, and behavior differencoe variabbes will be exaamined. Andaysois of applications of peycholology to prevertion. counsteling,
381. The Psychology of Work

Behavior (3) F,S
Pretequibite: PSY 100 . Problems and
procedures in induatial
psychology
 ocial context of of human orgonzarion, phyal ancal 390. Special Topics in
sychology (3) F,S
Prerequisite: Consent of instructor. Topics of intensive development. May be repeated wit , more than six units may be nied units bution no more than six units may
401./501. History of Psychology (3) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: Six upper division units in envopment of pyschololoy as a science.
Contributions of maior indinduals and systems. *405. Field Work in Psychology
(3) F Prerequisites: Poychology maioo, Junior
serion standing ( 3.0 GPA ). PSY 2000, 210, upper dinision units in pyychology, letter of works undor the supeenision of of in a association with, a protessional having an advancod degree in a psychohological disicipline and who in poychorology in the surrounding communti. Macements incude schools, hospitals, clirica
 13 weoks. Oftered CreditNo Credit grading only except to graduate students who mat
May be repeated to a total of sis unitia
406A,B. Applications of
rerequiste: Consent of instructo sudention Prerequiste: Consent of instructor. Students
are expected to take 4068 during the sprin
semester. Sudents apply tor the \(406 A-B\) emester. Students apply tor the 406A. sequence during the sping of the academic
year beforce the courses are taken. Theoretical and laboratory training in the topic areas are
followed by applied work with clients, schools, businesoses, eto., as approppiatet. Students are superised by the co
ourse as SW \(406, \mathrm{~B}\).
07./507. Introduction to Family 407./507. Introduc
Therapy (3) F,S

Prereaquibles: PSY \(200,473,475\) or consent of
the instructor. Sunvey of the feld of The instuctor. Survey of the fiflel of tamily therapy including origins ovdifierences in family
struture, historical deverocment of tamily
therapy
theory and practice. (Lecture)
411./511. Statistical Design and
Analysis of Experiments (3) F,S Prerequiste: PSY 310 or 412 or consent of
instructor: Simple and complex designs. instructor. Simple and complex designs.
Statistical
inference
in experimentation and in scientific inferernce and
prediction. (Lecture 3 hours.)
412./512. Multivariate Statistical alysis: PSY 3 instructor. Accuracy and cost of inferencee from mutitipe variabies. Theocretical implications of inferred
hours.)
416. Introduction to Program Evaluation and Needs
Assessment (3) F,S
Prerequistes: PSY 310,314 . Introcuction to the implementing, asessinyzing and deesporting evaluations of programs in mental heath, industry, oriminal jestice, education and
community
setings. (Leoture 2 hours laboratory 3 hours.)
418./518. Computer Applications
in Psychology (3) FS in Psychology (3) F,S Prerequisites: C/STT 200 or equivalient: PSY 310
or equivalent or consent of instructor Foundations of computer technology and tion
application to poyychology. Emphasio on application to peychology. Emphatis on
realtitime control by cigital computers in
psychological research and applications. pasychoogogical erearch and apputiers in
(Leeture 2 hours, laboratory 2 hours.) 433./533. Research in Cognition and Learning (3) \(F\)
Prerequuistes: PSY 200,310 , and 331 or 332 or
33. Research methods in cogntion, learning and percoption. Laboratory inductudes observations and experiments on selelected
topics. (Lecture 2 hours, laboratory 3 hours.) 436. Psychology of Mood
(3) F, S (3) \(F, S\)

Prerequuisites: PSYY 100, 200,310 , or permisesion
of instructor. Analyses of normal mood states, including sunvey of existing literture. Topics may include the relationship of mood to
important antecedents and consequencess important antecodents and consequurnces physical health, stress, and coognition, Self-applications for purposee
regulation also will be covered.
437./537. Research in Emotion and Motivation (3) S
Preerequisites: PSY 200, 310, and 336 or 337 .
Research methods in emotion and motivation. Research methods in emotion and motivation
(Leeture 2 hours, laboratory 3 hours.)
438./538. Psycholinguistics

Prereaquistes: Six units of linguistics of upper division peychology. Psychological and
linguistio apporaches to the study of language Tinguistio approaches to the study of language.
Theory
understand research ing in the production and understanding of language, language
accuistion, memory for language, and use of language in its social context.

Prevequisites: Six units of linguistios or upper
division peychocology, or consent of inturtur Theory and research on the acquistion of fort and second languages in chilcren and adututs Psychoholinguistic perspectives on the
development of semantic, and pragmatio aspects of language The interacting roles of developmentral stagees cognitive processes, indididual differencese
social influences, and the culural context wil social infuencos, and the cultural context wil
bestressed. (Seminar) Same course as LING 539.

441,/541. Research in Physiological Psychology (3) F
Prerequisites: PSY 200, 310, 341, Prevequistes: PSY 200, 310, 341. Resoarch
methods
fundamentals of neuropychocology. Incluces fundamentals of neuroanatomy, surucical
prococulues for stimulation, lesioning and
 neuropsychological
laboratory 3 hours.)
445./545. Research in

Psychophysiology (3) S
Prerequisites: PSY 200, 310, , 345 . Research
methods in human peychat polygraph recording and analysisisy in hume polygraph recording and analysis in human
response sytems such as brain, skin, carciovasculuar and respiriatory system,
(Lecture 2 hours, laborator 3 hours.) 450. The Psychology of
Self-Management (3) F,S

Prereauisites: PSY 314. Not open to students Perequalisies: PSY 314. Not Poen to students
with credit in Ed P 357 . Introduction to theory
reseach research, and application of self-management
procedures. Topics incluce systematic self-observation, decision-making, time management, emotion management, and hab Change and maintenancee Students design and
implement one sefficontrol progran. (Discussion)
451./551. Research in Social Psychology (3) F
Prerequistes: PSY 200, , 310,351, or consent of
instructor. Research methods and problems in social peychology. (Lecture 2 hours, laboraton)
3 hours.) 453./553. Principles of Group Dynamics (3) S
Prereacuiste: PSY 200, 210,351 or consent of
instructor. Behavior in groups with attention to Piestrucuistere. Behavior in groups with atenention to
such factors as

 officiency. Problem (3) S

Preerequistres: PSY 200, 310, 356, or consent or instructort Research menthods and probblems in personalit.
hours.)

\(* 457\)
*457. Psychology of Sex (3) S Pererequistes: PSY 351 or 356 or 370 , consent
of insturar. Survey of topoics in human
sexualiy with emphasis on denelonmentel
peychology of sexualily, atitudues and foelings
related to sexuality, sexual variations and
deviations, and sexual dystunction and sex deviations,
therapy.
Persor
Prerequisites: PSY 200, 356 . Current theoretioal philosophical and methodological issues
personality. Coverage may incuce the perssonitituation interaction, the role
genetics, genetics, aggression, altrrism, streves/opping
and sex differences. (Lecture/ /iscuusion: and sex
461/561. Research in
Developmental Psychology (3)
F
Prerequistes: PSY 200; 310; 361 or 365
Research methods in life-span developmental
 sequential design and stataisical
(Lecture 2 hours, laboratory 3 hours.)
462 Cognitive \({ }^{462 .}\) (3) F
Prerequisites: PSY 200; PSY 332,361 , o
equivalent. Phenomena of fifespan cognitivi equivient. Phenomena of ilifespan cognitive
development toonsidered within the framework develiopment considiered within the framework
of maior theories. Examination of research on
topics including develo topicis including developpment of perception
thinking, reasoning, and intellicence: landuage memory; and metacognition. Integration of
developmental
processis developmental processes; blological and
cutural constraints. (Leetureplicususion: cultural
463. Social and Personality Development (3) S
Prereauisites: PSY 361. The development o
social behavior and personality in chilidren and
 approaches and processes as well as content
areas, such as the development of aggression areas, succh as the devevopment of aqgeression,
morality, proscoial behavior, pees relations, and
sex differences. (lecturep sex differencoces. (Leeture)/iscoussion \(: 3\) hours.)
*. *473. Introduction to Clinical
Psychology (3) F,S Psychology (3) F,S
Prerequisites: PSY 370 . Sunvey of the field of
clinical ppychology including an introcuuction to cirinical ppychenology induluding an introduction to
diagnostic proesdures and the therapoutic
procesess. Practical proiects in obsenation procoss. Practical proiects in obsenvation, cas
practice and case conference teechiaues.
475./575. Clinical Interviewing
(3) \(F, S\)

481./582. Research in Industrial and Organizational Psychology (3) F,S

Prerequisites: PSY 200, 310, 381. Research
methocs and problems in industria methods and probbems in industrial
psychology. Incluces direct observation
 methodolo
hours.)
(3)

Prerequuiste: PSY 381 or 481 . Sunvey of existing
knowedge techniques in personnel peychology.
Psychology (3) F,S
Prerequisite: One tore-level course in the
subiect mater of the course. Avvanced stury subbiect maater of the courrse. Advanced study
of selected topics in one basio area of of setocted topics in one basic area of
peychology. e.s., cognition and learning, emotion and motivation, physibiogicial, social.
personality or developmental. May be repeated Perssonality o dovelopopmental. May be repeated
with difierenen topocos to maximum of nine units. See Scheduluo of Classes for subjects being
offered during a given semester. 495/595. Ethical and Leg Issues in Psychology (3) \(F\)
Prerequiste: Any \(30-\)-vevel poychology course.
Ethical principles in human and animal research and in appleod areas of poychonomal.
Emerging legal lisulus in the fields of forensic paychonology, behavior modification, criminal
499. Independent Study
(1-3) \(\mathrm{F}, \mathrm{S}\)
Prerequisite: Consent of department. Student
will conduct independ wiil conduct independent laboratory or libray
research and wite a report of the research May be repeated for a maximum of 6 units. Graduate Division
501./401. History of Psychology

Prerequisite: Six upper division units in Prerequisitity: Six upper division untis in
peychology
dhe histical background and development of posychology as a science.
Contributions of maioc indididuals and systems. 507./407. Introduction to Family Therapy (3) F
Prerequisites: PSY 200, 473 , or consent of the
instructo. Sunvey of the field of family therapy inducing origins of difictencesces in tamily
structure, historical development of tamily structure, historical development of famin)
therapy theory and practice. (Lecturel
511./411. Statistical Design and Analysis of Experiments (3) F,S Prerequiste: PSY 310 or 412512 or consent of
instructo: Simple and complex doesigns. instructor. Simple and complex desighn.
Statistical
inference experimentation and in scientifici inferences and
periction. (leeture 3 hours.)
512./412. Multivariate Statistical Analysis (3) \(F, S\)
Prerequiste: PSY 310 or 411,511 or consent of instructor. Accuracy and cost of inference from
mutriple predictors. Discovering structural
 Applications. (Lecture 3 hours.)
515. Test Construction Theory
and Practice (3) S and Practice (3) S Prerequisite: PSY 315. Consideration of
problime in the construction of tetit for
personnel selection, educational screening.

541./441. Research in
hysiological Psychology (3) F Preerequistes: PSY \(200,310,341\). Reesearch
nethods in
neuropyychology. Indude Undamentals of neurranaotomy. Includiea coording, pharmacologogical proceedures used in neuropaychological research. LLecture 2 hours, 542. Techniques of Physiologica sychology (3) S
Prerequibites: PSY \(541 / 441\). Dovelopment of
physiological methods and animal surgical physiological methods and animal surgicas 45,/445. Research In 545./445. Research In
Psychophysiology ( 3 ) Prerequistes: PSY 200, 310, 345. Research methods in human posychophysidoogy. Incelude olygraph recoroding and analasis in human
losponse systems such as brain, skin, cardiovascular and respiratory system.

\section*{51./451. Research in Social}
551./451. Research
Psychology (3) \(F\)

Prerequistes: PSY 200, 310,351 or consent of Preterucistes: PPY 200, 310,351, or consent of cial psychology. (Lecture 2 hours, laboratioy 553./453. Principle
Dynamics (3) S
rerequisties: PSY 200, 210, 351, or consent of sstructor. Behavior in groupo with attention
usch tactors as leadership.
fellowship
 organization, management, morate, and
officiency. Problems, techniques and methode of investigation. (Lecture/ Diocususion.) 554. Attitude
(3) Demand

Prerequisites: PSY 200, 210, 351. The nature ated psychological proccesses. Projeid
 556//456. Research in
556 ./456. Research in
Personality (3) \(\$\)
Trerequistes: PSY 200, 310, 356, or consent of nstructor heesearch methods and problems in personality. (Lecture 2 hours, laboraton
hours.
\(561 . / 461\). Research in Develop
mental Psychology (3) \(F\) Hereauishes: PSY 2200; 310 ; 361 or 365 soearch metrods in life-span developmenta sequential diesign and testasistical modela
LLectur 2 hours, laboratory 3 houras. acture 2 hours, laboratory 3 hours.) 571. Behavior Dis

Prerequistes: PSY 377 ; PSY 331 or ED P 30 consent of radruate coprdinator. Investigation of the etiology, classification, diagnosis and bith through adolescence.

\section*{(3) S}

Prerequiste: Pas a courrautiste: Permission of instructor. The
phenomenesses an understanding of socilel phenomena in communities ind terms of a
behavioral perspective and associate methodorogy. Aetspective variety of rassociated
phenomena such world phenomena such as energy consenvation,
polution, mass transportation, population control, and commu
selected for analysis.
573. Clinical Psychology (3) F,S Prerequisite: PSY 473, consent of instructor. Consideration and evaluation of dirical
assessment, pyychotherapeutio proceseses and aspesesment, ppyyhhotherapeoticic proce
current trens in in linical psychology.
575./475. Clinical Interviewing
(3) F,S

Preerequisites: Permission of instructor, PSY
314. Stud and development of the clinical
techniquues of observation and the interiew. 576. Cross-Cultural Psychology: Approaches, Theories, and Issues about Minority-Americans
(3) \(F\) (3) F

BSST 319, CHLS 319 , WST 119 , ASAM 319 \(300-400\) level suinvey course in ethni experience. This course focuses on the
development and practice of mental heath serice delivery in minority-American communities. The purpose of the seminar is to
students to obtain an understanding of studonts to obtain an understancing of pars
and pesent isues in the delvery of mente
healt heath semices for particular third world groupe
in the United States, i.e., Chicanos, Black in the United States, i.e.", Chicanos, Black
Asian Americans. This understanding will hopeflly If facilitate the the student's
conceptualization of mental healt service delinery and enable the integration of
theoretical concepts within the socio-cultual theoretical concepts
context of these groups
578. Advanced Issues in
Psychopathology (3) S

Prerequisites: Encollment in the Masters of
Science in Paycholog Pro Science in Psychologyy Program andlor consen of the instructor and Graduate Coordinato
This course will cover the relevant literature in The areas of child cout the ere human sexuncuatiry and chemical dependency as specified under
Califormia law requirements for MFCC Licensing.
581. Organizational Psychology
(3) F,S (3) F,S

Prerequistes: PSY 351,453 recommended or
consent of instructor and consent of consent of instructor and consent of Graduate
Coordinator. Anayysis of organizational
behavioc and practices behavior and practices from a aystems point of veew. Consideration of employee mottration,
power,
leadership.
communication decision-making, and organizational chang,
Research methods for studying organizations. 582./481. Research in Industrial Psychology (3) F,S
Prerequisthes: PSY 200, 310, 381. Research
methods and problems in industrial
peychology. Includues direct obsenvatian,
ppychophysical, regression and experimental
hentrocologies. (Lecture 2 hours, laboratory

\section*{585. Proseminar in Personnel} 585. Proseminar in
Psy

Not open to students with credit in PSY 586
Preerequistes: PSY 315 and 381 or 486 of Prerequisistes: PSYY 315 and 31 or or 486 of
conest of instructo and consent of 4 radut consent of instructor and consent of Graduato
Coordinator. Advanced consideration problems and procedures in peratsonnel posychology. Includes both differentitition
synthesis of major areas within this field. 587./486. Personnel Psychology (3) F

Prerequisite: PSY 381 or 481 . Survey of exisiting
knowedge and description of research techniques in persoonnel peychohology. 590. Advanced Topics
Psychology (3) F,S

Prerequisite: Consent of instructor. Topics of
current interest in peychology selected for current intereses in peychologys selected for
intensive development. May be repeated (with intinenise developpment. May be repeated (Mith
selection of a second topici) for a meximum of six units. Topicses will be announced in the
Scheodie of Classes. 595./495. Ethica
595./495. Ethical and Legal
Issues in Psychology (3)

Prerequiste: Any 330 -level peychology course.
Etical principles in human and animal research and in applied areas of paychnology
Emerging legal issues in the fields of forensie Emereging legal issues in the fielids of forensio
peychology, behavion thodifotion, criminal
ustice and dirical practice will justice and dinical practice will bo

\section*{(1-3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)}

Prerequisite: Consent of department. Prerequisite: Consent of dopartment.
Unclasifed graduate student will conduot
independent laboratory of library meseearch and independent laboratory or librayy research and
wite a reporo tof the research. May be erpeated
for a maximum of 6 unite to a maximum of 6 units.
631. Seminar in Perception and
Physiological Psychology Physiological Psychology ( 3 )
\(\mathrm{F}, \mathrm{S}\) F,S Prerequiuistes: PSY 331 or 341 or 345 or consent
of instructor, consent of graduate coordinator
 percoption, information processing and
neurophysiological correatates of behavio neurophysiologicalal correlates of behavior
Suteden emphasis on either perception of
physiological 632. Seminar in Le
632. Seminar in Learning (3) \(F\) Prerequisites: PSY 333 or consent of instructor
consent of graduate coordinator, advancemen consent of graduuat coordinator, advancoment
to candidacy. Advanced consideration on
selected topocici in iearaning

\section*{634. Seminar in Cognition}
(3) \(\mathrm{F}, \mathbf{S}\)

Prerequuisites: PSY 333 or 332 or consent of
instructor, consen
advan advancoment to candidacy. An examination of
method, theond sethod, theory and experimental evidence 637. Seminar in Emotion and
Motivation (3) FS Motivation (3) F,S Prerequiuistes: PSY 336 or 337 or consent of
instructor, consent of graduate coordination instructor, consent of graduate cocrdinator.
advancement to condidacy. Avvanced
consilieration of selected topicis in animal and
human motivation and emotion.
651. Seminar in Socia
651. Seminar in Social
Psychology (3) F,S

Prerequistes: PSY 351 or consent of instructor consent of graduate coordinetor, arvancement to candididacy, cirtical examination interperssonal relations, tocial influence, group
membership and influence, and intergroup
relations relations.
656. Seminar in Personality (3)
F

Prerequuisites: PSY 356 or consent of instructor consent of graduate ocordinatoto. Theories of
personality structure, dymamicion
 661. Seminar in Developmental Psychology (3) F,S
Pereqauistres: PSY 361 or consent of instructor
consent of graduate coordinator, advancemen consenn of graduare coordinator, advancement
to candiday. Consideration of theocetical and methodological issues in lifecal and
devevelomental pyychology. Critical examination
 of research on selected topics, including
development of physiological function,
intelligences intelligencoe, language, learning procesoses
sensory processes, perception, personality and saly pehaviosore.
672. Seminar in Community
Psychology (3) F Psychology (3) F
Preerequisites: Enrolment in MS graduate
program and/or consent of instructor and program and/or consent of instructor and
graduate coordiato. Suneve of topliss in
community/dilinical poychology such community/linical pyschology such as
devevoloment of discipline, changing roles of
mental heath professionals and the nature of

673A. Practicum in Prevention, Promotion and Empowerment
(3) S

Prerequisistes: PSY
prop2. Superised dexposure to
heatt that emphasizo
 compotence
disadanaged
supenised
groups. empowerment
Students to supenised in small groupp. Projocots to be be
conducted either in comunity agencies or al conductad eithe
673B. Practicum in Program Development (3) \(F\)
Prerequisites: PSY
experience
PS
program development to experience on proram development to to
include: needs pasesment, grant writing
agency collaboration, and progren aconey colaboboration, and program evaruation,
Programs will refece communty psychology Programs will refect communty poychology
emphasis of prevention, educacation and meeting the needs of undersenved populations. 673C. Practicum in Progr
Implementation (3) S Prerequistes: PSY 673A,
 devevioped in PSY 673 B .
678. Clinical-Practicum (3) F,S Preerequistes: PSY 370, 475/575, 573 , consent
of instuctor and gracuate coordinator of instructor and rraduate coordinator.
advancement to candidacy. Application for the

Practicum should be made by october 15 on
April 1 for the following semester. Clinicad April 1 for the following semester. Clinical
practice in varied dlinical sething. Indiduua
work with dlients, diagnostico proceecurese, stat conferencose, and case managementures, May be
(3) S

Prerequisities: PSY 473. Didactict training in the
theocies and practice of family therapy.
theories and practice of tamily therapy. 681. Seminar in Applications of
Psychology to Industry (3) F,S Prerequisites: Must be advanced to candidacy,
and two and two of the following: PSY 527, 581,585 ;
and co-requisite PSY 515 or 6961 and consent of gracuate coordinator. Psychological
applications to current problems of industry. Development of thesil propooeal and preteet ot 688. Practicum in Industrial Organizational Psychology (3) F, S
Prereaquistes: PSY 681 1, consent of graduate
coordinator. Practice of or human factors in various industrial settinge Inddudual research and consumation wi
industrial or covermental organizations.
690. Seminar in Psychology Prerequivistes: Consent of instructor and

 developpment at an acrancoed lovel. May be
repeated for a maximum of six units with differenent topices.
696C. Research Methods in Psychology (3) F,S
Pererequishes: PSY \(411 / 511\) or 412512, consenent
of graduate coordinator. The nature and of gratuate coordinath. The nature and
tunction of tresearch in the behenvioalu sciencoses.
Experimental, correlational and ase Experimental, correiational and case stovy
methods. Roseoarch desion and analysis using mutipipe Milineas regreassion modelel. general probability modeles and Bayesian interencice.
This course is offered particulary for Master of Aht students and includes the required comprehensive examination. 696L Research Methods in
Psychology (3) Demand
Prerequistes: PSY \(411 / 511\) or 412512 481/582 consent of graduate coordinator acduancement consent of graduate coordinator advancement

Correlational and case suces. Expermental, corelational ald and and anaysuis using muthitiples
feesearch design and Inear regression moded, generalal probabability modelelo and Bayesian iniference. Offered
particulary for Master of Ats, Industrial and Organizational Option students and does not
include the comprehensive examination resuired for Master of Ats Research Option 697. Directed Research (1-3)

Prerequisites: Consent of graduate coordinator, doppatment, adsancement to coandididoc,
theoretical and experimental problems in byychology requiring intensive anayyois.

\section*{698. Thesis (1-6) F,}
consent of advisor. Planning, preparation, and completion of a thesis in pyychology. Must be
repeated for a total of six units of creodit.

Social Work
College of Social and Behavioral Sciences

Director: James J. Kelly Associate Director: Janet Black Undergraduate
Director of Admissions: Rurhann Rountree, \(985-5654\)
Graduate Advisor: Lopez, 985-4614
Department Office: Psychology Building (PSY), Room
Telephone: 985-4616
Faculty: Professors: Paul Abels, Janet Black, Kenneth Chau, Catherine C. Goodman, Jean M
Granger, Mary Ann Jimenez, James J. Kelly, Isaiah C. Lee, John Oliver; Associate Professors: Lester Brown, Elizabeth T. Ortiz, Marilyn Potts, Susan Ric Madeleine Rose.
Field Faculty: L. Brown, K. Chau, Boodman, J. Granger, M. Herse, M. Jimenez, i. Lee, M. McNabola, M. Moyer, J. Oliver, J. Piiloo, S. Rice, M. Rose, R. Rount
Department Secretary: Department
Patricia Lauer

\section*{The Department}

Students desiring information should contact the department office
for referral to one of the faculty advisors. Admissions - teleph advisors. Admissions - telepho
\(9855-5654\); Field Education-985-8180.
The profession of social work
aims at the improvement of the aims at the improvement of the
quality of life for all people and the enhancement of the human potential for full and productive participation in
society. As such, social work has society. As such, social work has
universal application to meet human needs arising from personal-societal interactions.
change-oriented process which helps individuals and social units of all sizes, structures, and functions to
discover, develop, mobilize, and use discover, develop, mobilize, and use
their own and outside resources to change personal and social
canditions which are bariers conditions which are
meeting their needs.
Professional social workers are dedicated to service for the welfare
and self-tulilimet of \(h\) than being and self-fulfillment of human beings; use of scientific knowledge of
human and societal behavior; to the human and societal behavior, to the
development and imporvement of
resources to meet individual, group, resources to meet individual, group,
national, and international needs and aspirations; to the development institutions; and to the achievement of social justice.
Social workers are employed in
the major societal institutions: health and mental health care, family services, government, education justice, recreation, labor and
industry, and religion. They work many job classifications: direct services, supervision, consultation,
management, and administration The educational program of th Department of Social Work is the directed toward helping students
gain professional knowledge and gain professional knowledge and standing of social work methodology
and techniques, and achieving the and lechniques, and achieving the
skill required to undertake quality practice over the full spectrum of professional tasks. These objectives
are accomplished with the student are accomplisecre
through an interation of tuc through an integration of the classorom with supervised prectical experience in sociar agencies.
Curriculum is designed to meet the basic preparation for State licensing and the certification of the Nation
Association of Social Workers.
Programs
The Department of Social Work offers a perofessional undergraduate curriculum leading to the degree of
Bachelor of Arts in Social Work a graduate protessional curriculum leading to a Master of Social Wor degree. The purpose of the baccalaureate program is to prepare
students for beginning social work practice. The principal objective of the Social Work Master's degree program is to prepare
students for specialized social w students
practice
Bachelor of Arts Degree in Social Work
The Department of Social Work Offers, in conjunction with the enversity's two years of general
education, two year professional program leading to a Bachelor of BASW program is accredited by the
Commission on Accreditation of the

Council on Social Work Education program are to prepare students for beginning social work practice and
graduate social work education The graduate social work education. The
program is designed for the student who, through evaluations and periormance in the first course(s)
taken in the department. taken in the departrtent,
demonstrates ability and promise for demonstrates ability and prom
development as a professional
social worker. All social work social worker. All social work
baccalaureate courses incorpora issues and concerns related to ethnicity, gender, aging, poverty,
and sexual preferences. and sexual preferences.
Students should contact the undergraduate advisor as soon as possible for academic advising concerning the sequence in which courses should be taken and Social work majors should consider taking courses as electives requirements in the ethnic studies and women's studies programs, in other social and behavioral sciences The department can make recommendations concerning those
courses which would be most useful to students interested in acquiring broader information closely allied to
Requirements for the Bachelor of Arts (code 2-8555):
Lower Division: Completing
requirements for General Educat requirements for General Education
and Department, a 3-unit (minimum) course in: Cultural Anthropology, with a laboratory, Introductory Sociology, Introductory Psychology
Elementary Statistics Abnormal Elementary Statistics, Abnormal Welfare (SW 220 a and Introduction
to Social Welfare Practicum (SW to Social Welfare Practicum (SW Upper
340,340 \(340,340 \mathrm{~A}^{*}, 350\), 351, 440, 441, 442, 465, 495AB. *If SW 442 is no
taken concurrently with \(495 \mathrm{~A}, 340 \mathrm{~A}\) taken concurrently with
must be taken twice.
Sequence of Required Socia Work Courses:
First Level: SW २२०, २21, З30 350. Second Level: SW 331, 340
\(340 \mathrm{~A}, 351\)

Third and Fourth Levels: SW 440 Students who are planning to allow additional semesters for SW 442 with a Practicum ( 340 A ) prior to entering the third level of courses. Since SW 442 may be students interested in this option should discuss arrangements for shiuld discuss ar
with their advisor.
Master of Social Work
(code 7-8555)
The Master of Social Work program is acredited by the Council on
Social Work Education. The goal of the Master of Social Work (MSW) program is education which stresses
the worth and dignity of individuals, the interdependence among peoples, and the common human bond that unites all peoples. This is cultural stance which requires a respect for differences of custom, tradition, belief, and perspective and a developpment work in an increasin ly multi-cultural environment. The cross-cultural focus has been development of a world community. the changing population characteristics of the University and adjacen communities and in response to goals and objectives or profession of social work.
The master's program emphasizes an ecologica perspective which focuses on the and interactions of a person or syvironments likely to be encountered. Within this perspective knowledge, values, and skills are with a cross-cultural context to help individuals and social units achiev improved quality of life and social just institutions and equitable access to opportunities and resources.
The master's program defines mission as the provision of an education oflowing.
(1) Provides knowledge of and experience with ethnic diversity. teaches skill in ethnic-sensitive practice, and provides motivation
and skill to combat oppressive policies and discrimination. As such the program actively offers
opportunity for graduate education and socio-economic backgr, racial, and socio-economic backgrounds cultural gaps:
(2) Contributes to the quality o
social services delivered in the adjacent community Los Angeles, and Orange Counties - by providing an opportunity for advanced education to students
who are already employed in the social services. These students may concurrently maintain employment within the social services and develop advanced skills in their area Quality of services is also enhanced hrough close collaboration between community service agencies offering fieldwork experiences and through he labor force of MSW's educated a progis and specializations w reflect the needs of our adjacent community as well as the needs of urban communities nationally;
(3) Prepares social workers for
eadership and specialized practice with a specific population group. The program maintains high standards and prepares socia workers tor the depth and
complexity of generic social work practice while being able to practice in a chosen area of concentration. foundation \(\mathrm{knowledge}, \mathrm{values}\), cross-cultural context are applied and developed through work within he area of specialization on a stage of the life cycle: either aging and families or children, youth is offered concurrently with basic is ourered concurrenty with basic
foundation knowledge from entry into the program. Students are expected to have experience in the social services upon which to draw (4) Teaches analtic skil (4) Teaches anaytic skiil autonomous practice and necessan
for contribution to the advancement or contribution to the advancement
of knowledge. Social workers should be capable of integrating knowledge and practice, should be able to apply grounded, scientific principle o practice, should be capabbe of
conceptualizing practice principles on the basis of their experience, an

Contibute to the development of wnowledge;
(5) Educates students to the values and ethics of the profession. committed to the value that people hould have equal access to esources, services, and be advocates of humane and esponsive service, have regard for he worth and dignity of the
individual and conduct them individual, and conduct themselves
in accordance with the professional code of ethics.

\section*{oncentrations}

The Master of Social Work degree
offers opportunity for study in two offers opportunity for study in two
areas of concentration: Children, Youth and Families and Aging and amilies. Students meet
equirements for their concentration ourses, by related field experience and by research for their theses in e concentration area.
The concentrations reflect two of he major areas of social concern
and programs in our society Child neglect and abuse, single parents, drugs and gangs illustrate the remendous need for service
hildren and their families. interestingly, the other end of the ne range also reflects neglect and need tor service. The aged, the astest growing population segm
h our society, often lead health roductive ives; however, many at sk individuals and their families will adults in the uppermost age rackets are often frail and, herefore, may have a greater need taintenance housing, healt ersonal care services. The probability that older women will live
longer than men and experience Onger than men and experience conditions places many of them at isk. In its bicentennial issue, U.S. News \& World Report says geriatric scial workers will be the fouth eading new job group created by
te year 2000 with 600,000 new job penings.
With both groups, the family is Iten the mediating source, and the
scial worker needs to be able to social worker needs to be able to groups are represented by large umbers in Southern California, and programs are developing to ser
workers have a vital part to play in
seeing these services are adequate and sound.

The Children, Youth and Families practice in a variety of settings. Students are exposed to the full range of practice skills and have one
year of direct practice experience year of direct practice experience
and a second year of more intense direct practice or administrative practice experience
Field work placements are
available in a variety of agence the surrounding five-county area, including public, private and non-profit agencies. Typical settings
include child welfare/protective include child welfare/protective services, health care, mental heath,
public social services, schools, community-based outpatient agencies, corrections/iuvenile
justice, residential treatment programs for the developmentaly disabled, substance abuse treatment and other specialized
programs.
- SW 560 irect Intervention
Planning: Focus on CYF
- SW 597A Human Behavior and

Dystunction: Focus on CYF
- SW 660 Direct Intervention with
Families: Focus on CYF
- SW 670 Social Work

Administration: Focus on CYF
- SW 681 Advanced Policy and
- SW 596 and SW 680 Field work placement
agencies
- SW 698/699 Master's Thesis on a topic related to concentration.
- Two electives

The Aging and Families concenration prepares students for practice in the delivery of social services to older adults and their families, in the planning and
evaluation of social services administration of services and policy development. Students experience one year of placement in a direct
practice setting and may select either a direct practice or administrative practice setting for their second year.
Field work placements are
available in a variety of agencie available in a variety of agencies in
the surrounding five-county area including public and private nonprofit agencies. Typical settings
include health care, adult protective
services, mental health,
community-based outpatient agencies, rehabilitation, programs
for the developmentally disabled for the developmentally disabled,
substance abuse treatment, senio programs and other specialty services.
- SW 561 Direct Intervention and Planning: Focus on Aging - SW 5978 Human Behavior and - SW 661 Direct Intervention with Families and Groups: Focus on - SW 671 Social Work Administration: Focus on Aging - SW 682 Advanced Policy and SW 596 and SW 680 Fild wok SW 596 and SW 680 Field work
placement in two different Aging and Family agencies
SW 698/699 Master's Thesis on a topic relating to
Pupil Personnel Services
Pupil Personnel Services
Credential, School Social Work
Credential, and the Child Welfare Credential, and the Child Welfare and Attendance Specialist Credential
The California Commission on pupil personnel services credentials. The Department of Social Work, College of Social and Behavioral Work credential and the Child Welfare and Attendance Specialist credential, within the context of th Magter.
gree.
The PPS credential in School
Social Work and Child Welfare and Attendance authorizes the holder to e employed in the State of ar Child Welfare and Attendance Specialist. The credential covers pre-kindergarten through 12th grade ervice in public and other school social work is defined as the application of social work principals and objectives to help fulfill the major purpose of the education
system: to provide a setting for teaching and learning in which all children can prepare themselves for the world they now live in, and the
world they will face in the future. Requirements:
1. Successful completion of all of the requirements for the 60 unit Master of Social Work (MSW) egre: Required coursework will be
completed in the following sequence areas: Social Work Policy, Social Work Practice, Human Behavior and
the Social Environment, Social Work the Social Environment, Social Work
Researh, Community Projects and Field Work; 2. Completion of SW 665, School Social Work as one of the required degree program;
3. Demonstrated knowledge in the following areas of pupil personnel services: Knowledge of growth and development to achieve academic success; Knowledge of human assessment: Knowledge of problem prevention and early consultation services; Knowledge of psychological education;
Knowledge of coordination and Knowledge of coordination and
development of sevices development of services;
Knowledge of legal enablements and constraints, Knowledge of attendance laws and the rights of minors, K utilization of services; Knowledge of human assessment as direct services to pupils, Knowledge of social interventions, Knowledge o development of services; Knowledge of referral and utilization, and involvement and use of community resources; Knowledge of
social research and services based on research, and Knowledge of the code of professional ethics; 4. Successful completion of 500 clock hours of field practice demonstrating all of the required
skills and knowledge areas, unde the supervision of an experienced MSW practitioner, preferably one who holds a PPS Credential. will linclude at least 100 hours in each of two settings (elementary, experience with racial/ethnic diversity experience with raci
5. A certificate of clearance and
successful performance on CBEST 6. Certification of program completion by the Director of Field. The student may be required to complete addititonal course work,
field work, or demonstrate specific competencies before approval. Admission to Master's Degree Students
Students interested in full- and
part-time study are admitted to the
M.S.W. program for the fall semester of each year. Prospective student should apply directly to the
Department of Social Work. Departileations begins December 1
of application and continues until the class is silled Ordinarily, decisions on
are evaluated by June

\section*{are evaluated by June.}

To be admitted to graduate wo
To be admitted to graduate work Master of Social Work program, applicants must meet the following criteria
(1) Complete the departme Applicant's Personal Statement and Applicant's Personal Statement and
the Cross-Cultural Experience Form; (2) Preadmission interviews may be required by the Program facult (3) Hold a Bachelor's degre
from a university or college of recognized standing, have a liberal arts background, and be eligible for admission to graduate standing at
CSULB:
(4) Have the professional and intellectual ability to perform cumulative GPA of 2.50 or above (on the 4.0 scale) on the last 60 units attempted is rec
(5) Submit results of the General Aptitude Section of the Graduate the past 5 years, to the department (waived for individuals who have completed a Master's degree)
(6) Submit a copy of all
college/university transcript college/university transcripts to the
department: (7) Obtain 3 letters of recommendation completed on the official department forms: one from an academic source, one from a either of the two above;
(8) Knowledge of the field Field Wor
The field work sequence plays an integral role in the MSW curriculum. The experience offers an opportunity
for students to integrate and apply theoretical knowledge and social work practice and intervention ski in a community agency setting
under the supervision of a qualifie under the supernis
field instructor. A variety of agencies within the surrounding counties are utilized, reflecting the diverse semployed.

Each student has two field work stuacements Each placement involvives 500 study. Each placement involves 500 agency setting, and attendance and participation in a field work semina hat meets weekly on campus. The fietd work sequence encompasses
total of 1000 hours, for which 12 units of academic credit are given. Concurrent and summer block available. The concurrent model of field work parallels the academic year schedule, with placement continuing through mid May. Students take concurrent course work and a field seminar while enroled in field work, and are
currenty in field work two days (16 hours) per week (M-F 8:00am 5:00pm). The block model of field work occurs during the summer hours per week (M-F 8:00am \(5: 00 \mathrm{pm}\) ) in field work while concur-
ently taking coursework and a field rently taking coursework and a field
seminar. Student enrolled in the full time (2 year) model, or the part-time 3 year or 4 year) model may take one year of concurrent and one ye of block field work placement. Block Model will complete both field placements in the block model. Students who are employed in social service agencies may reques
that their agency be evaluated as a site for their field work for the second year of field work. The agency must ee able to meet all criteria estabilished by the Department of
Social Work to insure the education al focus of field work. Evaluation of field work sites and approval to utilize an agency of employment as
field work site will be completed by the field work faculty.
The Department of Social Work will reject an applicant or disqualify an enrolled student whose r performance in field instruction does not meet the minimum standards o the profess
semester.
Advancement to Candidacy: A Conditionally Classified or fully
Classified student must maintain a Classified student must maintain a
minimum GPA of 3.0 on all courses minimum GPA of 3.0 on all courses
taken subsequent to admission. In ddition, a GPA of 3.0 must be he degree. A student will be eligibl
or advancement to candidacy to ompletion of 12 units of graduate eve courses in SE.
Course Load:
The California State University, -ong Beach requirement for full-tim weighted units. For part-time tudents pursuing the M.S.W egree in the Department of Social ork, the residency requirement is part-time students pursuing the M.S. W. degree must take at least 2 emesters of at least 3 courses complete the M.S.W. degree in years must take an overload of 6 units for 4 semesters or 15 units semester
Requirements for the Master of
The Master of Social Work
program requires the completion of
0 semester units, taken in one of
he three following sequences
Plan \(A\) :four years)
Term 1 -- SW 503, 505
Term 2 -- SW 550, 597A or 597B; ferm 3 -- SW 500, 596A, 600 leve
erm 4 -- SW 560 or 561, 592,
erm 5 -- SW 660 or \(661,680 \mathrm{~A}\)
Term 6 -- SW 594, 670 or 671
Term 6 - SW 594, 670 or 67
Term 7 -- SW 698A, 600 lev
 lan Bi:(three years)
Term 2 -- SW 592, 597A or 597B
Term 3 -- SW 500, 596A, 693;
Term 4 -- SW 560 or 561,594 596B;
Term 5-SW 550, 660 or 661, 80A, 698A, 600 level elective; Term \(6-\mathrm{SW} 670\) or \(671,680 \mathrm{~B}\)
681 or \(682,699 \mathrm{~A}, 600\) leve elective.
\(\frac{\text { Plan Ci:(three years) }}{\text { Term 1-SW } 503 \text { 505 }}\)
Term 1 -SW 503, 505:
Term 2-. SW 592, 597A or 597B: Term 2 - SW 592, 597A or 597B; level elective;
Term 4 -- SW 550, 560 or 561 Term 4 -
94, 596B;
erm 5 - - SW 660 or \(661,680 \mathrm{~A}\) 98A, 600 level elective:

Term 6 - SW 670 or \(671,680 \mathrm{~B}\) 681 or 682, 699A
Plan D: (two years) Term 1 -- SW 500, 503, 505, 550, 596A;
4, 29 - SW 560 or 561, 592,
3, 5W or 597B.
Term 3-sW 660 or 661, 680A
Term 4 - SW 670 elective.
Term 4 -- SW 670 or \(671,680 B\),
681 or \(682,699 \mathrm{~A}, 600\) level
elective.
Plan E: (Summer Block Model)
Term 1 (Summer Session) -- SW
Term 2 .- SW 550, 600 leve
Term 2--
elective.
Term 3 -- SW 592, 594, 597A or
Term 4 (Summer Session) -- SW
500 , 560 or \(561,596 \mathrm{C}, 596 \mathrm{D}\).
Term 5 -. SW 693, 600 leve
elective.
Term 6 -- SW 681 or 682.
Term 7 (Summer Session) - SW 680D, 699B.
For other requirements of Master's degree programs, see the
University's graduate degree University's graduate degree
equirements.
Lower Division
220. Introduction to Social
Weifare (3) F,S

Welfare (3) F,S
Anaysis of current functions and purposes of social weltare as an instituiton. Examination of
historical and philosophical perspectives on
social
 Sturty of the consogecuuancoses of national weltare programs and policies. Analtical comparison other countiee
221. Introduction to Soclal
Weifare Practicum (2) F,S

Prerequisiste: Consent of instructor. Minimum of six hours weekly in an approved social senvice or allied setting, Social work field praticic nid career choices.
and
and
Upper Division
330. Human Behavior and Social nvironment: Birth throug
Open to non-maiors.). Examination
odationship of human behavior to the social onvironment. Integration of generalal systema and rote theor and concopts of stigma
Application to life cycles from bith through
331. Human Behavior and Social Environment: Young Adult
(Open to non-maiors.) Examination of
relationship of human behavior to sccial relationship. of human behavior to social
environment. Integration of general systems envirionment. integration of genereal systemm
rove and personality theory, and concopets of racism and sexism. Application to life cyol
trom young aduthbood through old age.
340. Generic Soc
Practice (3) F,S

Preerequisites: SW22O, SW221, SW330, SW350,
SW 340A. Social wark an ent enrllment
SW \(340 A\). Social work as a helping procesen
Basic ppinciples, common elements, and genenic trameworks for social work practic
induding interiew techniques. Role of social workers in resocotion of social emotionala, and
environmental problems and the relationship of environmental problems and the relationship
social work intervention.
340A. Social Work Practicum (2) \(\mathrm{F}, \mathrm{S}\)

Prerequisite: Concurrent enrollment in SW 340 or 442 . Minimum of six hours weekly experienco in approved social serice or alled sesting.
Social work field practice including inteniewing asesessment, and intevenention actututies. May be 350. Social Policy: Law and 350. Social Policy: Law an
Court Decisions (3) F,S (OPon to non-maijos).) Social policy as defined in legisiation and judicial docisisons atfecting
nights of individualse, minorotities, familieses and the
general weftare.
351. Social Policy: Formulation and Analysis (3) F,S (Open to nen-majios.) Policy formulation and anayysis related to to social welfare insthtutions
and maiar social welfare policies and and maior scoial weltare policies and
programs. Current values and issues in socie programs.
welfare \(p\) plicic
W06A. Applications of Social Peatube
Prerequivistes: Consent of Instructor. Sudents
are expected to take 406A and 406 B . Students apply to the \(406 \mathrm{~A}-\mathrm{B}\) sequence during the are taken. Can be used tor SW 221 or SW 34AA, but must fuffll entire time commitmen
 Different topice. Same course as PSY 400 406B. Applications of Social
Work (3) S Work (3) S
Prerequiustes: Consent of instructor. Students
are expected to take 406 A and 406 B . Students apply for the \(406 \mathrm{~A} \cdot \mathrm{~B}\) sequence during the Sping of the academic yeat before the coursees
are taken. Can be cused for SW 221 or 5 W
340, but must tuflil entire time commiment. resent project is is in Leisure Wortd Cours may be repoated for a maximum of 12 units.
different topics. Same course as PSY 406 AB. 423. Child Abuse/Prevention (3) \(\mathrm{F}, \mathrm{S}, \mathrm{SS}\)

Examination of child abuse as a social
problem; tits history and causal factors, in.

Cluding social change and changing family patterns. Intervention practicos, including
identification and investigation, social servicee identification and investigation, social senvicee
and court intervention will be reviewed
especilly especially the roles of heath professionale
ciminal |ustice and conections social workers and educatoctrs. Finally polic
inplications will be
 policy as intervention, as well as the roile
conceerned cotizens and child advocate.

440. Social Work Practice with
Groups (3) F

Prerequistes: SW 331, 340, 340A. Concurren enrollment in SW 495 A or 495 B . Adaptation of
generic trameworks of social work practice to generic group approaches, Analysis dynamics, theories, and principles underying \(^{\text {den }}\) group practice. Programs, practice technigues,
and roles involved with groups. Non-maiors and roles involved with groups.
require the consent of the instructor.
441. Social Work Practice with Communities and Institutions (3) s

Prerequisites: SW 331, \(340,340 \mathrm{~A}, 351\),
Concurrent encollment in \(5 W 495 \mathrm{~A}\) or 495 B Conourrent enrollment in SW 495A or 4955 .
Adapatation of generic frameworks of social work practice to generic approaches to com-
munity and institutional applications munity and instututional applications. Analysi-
of theories and principles undertying community practicie. Adapatation of theories and aotNitites to organizational contexts. Techniques
and accivites applicable to communties and and activities applicable to communities and
neifhborocods. Non-majors require consent of
the ne inghtuctor.
442. Social Work Practice With
Individuals and Families Prerequistes: SW 331, 340, 3404 Concurren Prerequistes: \(S W\) 331, 340, 340 A. Concurrent
erollment in \(5 W\) W45A. Adaptation of generic trameworks of social work practio to to generic
approaches in working with individuals approaches in working with indididuals and
tamilies. Theories, techniques, activities, and toile of social workers: dififerestatial apisprosoaches
to assesement, intenention, to assessment, intervention, and helping
processes. Work (3) S Preerequisites: \(\mathrm{SW} 340,340 \mathrm{~A}, 351,442\), one
course in in elementay statist . Must be
completed concourrenty with 495A or 495 B Must be completerrenty concurrenty with 4959 A o
495B. introcuction to 495B. introduction to research methods in
scial work and emphasia on evaluation of social work and emphasiz on evaluation
scoial work and community senvice program Non-majors require consent of the instructor. 480. Social Work with Families
and Children (3) F,S Contemporary social welfare programs

 es in Social Work (3) W,SS Sunvey of major historical and contemporary
issues regarding legal and illegal immigran issues regarding legal and illegal immigran
populations in California Origins of the currer populations in caltornia Origins of the current
imolicrant flow and itherational and federal
polices and mechanisms which facilitat
immigrant enty into the U.S. Dosigned to unique inmigrant experiencese and focusing on unique immiarant experience end focusing o
select variables which present tasiors to immigrant dilents in in accossing senices. 4841. International Perspective (3) W,SS

Citical analysis of aging problems in developed and developing coountrien
dibocusing dimographion disocussing demographic, sociococonomic and
humanitarian issues trom a social welfar errspective. Discussion of medical, financia and social senice programm for the elderly
485. Aging and Mental Health (3) F,S

Intevention strategies, preventive and
supportive, with the independent older aduti. upootitie, with the independent oloder adiut.
ocial and dinical reseach retaed to social and od
gerop-pychiaty.

\section*{490. Special To \\ Work (1-4) F,S}
opios of special interest in social work for
Sheduie of Classes each semouncod in the pheated with different t topics.
91. Non-Violent Conflict Resoluion: In Your Life and On the Job
nd Around the Planet (3) F,S
Designed to help the student examine confliu Designod to help, the student examin, conficic different situations, and to learn to utilice non-vidolent manneer.
95A. Field Experience in Social Work (7) F
Prerequisites: SW 331, \(340,340 \mathrm{~A}, 335\), WW 440 , and 442 . Evidence of satistacto Halpractioe dilabaility insurance coverage Superised practice experience in sccia Pifare agencices and alilied settinge. Two hour eokly of campus seminar and 16 hour
nimum (usualy Tuesday and Thuroday) minimum (usualy
95B. Field Experience in Social ork (7) S
Prerequisites: Evidence of satistactory mal. 40, 422, 495A . Concurrent envolugment in 3 SW 41 and 465. M Most be taken immediately atel superised practice experience in sociu eltare agencies and allied settings. Two hour nimum (uusually Tuesday and Thursoday) ency placement.
99. Directed Studies (1-3) F,S Conerequisent of instructor
ndependent study of special topics under Independident of sutac surty member.

\section*{Graduate Division}

\section*{500. Foundations of Generic} Social Work Practice: A
Cross-Cultural Perspertiver Prerequiste: Concurrent enroliment in \(S W\) \({ }^{5} 506\) A. The asoumptions, concocopt, principles, and valuen or genenir opactive in regard to
croos untural perspective protesesional relationshipp, social work roles,
 arganization, and communitioes a conscious and systematio cual pertpentive used to
 503. Behavior and Environment 503. Behavior and Environment
in Cross-Cultural Perspectives (3) \(F\)

Review of poscho-analytic concopts, ego
poychology, learning theory, role theory, and poychology, learning theory, role theory, and
socio-cultural impacts upon individual behavior.
 social deviancy, sex discrimination. and poverty

 tamileos.
505. Oppressed Groups: Social
Policy and Political Action (3) F Discussion and analysis of the baritiers to
resources and social-political status faced by selected oppressed groups in the U.S. Forms of disesent and political action used, including
protest and compromise, the politics of protest and compromise, the politics of
accommodation, input into the party system
 appraiaal of group needse differencos and
strataoges for overcoming batiers wits
emphesis on adequacy, equity. emphasis on adecuacy, equity. 540. Social Work Practice in Health Care (3) F
Overiew of the health care system and social
work pratice. Dicu usion oof the
 social and cultural tactors in heath care and
divease condtions tanging from congential anomalies to termina illiness with atennention to the role of social worker in the heath care
system: health mainenance, tamily planning. perventive and rehabilitative sernices. 550. Computers and Social
Services (3) S Services (3) S
Study of the application of computer
technology to to
cinical
practice
 settings. Discussion of thei impact of compopters on issues of confidentiality, ethics and fiture
directions of the profession. Use of computers
 560. Direct Intervention:
560. Direct Intervention: Focus
on Children, Youth and Families \begin{tabular}{l} 
on Ch \\
(3) \\
\hline
\end{tabular}
 and concurrent enroliment in \(5 W 5968\) or SW
5960 . Examination of varied practice strategies
in depth. Behavioral, cogntive, social and
 the ecologicial systems approach. Emphasis on
midal ethounh termination phease of the
helping prococoss with special emphasis on helping procosos with spec

\section*{o1. Direct Intervention: Focus} (3) S

Prerequibites: SW \(500,596 \mathrm{~A}\) or 596 C , and
concurrent enrollment in SW 596 B or 596 D . Examination of varied practice stratogies in
 the eocological systems approach. Emphasis on the middole trrough termination phameso of the helping procoess with speci
cross-cultural perspectives.
590. Special Topics (3) F,S Content may vay from semester to semester.
May be repeated under different course topics. Appoual of instuctor neededed. Topipses will be mester.
592. Community Projects I (3) S
 communtry organization and research know.
edge in the context of
kncen approaches ofor cootexing of with a sencepoctual com. munty probiem. Requires demonostration of mastery and ability to synthesize curriculum
content through the development of pratical interventive strategies which focus on an
existing communty
concorm. 594. Research Methods for An introduction to social work research
methocs, including research doesign for both
 out independent, cross-auturally foculysed evearch in social work and on the ability to 596A. Fleld Instruction I (3) F Prerequisites: Concurrent envollment in SW 500 .
SSperised practice experience in a community pocial agency based upon students' learning Focus on development of foundation of genericic
interventive mocalities in individuals, tamilies, croupe and communtios with emphasis on
crose-cultural practio. One and a halt hours
 596B. Field Instruction II (3) \(\mathbf{S}\) Prerequibetes: SW 500, SW 506 A, and
concurrent enrollment in SW 560 or 561 . Continuation of superised practice experience in evel of practice with indinduals, groups and
commintios with emphasis on cooss cultural communties with emphasis on cross-cuitural
practioe. One and \(m\) halt hours wekt feld
semmina and 16 hours in in agency placeement. 596C. Field Instruction I (3) SS Prevequistes: Conncurrent envollment in SW W50.
needs, interest and area of concentration.
Focusu on develomement of foundation of generio Focus ond development of foundation of ganerii
inteventive modalitios in indinduals, tamilies groups and communties with emphasis on
coros-coltural practio. Two hour weokly field
seminar and 40 hours in agency placement. seminar and 40 hour
Summer session only.
596D. Field Instruction II (3) SS Prerequisites: SW 500, SW 5968 or SW 596 C
and concurrent enrollment in SW 560 or SW and concurrent enrollment in SW 560 or SWW
561 . Continuation of supenied praction 561 . Continuation of superised praction
experience in a community social agency on an
and advanced level of practice with individuals groups and communtios with emphasis of
cross-cultural practice. Two hour weeky field crossecuitural practice. Two hour weekt field
semina and 40 hours in agency placement.
Summer sesion only
597A. Human Behavior and
Dysfunction: Focus on Children, Youth and Families (3) S
Based on basic understanding of varied
developmental perspectives. Concentration on developomental perspectives. Concontration on
birth to adult behavior range in relation to the clinical ecological systems approach. Examina tion of all range of beheviors whit a crose 597B. Human Behavior and Dysfunction: Focus on Adults and the Aged (3) S
Based on basic understanding of varied
developmental perspectives. Concentration on the adult behehvior range and relates to the dininial ecologicial systems approach. Examina tion of a range of behavivors with a crose.
cultural perspective. Tradtional grading only. 599. Independent Study (3) F,S Prerequisites: Consent of Department and
instuctor. Independent study of special topice under supeenision of a faculty member. Tradtional grading only. Cours
repeated for \(a\) maximum of 6 units. 642. Mental Health and the Perspective ( 3 ) S.F.SS The course will tous on a The course will focus on a broad-based
selection of demographic, pyychological and social issues concorned with the older person and their families. Topics will be descibibed and
anayzed
crosesecultural perspeectives. Tradititional grading cross

Concurrent enroliment in SW 680 or SW 6800 . Teaching of specialzed skilis needed to work
with families and droups. emphasizg work
with chilicren, youth and aduuts. Aspects or advanced dilinical work using gyirs. Aps. Emphects
on croses- cultural perspective
661. Direct Intervention with
661. Direct Intervention with
Families and Groups: Focus the Aged (3) \(F\)
 concurrent enioliment in SW 6880 or SW 6800 .
Teaching of the specialzed skills needed to
work with families and work with families and groups, emposasting
work with the aged and their families. Aspection work with the aged and their families. Aspece
of advanced olinieal work with. groupa
Emphasis on Emphasis on cross-cultural perspectives. 662. Legal Issues in Social Work
Practice (3) F,S Practice (3) F,S
Examination of legal aspects concomning
chilicren, the family, and the aged, consididering chicren, the family, and the aged, considering
such isuese as abobion, illogitimayy, right to
treatment mental heolth codures, rights of the elderty, chilidren's rights,
 olvyy and classification of legal resources
piniciplese of legal reasoning, understanding of principles of legal reasoning, undertananding of
foceral and state court systems. Familiarity with
legal assistance programs. logal assistance program.
663. Assessment and Treatment
of Alcoholism (3) F,S Social work practice with Social work practice with individual alcoholics,
their family systems, and their community network of collataterass. Awarenesess of prevevanences work practice. Dynamics and treatment disease. Special relationship issues, problem
of cross-adictions and pild
 networks supporitg substance abues serice
Fetal Alcohol Syndrome, and problems special
eldery.
664. Occupational Social Work
(3) F,S (3) F,S

Significance of work life factors on the
bioposchosocial functioning of clients and the biopsychosociar functioning of clients and the
interface of person, family and employment Concepts of human growh and behavior issues of engagement, diagnostic assessment,
and intevention trom the special perspective of and itievention fiom the special perspective of
work \(k\) ite settings. Concepts selated to work a
and a social environment and an interpersonal a
system. Occupational environment as a resource system and dlient syytem.
665. School Social Work (3) F,S Social work and the public school as a process in school-community-pupil relations. Attention
to the school as a social institution and to organization. Social work senvices in schools as a specialized field of social work practico- - it
conceptual framework; models of practice: concoptual framework; models of practice:
social work rolese; and target groups of chidren to be sened. Examination of maior sociol-legal
policy issue. 666. Huma
666. Human Sexuality and Social
Work (3)

Introduces social work majors to discipiline of human sexual behavior. Survery a range of
sexually related issues encountered in
therapoutio relationshipe, as part of administrai
tive duties, and at the social policy level Presents knowledge base and requiles studen examination of oun attitudes
aspects of human sexuality
667. Sex Roles and Gender
Discrimination: Women's Discrimination: Women's iss
in Soclal Work (3) \(S, F, S S\) This course will examine historical and This course will examine historical and
contemporary causees of gender disormination
against women in order to liluminate the against women in orden to illumminitation the
problems faced by women at risk in American probiems thaced by women at ink in American
societ. The special fous of the course will be
bon women at it ithk for mental heath problemes
viliencee and poverty along with other critical
 abuse and eating disorders.
668. Social Work in F,S
Neighborhoods (3) F,

Designed as an introduction to the conceept of Designed as an incourdion the concept of
neighborhooods and prepares stucents to assume social work rolea and functions in in
neighborthood settings. Emphasizes the neighborhood settings. Emphasies the the
neceessity of understanding the oulture, physical acd socsily orl organaiziation, and power relation-
ships of modalities: planning and ships of modalities: planning and servica
defivery, development, and organization. 669. Comparative Approaches to Social Work Group Practice (3)
F,S F,S
Examines in depth siginificant models of group
wark and the role of the leader and strateocies work and the role of the leader and strategies of intevention proposed under these models.
Also focusese on the formulation of a workable
Anser tramework tor assessment, intervention and
evaluation in social work practice with smal everapeotitio groups.
670. Social Work Administration:
Focus on Children, Youts, Families (3) s , Youth, and Familes (3) S

 management in human. senices agoencoses with
emphasis on structures seving chidren, oouth. emphasis on structures sening children, youth,
and familiesu. Foundation for effective and families. Foundition for effective organizational patritication and leadership.
Relation of theocies of organizationol behavio and management to problems of social weffare
agencies. Atternative models of the use of power in organizational setthings and
implications for managers effectivenese implications for manager's efffectiveness
Framework for planning. montoring and Framework for planning. monitoring and
intormation management Manaement tools,
induluding computers and fifcal management. including computers and fiscal management. 671. Social Work Administration:
Focus on Aging (3) \(s\) ocus on Aging (3)
Preerequisites: SW 500 , SW 560 or \(5 W\) SW 561, SW
\(596 A\) or \(S W\) 596C, SW \(596 B\) or SW 5960 , SW 660 or \(S W 661\), and concurrent envollment in
SW
5800 SW 680B or SW 6800. Basic processes of
management in human services agencies with memhasis on structuruesericesing the aging.
Foundation for effective orgizational Foundation for effective organizational
particication and leadership. Reilation of theorieg of organizational behavior and management to problems of social welfere
agencies. Atternative models of the use of
 672. Program Evaluation In
Social Services (3) F,S
ocial Services (3) F,
Introduction to prevailing types of problem
vealuation and preparation for continual valuation ancopreparation for continual
valuation checks or self evaluations a conducted within sericrice ale aencies.
 monitooring, impoact evaluation,
73. Supervision/Staff Develop ment/Consultation (3) F,S
Review of the philiosophy, objectives, pincipiles.
and methods of social work superision, stafl and methods of social work supenision, talal given to similiartites and differencices in the roles, knowledge, and skills required, emphasizing teaching-teanning-evaluating component shanging legilation, and reagram prousioion nd profes
xamined.
74. Clinical Diagnosis and Therapeutic Communication (3) \(\mathrm{F}, \mathrm{S}\) Utilization of indepth diagnocis as an ferotyping proceses. Use of case materia ilustrating varing levels of structuralization om disorganizaation of schizophrenic exsisten
conflicict of neurotic character formation confict of neurrotic charatiter tromation racial and cultural differerocoes, prostitution.
676. Family Centered SW

An advanced specialist coveriew of evoving viewpoints, perspeotitues, values, intervention echniquese and goalis of attention and target o the tamily as a unir will emphaske the
ntevention and
development and enhancoment of knowerge.
 hillerapy and social worl
traditional grading only.
77. Social Work Practice in
677. Social Work Pra

Reviewing the changing roles of social work in
Reviewing the changing, ropes of social work
mental headh setings, the infuence of new poycho-social and poscchiatric theocress upo coare and treatment orthe mentaly cocomic and oultural factors as they afteci social work rieles in m and dinical practice.
78. Treatment of Couples with

Marital Problems (3) F,S
Clinical models and teccriques lo treatment couples with marital problems. Integration
oytemic and analical lthecies. Presentation
of strategies and techicues through
simulations and vidoo. Theores of change in
treatment and identifotion ot treatment and ideontification of individual
theoercical famework and capabilitios. Wive
rance of range of sytematology and dystunction
variety of dyadic eleationships and cuitures. 680A. Field Instruction III (3) F Prevequibite: SW \(500, \mathrm{SW} 560\) or \(\mathrm{SW} 561, \mathrm{SW}\) \(599 A\), SW 598 , and concurrent enrolliment in
SW 660 or SW 661 . Supenimed social work pratioc in a community social agency with focus on advancoed diriect practice skilis and administative program develiopmenta aroas with half hours weekly in Fiol
hours in agency placemert
680B. Field Instruction IV (3) S Prerequisites: SW 500, SW 560 or SW 561, SW
\(596 A\), SW 5968, SW \(600 A, S W 600\) or SW 661 and concurrent enrollment in SW 670 or \(S W\) 671. Continued supenised social wark practio in a community agency at an advancood levelin
both diriect practice and administration whitin the student's area of concoentration. Proparation tor entering professional employment with
 hours in agency placemer.

Field Instruction III (3) SS Preerequistes: SW 596A and SW 5968 o SW
596 C and SW 5960 , SW 500 , SW 560 or SW 561, and concurrent eniollment in SW 660 a
SW 661 . SW 661. Supenised social work practice in a
community social agency with focus on achananed didiet poratice skills and
administration program development areas with administative program deveviopmentita reas with emphaiai en cososecultura practioe. TTo hour
weeky field Seminar and 40 hours in agency placement. Summer session only.
680D. Field Instruction IV (3) SS

 concurrent envoliment in 5 SW 670 a \(5 W 671\)
Continued superibed social wark practico in community agency at an actrancod hevel in the student's aractice ann admmintration withi the stucenits sarea of concentration. Preperation emphasis on croso-cultural practic. Two mour
weoky Field Sominat and 40 hours in agency weeky Field Seminar and 40 hour
placement. Summer session only. 681. Advanced Policy and Prouramming with Children Youth and Families (3) S This course is designed to provide studentes
with an advanced understanding of key issues
 programs affecting fanilies and
contemporary American sociery.

\section*{882. Advanced Policies and Programming with th
their Familles (3) \(\mathbf{S}\)}

This course is designed to provide students With an advancoed understanding of key issues programs ateoctisn the aged and their fanailies
in contemporary American society. Tradional in contemporaa
690. Special Toplcs in Graduate Social Work (3) F,S
Preerequibites: Consont of Department. Topics
of special interest in social work selected for intensive study . Topics will be announceed in the Schedive of Classess each semester. Traditional grading only. Course may be repoated fir
maximum of 6 units with different topics. 693. Community Projects II (3)F,S Prierequisites: SW 592 . Focuses on demonstrain executing apporopiate community outtreach inteventions as concopoptualized in Community 698A. MSW Thesis I (3) SS Preerequisites: 30 units in the MSW program
completed at a minimum GPA of 3.0 and completed at a minimum GPA of 3.0 and uttorial class in which the student completess an Iddididual research project which meets
Univeraty
thesis requirementi. Traditional grading only.
698B. MSW Thesis I (3) SS Prerequibites: 30 units in the MSW program
completed at a minimum GPA of 3.0 and completed at a minimum GPA of 3.0 and
Advancoment to Candidacy. A two semester Autoriacomel lass in which the studuent oomplotetes an
individual reseach proiect which meets individual research proiject which meets
Univeraity thesis requirements. Tradtional Onvesinty the the
699A. MSW Thesis II (3) F,S Prereacuistes: 33 units in the MSW program
completed at a minimum of a 3.0 GPA . completed at a minimum of a 3.0 GPA
Acvancoment to Caldidacy, and sucoessulu Advancement
completion of SW Casaid. The escond semester
of a of a two semester tutorial class in which the
student completes an individual independert
 not not reauried.
grading only.
699B. MSW Thesis II (3) SS Prerequibites: 33 units in the MSW program
completed at a minimum of a 3.0 GPA Advancoment to Candidacay, and succospstul of a two semester tutorial semond semester student completes an indixidual independent research proiect wich meets University theosis not required. (Indepencoent Study. Tradtional
noter grading only.

\section*{Sociology}

College of Social and Behavioral Sciences

Department Chair: Theresa G. Turk
Department Office: Social Science Department Office: Social Science
Public Affairs (SS/PA), Room 258 Telephone: 985-4602
Faculty: Professors: Norma S. Chinchilla, Barry M. Dank, Michae Harold G. Hubbard, Douglas Parker, Carl Slawski, Peggy J. Smith, Theresa G. Turk, Paul S. Gail C. Farmer; Assistant Professors: Carole Campbell, William Gibson, Juniper Wiley.
Emeritus Faculty Emeritus Faculty: Herbert LL.
Aarons, Howard E. Fradkin, Aud Aarons, , Howard E. Fradkin, Audrey
Fuss, William E. Hartman, George W. Korber, Gordon L. Leis, Fernando Penalosa, Alfred W. Department Secretary: Lillie Monji
The Department
Students desiring information should contact the department office or referral to one of the faculty
advisors: Undergraduate Advisor: Theresa G. Turk
The major in sociology is intended to serve as preparation for careers in teaching, delivery and services, urban and environmental studies, law, government sevice at ocal, state and federal levels and related occupations. The major also
provides training for advanced graduate work in sociology, social work and other social sciences. Sociology is also recommended as
second maior or minor for students of all other social sciences for business; for the humanities; especially literature and theatre art
for ethnic and area studies; for burnalism and other various applie arts and sciences.
Students interested in sociology may also wish to consider the liber sociology, which is described below. he Liberal Studies program is discussed elsewhere in this Bulletin. Detailed information about the the Sociology Department Office.

Sociology courses are suitable for ulfilling general education or elective najors. However lower division courses selected to fulfill the equirements of the major may not equirements of any General requirements of any
Bachelor of Arts in Sociology
Requirements for the Bachelor of
Arts in Sociology(code 2-8560):
Lower Division: Fifteen units of ower division are required. Students must have credit for SOC 100, 142, 200. Students should complete C/ST 200 prior to enrolling in SOC 555. C/ST T 210 may be substituted or SOC 255
Upper Division: Satisfactory umpletion of at least 51 semester
units of college work is required before students will be accepted to upper division sociology courses. Aimajors are required to
have a minimum of 31 upper division units in sociology. This must include credit for SOC 327 or \(420,3351,356\) 455,456 , and nine units in one
concentration and six units of electives from other upper division courses in sociology. Total credit fo OC 400, 495, and 499 combined Concentrations: Concentrations
Deviance and Social Control: 454, 459, 463.
Family and Intimate Relations:
SOC 320, \(325,336,423,426,444\),
\(454,459,464\).
Gender and Ethnic Issues: SOC \(325,340,341\)
WST 4011 C .
Medical Sociology: SOC 454
611C, 462, 463, 464, 465, 466, SC 400 . Research: Research: SOC 336 ST 312 sucial Change and Global 450 SOC 327 or SOC 420 (whichever not taken in core), 454,

Minor in Sociology (code 0-8560)
A minimum of 24 units which
Lower Division: SOC 100, 142.
Upper Division: SOC 3351 and a minimum of 15 units selected from other upper division courses in 495,499 may not exceed 6 units. Courses (SOC)
Lower Division
100. Principles of Sociology (3) \(\mathrm{F}, \mathrm{S}\)
sociologicioal analysis, empheasis upon group
 procososes, institutions, social organn
scoicoultural change. (CAN SOC 2 )
135. Society and the Individual (3) \(\mathrm{F}, \mathrm{S}\)
htended primarily for nonmajior. Examines the ocial processes influencing the individual
development and behavior from infanc through the entive life cyclele Includdes childhoo
 oeces, peer influence, reterence groups an
onfluence by cocoupational, political thnic and relifious groupp. Alloo analyzeesth development of self-control and social contrio
and social factors alfecting attitude formation
and change and change

\section*{142. Soc}
ociolos
sociolgogical pincipiles applied to contemporary
social trends and problems. Topical areas will vy from year to yeab but may inicludud: Aging Birth Control, Crime, Discrimination, Druy
buuse, the Nature of the Economy

 Unemployment, War, and Weltare, Studextis are
necouraged to view social problems in a laro encouraged to view social problems in a large
sociocultural
historical context. They ar encouraged to thinco obiectively. and citicicaly
about the eelevance of these problem to the about the relevance of thenes porolimems to their
own lives and the lives of their children. Open to and
on-majors tor Goneral Education. creoint in
Categor D2B. (CAN SOO 4) Category D2.B. (CAN SOC 4)
250. Elen
(4) F,S

Not open to students with crodit in HDEV 250 ,
BS 250, ANTH 302, CST 210, SOC 210, MAT
 Knowledge of mathematioal procedures usually
coverd in elementary high shocol algebra, as
demontated demonstrated on a screvening examination the
descoriptive and inferential stataisices and their applications in social and bethavioral scierco research; periormance of stalisical exercices
by interactive computer. Empheasis upo knowedge of which stataistical tests to use an how to interpret their results. (Discuasion,
Laboraton) Same course as HDEV 250 and Laboratory)
SBS 250 .
255. Elementary Statistics

\section*{(3) F,S}

Not open to students with crosit in C/ST 210,
HEEV 250, PSY 210, SBS 250 or MATH 180 HDEV 250, PSY 210, SBS 250 or MAAH 188
Prerecuiste:
Knowedge of mathematioal procedures usually covered in elementary
high-school algebra. Concopts and techniques of descipitive and inferential statatitica Statistical reasoning applied to occial research.
Focus on the undertanding of statistical measures and the assumptions underlying 275. Marriage (3) F,S Survey of the most recent intormation on
dating, courtship, engagement, mate selection areas of adjustment in mariage, parenthooc inancial and homemaking problems.
\({ }_{(1-3)}^{290}\). Special Topics in Sociology 1-3) F,S
oppiso of special interest in socilology selected
or intensive study. Topics will be announced in
 difierent toples 10a
320. The Family (3) F,S Prerequiste: SOC 100 or consent of instructor with stress on the American family sytem naysisis of forces producing change organizatio

\section*{25. So \\ F S}

Soci-cultural position of women; a brief histon Women's role and status; societal altitude ioward Women's place in scoiredy. Open
men and women. (Same course as W/ST 325 . 327. Social Order and Social hange (3) F,S
ard recont: analyuis of social order and social hange. Study of institutioions and organizationa structure of social systems in the pas 3321. Sociocultural Dimension of Sport and Human Movement (3) F,S
sociological and poychological correlations to
human movement. Same course as P ED 3321 . 3351. Social Psychology (3) F,S Prerequisites: ENGL 100 and upper division
tatus. Preerequisite: SOC 100 or PSY 100 . Examines sccial processese in personality deveropoment and the iscialization procoses
whereby the individual is integrated into social roups. Includes social infuencee of tamik) peoss, reference groups and subcultures
Examines the impact of primary groups, social
 creditit in PSY 351 (3) F,S

Preveruuiste: SOC 100. Designed to give
theoretice theoreticial and practical understanding o
sociological concoots and priniples tound in the cynamics of small groups, research and theory, the individual in a soccial situation, the group as a system of social interaction,
leadership, methocology, and the small group leaderghip, methedolog
340. Sociology of the Barrio
(3) F
Analysis

Analysis of social institutions in the Cricano
community. Survey of educational, politioal
 work will be required to provide relevar
expeeiences. (Same course as MEXA 350.) 341. Central American and Caribbean Peoples in California (3) S

Sunvey of the socioceconomic consitions and
cultural life of the contal cultural life of the Central Americian and
Spanish-speaking Caribbean communtios of Califonshia: Satavadocrans, Guatemalanns, Puerto Ricans, Cubans, etc. Not all groups w
necessarily be deat with each time the course in offered.d. Similarities with and diftererncoes from
the Mexican-American communty will be the Mexican-American communtiy, \({ }^{\text {w }}\),
examined. (Same course as MEXA 352 ),
345. Juvenile Delinquency
(3) \(\mathrm{F}, \mathrm{S}\)

Jwenile dolinquency as a recont social Invention:" extent and distribution; malor explinatory theories ranging from cliasical to
radical viewse: justice system with emphatis on the 350. International Population Problems (3)
Presents the basic demographic variables
letility, motality and migration) and metheds (leritity, motratiy and migration) and methods
(vital stataistics and census). Histocical and (Mital statistics and census). Historical and
current trends and probiems in worti population composation, growth and movemem are examine
processes.
356. Development of
sociological Theory (3) F,S Preerauiate: \(S O C 100\). Social thought and cociology: and an exploration of classical sciological theories up to the earty twentiet) century including such thinkers
Spencer, Mar, Durkheim and Weber.
370. Humanity in Space (3) F,S Preerequistes: ENGL 100 and upper divisio tratusus. The feasibility and potential impasat of ace colonies in obbit on the moon and planets and bace station tecchnology an pacialary implications of human peetiomenerts awa trom Earth are discussed, including the potentials and impeater
inteligent
iff forme.
372. Llving in Space (3) F,S Prerequisistes: ENGL 100 and uppor division
status. The reationship between the environment and social institutions is analyzed. along with the potential of space activities to
sttergnthen Idenitification with humanity rather than onen's own nationality or ethnic group. The
social and biological necosatioes for a
 outtined. The social impications of human
settlements away trom Earth are diocuseed, intudining the potential impact of contact with other intelligent life torme
4101. Social Ecology (3) s

Prerequisites: ENGL 100 and upper division
status, \(s 0 \mathrm{C}\). 100 . Analysis of interdopendencies of elements of populations, eninionment, rechnology and social organization. Examines
socio-ecological relationships currenty and in historical perspective, in simple and complex socitities. Presentation and analysis of world
and U.. problemm in oscial ecology. A field
and and U.S. problems in social ecol
research procect will be required.
420. Social Stratification (3) F,S Prerequiste: \(S O C\) 100. Characterisitios and United States. Differerent theoretical perspectives. how social class affects the opportunity struetures, for income, upward mobility and various
measures of 'the good life" in America today. 423. Fhild Abuse and Prevention ,
This cursee will examine child abuse as a social
problem; tis history and caneal tactos including social change and causalal factors,
patterns. Intevention practices, incluviling pataentif. Intervention practioses, including and court intervention will be reviewed. especially the roles of heath professionals social workers and educotectors. Finally, polioy
implications will be exanine of concermed beexamined, including the role of concoerned citizene

\section*{426. Sociology of Sex}

\section*{ior (3) F,S}

The social context of human sexuality; effects or socialiaztion, social class, cocupation and
religion on sexual atitiudes and behation 4411. Criminology (3) F,S Prerequistes: ENGL 100 and uper division
thatus: SOC 100 or 142 , or PSY 100 , or CRIM
 sociologocical, payctochological.
 approaches to cime. Responses to crime anc
criminals, e.g., prisons, jals, death penalty. cimiminals, e.g., prisons, jails, doath penath.
softhelp. peychotherapy, social reform, media Types of ciriminan beohavior Victims of
(ecture Disucusion) Grading: Ether.
442. Sociology of Prisons (3) S Prerequibte: SOC 100 . Role of the prison in socciecty as viewed from perspectives ranging
from classical to radical; the prison as a Iotal trom classical to radical: the prison as a t otet.
institution; inmate-statt
interaction and subcuitures: imprisonment as "assauth on the self:" the meaning of fiots: the ftuture of
444. Humanistic and Naturalistic 444. Humanistic and
Sociology ( \(\mathbf{F , S}\)
This course is about ordina

This cuurse is about ordinary people as they ty
to understand themselves and others and
sunde unvive, itheract and succoed in an existentially onstage' and playing games with themselves and others in their relationships at home, at
work, at school, on the beach, in bars and in
 videotapes and some full-ength movies will bee
shown in clases. This course is especially
designed fo Paycher designed for Psychology, Busineses, Theoratre
Arts Spoech Communications, Nursing and
Heath
445. Fthnic Group Relations (3),

Patuens of ethnic group differentiation; world
ilationships
between ccommodation and assimilation of miups; roups in America.
48. Impersonality, Violence and Silm (3) An Analysis Through
ilm (3) F,S
Exploration through film of the societal
conditios that facilitate impersonality, and
aliond alienation and uttimamitety y impersonalily, anc society. The study of the strugol of the
ndividual to survie, both physically and psychologicially, in modern society. Focus on
attempts of indididuals to tranceend social attempts of individuals to transcond socie
tariers. Course does not include explotation films but rather films sthat providide a seriotious
commentary on the commentary on the nature of modern society.
Not open to students with creditit this subiect under SOC 450. (Discususion)
4491. Sociology of Politica Rights (3) S
Prerequistes: ENGL 100, at least two courses standing. Examinination of the nexus between the poitical procosss and legal institutions with fousus on how the sociology of law provides
different perspective than the legal doctrines set forth in published judicial opotinions Emphasizes the development of analytical
abilities which are useful to student abilues which are useful to studen
antiopating a career in the law or other
plicy-making felds aking field
450. Marxist Sociology (3) S Analysis of human behaviog, society and social
change from a Maxisist persective 454. Qualitative Methods of Social Research (4) F,S Prerequistes: \(\mathrm{SOC} 100, \mathrm{SOC} 250\) or 255 , or \(\mathrm{C/S}\)
210 , and one upper division course in Sociology. Review aper dinision ocourse in
and essential features of of plasinciples and essential features of classical and
contemporay
qualtative
studies. Topics covered: research design, inclucing use o obbesvation: inteasuruesing modeses of participanas
of "snowbell" and tithiction of "snowball" and other corvenience sampling
techniques; analysis and interpetation of qualitative data. Use of qualitative methods in natural setting and the field. An individual
student research project is required. (Leecture studont research propect in required. (Lecture
hours, laboratory 2 hours). Same course as
as
455. Methods of Social Research (4) F,S

Preerequisites: SOC 100,255 , or 250 , or CIS Socilogy. Tone upper division course in research design, including operationerikation measurement, scaling, reliability, validitity and analysisi: and report witita collection and computer and an individual student teseearch
profoct are reevuired. (Lecture 3 hours, laboratory 2 hours).
456. Contemp Theory (3) FS Prerequisites: SOC 100,356 and one other
upper dovision curre in sociology. Cititical analysis of the contributions of congememoral
sociologolits. Intended primarily for maiors in sociologh
this field.
\({ }^{\text {461. }}\) (3) Alcohol and Society ) \(F, S\)
Preerquisites: SOC 100 or PSY 100 Recormmended: an elementary statistice
course. Epidemiological and soctiogical
approaches to the study of approaches to the stuty of and ohol uocioge and
abuse; socicuutural correlates of alcohol use asouse sociocutitral loore elates of allohol use
ascosed by national and regional surveys
effects of efficts of alcohol uee on phyyiciol and mental
heath; the role of sovernment and hearth; the role of government and other
organizations in the prevention and treatment
of talcohol abuse.
462. Medical Sociology (3) F,S Epidemiological and sociological approacheo
to the stuyy of heath and illeses; patterns of physical and mental disease; patient and physician perspectives on the development of repertoines: types of actaptation of the chronically illif heath care delivery and utilization, particuluary in the Unitiod Statase; and
interaction of physician, nurse, therapitst hoenth
adminisistator, interaction of phyyician, nurse, thereapist, health
adminstator, social worker, pationt, and family
members.
463. Mental Illness and Society (3) S

No Prerequisites. Epidemimogical and
sociological approaches to the study of mental heath and iliness; prevalencee and incidenconce of mental disorderss as dicclosed by community
and national surveys: effects of tamily histon work experience and lifechange events on
varius ticets of various facets of intellectual and affective
functioning: the social and logal status of the mental patient; the role of government and other organizations in
treatment of mental iliness.
464. Sociology of Aging (3) F Preerequisistes: SOC 100 and completion of at
leasat one upper-division course is recommended prior to ennolliment in this
course. Sociological perspective on the aging
procoss from the middle years through old age
Survey of theoretical peerspectives issies
 Focus on roloe and status changess whit aging in
US. Croes cultural and ethnio differences wil U.S. Crosos-uutural and ethnic differencess w olicies and exploration of athernatives. No.
open to students with credit in this subied open to students with croerit in this subbie
under SoC 490. Same course as GERN 464. 465. Work and Health (3) F,S Prerequisites: HSC 400 or 50 SC 46
Epidemiological and sociological approache Epidemiological and sociological approache
to the stucy of relationships between work an to the study of relationships between work a
heath; methocological problems in evaluati, associations between coccupations and
diseases assessment of the effects of occupationnal consitiont of the expofifuctes on
physical and mental heath and heath-related physial and mental heath and
behavior. Traditional grading only. 466. AIDS and Society (3) FS Preerequistes: Sociology 100 or 142 of
Psychology 100 . Recommended: Biology 100 Payyhology 100. Recommended: Biology 100
or 200 or Microbiology 100 or 101 . Places the contemporary
immunodeficiency
divease,
syndrome accuire
(AIDS) sociological perspective. Covers histor.
etiology and epidemiocogy of AIDS. etiology and epidemiology of AIDS. Include
biomedical and sociological research on AlS.
Foculan Focures of behavioral aspects and sociotal impact of the
grading only.
4851. Sociology of Language (3) S Prerequisistes: ENGL 100 and upper division
status. Stuctur and useo of language varieies
in relation to social interaction, social inequality. social change and and nationationism,
\({ }^{\text {490. }}\) (1-3) F. S S . (1-3) F,S
Topics of special interest in sociology selected
for intensive study. Topics will be announced in
 different topisis to a maximum of 6 unit 495. Internship (1-4) F,S Prerequisthes: SOC 100, 142, ,3551, junior or
senior standing. consent of instructor Supervised fiendid, expensient of in instructor
private agencies, private agencies, relating sociologicicl lin inipiles
to community situations. Designed to provico to communtity stuations. Designed to provide
careen-r-ilated
and
and and applied firliks. Stuterents in may entroll tosarch \(1-4\)
units dopending on field assignment and time units dopending on field assignment and time six units. (6-10 hours per week field experimum of 499. Directed Studies (1-3) F,S
 supenision of a tuay of spulty mecial topices. May under be
repeated to a meximy expeated to a maximum of 4 units. In axceptional cases, may be repeated to to

Director: Norma Chinchilla Women's Studies and Sociology) Telephone: 985-4839 Faculty: Professors: Ruth Afflack (Mathematics), Norma Chinchilla
(Women's Studies and Sociology) Margaret Costa (Physical (Spanish// Portuguese), Consuelo Nieto (Education), Sharon Slievers (History), Theresa Turk (Sociolog) Blankley (English and Women' Studies), Pamela Bunte
(Anthropology), Betty Edmondson Ramirez (Mexican American Studies), Pat Rozee (Psychology and Women's Studies); Assistan Professors: Wendy Lozano (Homen's Studies), P (Hior), Claire Martin (Anatomy/Physiology and Women's Studies), Elizabeth Young (English). Emeritus Faculty: Vivian Sucher (Nursing)
Department Secretary Arlene Valdes
Students desiring information should contact the department office for referral to one of the faculty advisors. It is the goal of the Women' Studies Program to provide for
students, the University, and the community an intellectual context from
which it is possible to study the which it is possible to stulcy the
experience of women. By definition experience of women. By definition
this enterprise crosses disciplinary and cultural lines; it means that we are in the University not only to fill in gaps
and to facilitate the development of and to tacilitati the ed evelopment of
coherent bodies of knowledge about women in established disciplines, bu that we represent a core of emerging discipline.
Women's Studies seeks to equip students with the knowledge, skills, and perception necessary to their options available to them as human beings. We want to provide and academic excellence and sensitive to academic freedom that will assist students in 1) the reexamination o men in cultures characterized by
patterns of sex-role stereotyping: 2) the acquistion of an understancin women of varying social, racial, and the analytical tools required to understand and appreciate the implications of the last two decades of feminist theory and research; and 4)
preparing for a variety of vocations which increasingly demand knowledge about women's experience. Wrogram and through courses in other departments and disciplines, offers the University the intellectual ment of a new discipline, and a humanistic perspective from which to view the accumulated knowledge of other disciplines, particulary their
assumptions about women, both as astors and subjects. Women's Studies encourages the developmen of research and curriculum relate
women in other disciplines and departments throughout the University. We also provide information and advising for students and
other members of the University community on the subbject of women and women's studies. The Women's Studies Program
offers a minor which may be combined with many majors, and the American Studies major includes a concentration in Women in American
Society. CSULB also offers a Special Major at the graduate and undergraduate level through which students may design a major
combining Women's Studies with another discipline. Designated Women's Studies courses may be used to fulfill the Social Science
(Category Il and other) General (Category ll and other) General
Education requirement, as well as I.C. requirements.
Other programs and departments offering courses on women, some of
which are cross-listed with Women's Studies, include Anthropology, American Indian Studies, Comparative Literature, English, History, Home
Economics, Math, Mexican American Studies, Physical Education, Psychology, Radio, Tele
Film, Women's Studies
College of Social and Behavioral
Sciences, Religious Studies, Social

\section*{Women's Studies \\ colloge of Social and Behavioral Sciences}

Welfare, Sociology and Speech mmunication.
Minor in Women's Studies Requirements for the Minor in
Women's Studies (code 0-0013)
A minimum of 24 units, to be Alected with approval of a Women's
adies advor, from the following ategories:
(1) Women's Studies Core: Lower101, 102. 200; upper division: 3 units 101, 102, 200; upper division: 3 units units consisting of W/ST 415 and 495;
(2) Cross-Cultural Courses: Three
nutis selected from W/ST 370 (or AlS
\(370)\) W/ST 310 (or B/ST 310): WST units selected from W/ST 370 (or AIS
370). WIST 310 (or B/ST 310)) W/ST
\(314,315,320\) (or CHLS 415), WT \(621 \mathrm{C}, 4011 \mathrm{C}, 406\) (HIST 406), 490
(or ASAM 370), ANTH 351, BST 475, or other selected 490 courses; (3) Electives: At least 6 additional nits of upper division Women's
Studies courses. WIST 498 or 499 units may be applied only with the prior approval of a Women's Studies advisor.
Courses (W/ST)
Lower Division
101. Women and Their Bodies (3) , S
An introduction to the rapitly expanding booy of ierature and ideass
02. Women In Contemporary ociety (S) F,S
An introduction to some of the basic questions
ioed by the contemporary feminist movemen and
alating to the social, political and economic Upper Division

\section*{. Incouction to Feminism}
(3) F

An introduction to feminist history, thought, and United States and European experiencece. adtional grading only.
07. Women and the Economy:
Money, Sex, and Power (3) F,s

Samination of assumptions about the cconcomic lies of women; analtyis of sexuxal division of laber workers; women and divelopment:
waerican women and the economy since 1945 .

\section*{308. Women and the Law (3) S}

History of women's experience under the law
constitutional law; 19th amendment and ERA equal protection; bsth amens diment and ERA;
employment; marriage and familiy law. 310. Black Male and Female Relationships (3) S
Analylis of the effecta of oscial economic, racial and cultural infuences of society on the black
male-female relationship. Focuses on the male-emale relationship. Foouses on the
externally proiected images of the relationship
and the nature of changed roles trom the and the nature of changed roles from the
beoginnings in Africa through the present day. Changing role cycless and the role changeg:
effects upon the relationship. Same course as eeffects Bpon
\(\mathrm{B} / \mathrm{ST} 310\).
314. Women's Lives (3) F

Study of the lives of well-known and litite-known
women based on bligraphical and autobiographical sources

\section*{315. Black Women in America}
(3) F

Examination of the roles of American black
women; taugh from an intercisciplinary
perspectrue
316. Women in the History of U.S.

\section*{316. Women
Film (3) \(\mathrm{F}, \mathrm{S}\)}

History of women as they are represented,
presented as images, or constructed in the development of U.S. film. Theonytracted and in the the of
film trom a feminist perspective. Same course as

\section*{film from}
319. The Ethnic Experience in the Ethnic Studies
Ethnic Studies 319 is an examination of the
dynamics of the development of our multic utheral
 ethnic strands of American sociery (Asian
American, Black American, Mexican American, and American Indiain) and Mexcican Americican,
maintenance of cultural divershit in in the maintenance of cultural diversity in the United
States. Lecture).Discursion. Same course as SBS Statese Lecture/Discussion. Same course as SBS
320.
CHST
CHI9, AlS 319 , ASAM 319 , B/ST 319 , CHLS 319
320. La Chicana (3) S

This course is designed to survey the histrotical
and peychology of the woman in the Chian community. Class work will indulude the analysis
of the history, development, of the history, development, themes, and genres
of the literature of the Chicana and by the Chicana in Engulish- and Spanisana and by tanguage texts. Same course as CHLS 415 .
325. Sociology of Women
(3) FS
(3) F,S

Soci--cultural position of women; a brief history
of women's role and status; societal attitudes toward women's place in society, Same course
as SOC 325. 3381. Wom

Surey of women in Sport (3) F,S Survey of women's hitotical and coctiemporary
invovement with sporto The acoial cuturual and
developomental implications of developmental implications of sports, participation
for women. Same course as PED 338 . 350. Feminist lssues in Mental Health F
Introduces issues related to the mental heath of
women, from historical, anthropological,
sociloggical and paychological perspective
Emphasis is on the relationship of power, sexise,
sex rode socialization and gender stereotypes to sex rote esocializ
mental heath.
History of lesbianism, including (literary history;
 lesbianism and feminism; presentation and
roprosentatio of lesbians in varioum media; the
poltice of gay liberation, and the place of 6551. 3651. Images of Women in Popular
Culture (3) FS Culture (3) F,S
Prerequisistes: ENGL 100 and upper division
statuus. Explores imagen popular culture, indududing of women in American Themes illustrate the ways in which culture reinforcest the societal ideology or patriarchy. We present negative imagese of women and then
demonstate more recent attempts by women cemon statate more recent attem
(and men) to atter these images.
370. American Indian Women
(3) S (3) S

OVeriew of the rote of women in traditional
Indian societies and in the modern wordd
 have altered sexual role definitions will
examined.
382. Women and Literature
3) \(\mathrm{F}, \mathrm{S}\)

Images of Women in English literature; works in
 approacheos and bibliogapophio resourrese
Speeific content will vary. (Lecture - Discussion) Specific oontent will vary. (Lecture - Discussion
Grading: Student Option. Same course as ENGL 382.

\section*{4011. History of Women in}

Cross-Cultural Perspective (3) F Prerequisites: ENGL 100 and upper division
status. Comparison of how different scoial and
sultural cultural oystems have affected the chananging work roles, social stataus and political particmentin's
 and Asian, capitilast and sociallest societiese. Areà emphasis to vary from semester to to

\section*{402. Women and the Feminine in}

Western Political Theory (3)
This course will examine the differential treatment
of women and men in western poltical thecies. Analyses of clasicic and contemporary texts will afflord an opportunity to purzile ovevar the extent to
which western political thought has been witten which western political thought has been witten
trom a mascalinite perspective. Issues such as trom a mascuininit perspective. Issues such as
temininity, and the role of the women in the tamily
will be discussed. The course will indudede mhir be discussed. The course will include
thinkers such as plato, Rouseau Max, and a
variety of feminist theorists. Traditional grading thinkers such as Plato, Rousseau, Marx, and a
vairet of eminist theorists. Traditional grading
only. Same course as Posc 401. only. Same course as Posc 401 . History (3) F,S
Using oral history, this course will focus on
women's experience in different periods in the women's experiencoce in ofiffererent periocoss in the
2ath contury. Different topics will each semester, includidig a study of womeners
changing history through a comparison of two
generational groups: the "feminine mystique" World War II.: Mosie the Reveter, women during repeated with different
Wor 406. Asian Women (3). Histrical experiencen (3) S Historical experience of women in Asia, with
empanis on Chinese and JJapanese societies;
links with the experience limks with the experience of Afian-American
women. Same course as AST 400 and
WIIT 406 . 410. Women and Religion (3) F A study of the Judeo-Christian understanding of the nature of woman and her rote in church and
society from bibical times to the peesent society, from biblical times to the present.
Bibilical, historical, theological, and practical aspects of the subject will be investigated. 415. Feminist Theory (3) F Prerequisite: W/TT 101 , 102 or consent of
instructor. Examination of malor feminist analy instructor. Examination of maior feminist analyees
and discuasion of reformist, revolutionary and peycho-scoial theoriem for bringing about
female-male equality emancipation female-male equality/emanacipation. \({ }^{420}{ }^{(3)} F\) Analyzes how mothering is 'reproducod" in
daughters, and daughters, and why how patriarchalal oulture
regulese the mothe/daughter bond. Readings
are primariy literay regulates the mother/daughter bond. Readings
are pimarily, literay texts, with theoritical
materials drawn from an interciscoipinary
 framework. Special emphasis is given to the
shaping of the mother/daughter relationship in a shaping of the mother/daughter relationship in a
range of historical, racial, class and sexual
contexts. contexts.
425. Women and Power (3) S Examination of the various means women use to
achieve both public and pivivate power, and the
. extent to which women have gained power in the family, the workplace, and politics. Traditional
and feminist definitions of the meaning of power are explorered.
428. Women's U.S. Labor History
(3) S (3) S
in various settings to understand how workers
 their life experiences as workers in the home have
oten times lied to different issues, needs and forms of organization.
430. Women and Violence (3) F Women as victims and survivors of physical.
poychologicical and philosophical poychological, and philosophical violenco
Probolems of rape, woman battering, incest
 examination of lega, religious and philosophica
issues and aternatives for change. 432. Women In the City

Examines the way women respond to the urban environment, both Ilierally and in ithe uriatively.
Special attention paid to the special attention paid to the sexual division of
space, paticular needs of immigrant and third space, paricular needs of immigrant and thic
werod women, and utopian octios of sistethood
Readings featurue literay, texts, augmented by an Readings fature literary texts, augmented by an
interdiripipinary range of theoretical and Interdisacipinary range
empirical studies of ofties. \({ }_{F}^{440 \text {. Issues in Women's Health (3) }}\) Fundamentals of normal physiology and natural defernse mechanisms are covered in order to
understand the cause, prevention and treatment
of various disorders, induculing reproductive organ dystunction, inferitility, PMM. complications pregnancy, sexually-transmitted dibease, cantolity and the relationonship betwee
475. Language and Gender in
Cross-Cuitural Perspective (3) F

Analysis of men's and women's communication interpeting corversational interactions in the \(U . S\). and eltewnerere acocuisition of gender differences:
autural dimens
dions or stereotypes and their offfect on communication Same course as ANTH 475.
485A. History of Women in the
U.S. - Early Period (3) F
Provides a survey of the roles and activitioe American women from coloovial apericod to 1850 ;
immigration: relationships to the family, econom and political movements. (Leec
as AMST 490 and H HIST 485 A . 485B. History of Women in the
U.S. - Since 1850 (3) S
U.S. - Since 1850 (3)

Changing roles and status of women in
economic and social change; suffrage economic and social change; sutfrage
movement; women in union movement and wW
II; the decado of the sptiee and the "second Il; the decade of the sisties and the "seccond
wave" of ferminimm. (Lecture) Same course as AMST 490 and IIITT 4858 B.
490. Speclal Topics (1-3) F,S Topicis of current interest in women's studies
selected for intensine study May bo repeated
with different topics for a maximum of \(s\) six unita. 494. Women's Studie Colloquium (3) F Prerequisites: Consent of instructor. Anaysisis
and interperetaion of current issues in the
diocipline. Speedific topics will be chosen by the instructor. May be repeated with different top
to a maximum of six units. 495. Senior Integrative Semina (3) S
integrates body of knowledge accumulated in
multidicipiplinary minor or special major. mutitidiciplinary minor or special major.
Designed as a seminar in research and
methodology 498 . Field W
eld Work (1-3) F,S
Consent of instructor. Practioal experiences in
campus or community organizations concermed campus or community organization concoerned
with women's issurues. May be repeated for a maximum of stix uniss

Studies (1-3) F,S Consent of instructor. Indopendent work in areas
of spepiai interest to student and instructor. May
be be repeated for a maximum of six units.

\section*{Emeritus Faculty}
(Number in parentheses indicates year of appointment)
Heribert L Aarono (1969) Associale Profossor Emerius, 1991.
 Kamail. Al-Chalabl (1966) Protessor Emerius, 1990. Robort LAmexexandider (1984) Professor Emeritus, 1991 Charite A. A. Allon (1957) Protessoor Emeritus, 1978
Falenh k. Alon (1956) Professor Emeritus, 1970.
Kennotilis. Ames (1988) Profossor Emeritus, 1987. Rhode M Anderrsen (1974) Assococite Protosesor Emeritus, 1988
 Roy C. Andoraon (1950) Prolessor Emeritus, 1974
 Olaf paining ingon (1956) Protessor Emeritus, 1974.
 Blairic. Archer (1950) Professor Emeitius, 1983. Allonoon Larchuleta (1985) Associate Professor Emeritus, 1983
 Daniol tomamenime (1959) Protessor Emeritus, 1990. Harold Aspopiz ( (1958) Professor
Willimem. Ab (1957) Protessor Emeritus, 1990. Abrahhem A. Avi (1964) Protesoor Emeritus, 1983. Jernibibilior (1968) Associale Prolessor Emeritus, 1990
 Dan fibiorer (1961) Professor Emeitus, 1996 . Dorothy w. Beaner (196i) Assistant Protessor Emeritus, 198:

 zol himamomatas) (has3) Profossor Emeitus, 1967. Phylibic Baocom (1979) Locturer Emeritus, 1991 Louit L L Beock (1970) Protessor Emeritus, 1999.
 Edwinin. Bocker (1955) Protessor Emeritus, 1933. Conalididit Boogle ( 1983 Prolessor Emeritus, 1988. Virginimem. M. Bet (1963) Protessor Emeritus, 1983. Stewane Berkshite (1974) Associate Protessoror Emeritus, 1988 Oicoocrowneve betar (1983) Protessor Emeritus, 1981.

 Evelym L Blackman (1961) Prolossor Emeritus, 1976.


Blazeo. .ionaza (1966) Protessor Emeritus, 1983.
Willinmo. Bonie (1983) Protossor Emeitus, 1991.

Dovid C. Bordorat (1962) Profosesor Emeritus, 1990.
Warran . . Boring (1956) Protessor Emeritus, 1981.

 Wetioyen Bration (1950) Professoro Emeritus, 1969 Alico M. Brekke (1970) Professor Ememitus, 1991. Panilitherent (195s) Protessor Emeritus, 198.
 Estolle R. Briaker (1987) Professor Emeritus, 1981. Alexasider \(L\) Brituon (1955) Protessor Emeritus, 1980.

 Futhi.M. Bran (1982) Assistant Fine Ats Librarian-Emeritus, 1977 .
 Johnnaineuchanan (1988) Professor Emeritus, 1990. Steven M. Buck (196i) Professor Emeritus, 1990 .

 Darail V. B. Burase (1957) Protessor Emerius, 1980. Benimeminc. Butcher (1999) Professor Emeitius, 1990 . Ear Remainicic (1959) Professor Emeitus, 1986.

 Daniol N. Cardionase (1970) Protessor Emeritus, 1987
Ear R. Carison (1961) Prolessor Ememitus, 1990
Muadionc Corion ( \({ }^{\text {(1952) }}\) Hoad Social


 L Linooln Chao (1984) Prolossor Ementius, 1983 Richeramid. hiom (isse) Protessor Emeitus, 1986.
 Robern E. Click (1962) Professor Emeitus, 1982 Marguerite A. Ciliton (1978) Professor Emeritus, 1987
 Jameen E. cookrum (1955) Prolossor Emeritus, 1978 .

 Bor LC Conrey (1955) Protessor Emeritus, 1983 . Jooseph Controcras (1964) Protessor Emeritus, 1980. Roymond Cook (1986) Protessor Emeritus, 1991.

Edmund dicconta (1958) Protessor Emeritus, 1991.
 Jommest s. Cratas (1957) Protessoro Emeritus, 1890. Wathor B. Cramord (1993) Proteseor Emeritius, 1985

 Wallorac. C.Come (1952) Protossor Emeritus, 1980.
Benjiamin H.C.Cunningham (1988) Protesesor Emeritus, 1981
Loon Doallin (1955) Protessore Emeritus, 1933.

Honolity Dast (1987) Associate Protessor Emefitus, 1980
Boyd A. Dovis. (1951) Proteseor Emeritus, 1980.
Jamees E. Day (1955) Protesosor Emeritus, 193
c. Tholiems Doan (1952) Protessors Emaitus, 1980

Dorohy Doathorisoo (1955) Protessore Emeatius, 1990.
 aoorgio Di. omono (1932) Protessor Emeritus, 1933 Harold 9 . Dilibock (1989) Professor Emeritus, 1991

Oracce EDinemation (1567) Protessor Emeritus, 1981.





 Stacy E. Dukes (1964) Associalat Prolasoso Emeritus, 1988 Elluaboalno. Dupont (1969) Protessor Emeritus, 1983. Robeer P. Ourbin (1950) Prolessoor Emeitius, 1972

 Albert LEbhrolech (1955) Protessor Emeritus, 1988 Dorothys Emicoon (1933) Protessor Emeritus, 1974 . Ravmond F .



Franciald. F. Flynn (1950) Exeoutive Doan, Development-Emeritus, 197 . Willeme Forg (11.55) Protessor Emeritus, 1881.





Rober K. F Frove (1958) Associalate Prolossor Emaitus, 1900 Charlotenade . F Furth (1966) Prolossor Emeritus, 1900

Audroy Fuse (1966) Assocoiale Prolossoso Emaritus, 1977
Stunleye Re.abionilisen (1958) Prolessor Emeritus, 1976.
 Allos A. Obbieliton (1961) Senior A Assitant Libral Olgas. ©azalik (1988) Assistant Libratian Emeftus, 1982 aoorge w. aenevro (1957) Protessor Emeitus, 1962


 Alen J. Oliasoor (11959) Prolessor Emertius, 1980 . Kennath lienn (1956) Protessor Emeftus, 1930. John H. Good (1987) Associatel Protessor Emeritus, 1983. Franke. Gorow (1953) Protessor Emefitus, 1974. Horman H. Oratet (1964) Protessor Emeritus, 1986. Harold V. Orahem (1989) Protessoso Emeoritus, 1983.
 Jay J. Oramich (1956) Protessor Emeitus, 1980. David E. Oray (154) Protessor Emeritus, 1933.


 Arthur w. aroasmen (198e8) Protessoor Emeitis, 1988.
 Serafina O. . Uunter (1964) Protessor Emeritus, 1980 c. Rocoment Outhrie (1983) Protessor Ememitus, 1930.
 Arenene D. Hemmiluon (1966) Assosciate Prolessor Emeitus, 1933. Raphaol M. Henaon (1964) Protessor Emeitius, 1966 Sally M. Hataratoon (1966) Protessor Emeritus, 1989.

 Willomenen Hartmen (1951) Prolossor Emeritus, 1980 Olenn E. Heyoen (1980) Prolossor Emeritus, 1991.
 John L Heaty y lisese Associate Protessor Emeritus, 1983


 Braxion C. Henderoson (1964) Prolessor Emeritus, 1975. Don Ambinnozeoc (1952) Asasitant Humantios Librarian John A.Hememan (1955) Protessor Emeritus, 1982 John EHiggine (1964) Prolessor Emeritus, 1990 .
 Howerd O. Hinchocck (1958) Protessor Emeritus, 1990 . Mabol J. Hottman (1981) Protessor Emeritus, 1980. Robeorit. Holmes (1961) Prolessor Ememitus, 1986.


Adelore L. Houde (1995) Professor Emeritus, 1985 ,
 Everetit H . Hrubant (1957) Professor Emeritus, 1988.
Biocay
Carol A. Hunter ( 1969 Profossor Emeritus, 1983.
 Home EConomites
John Vhy Hutchesson (1956) Professor Emeritus, 1984.
Physics and Astronomy
 Cathem M. Ivwin (1961) Associate Professor Emeritus, 1983. Tayylor T Juackitman ( (1963) Professor Emeritus, 1980.

 Patriciac.E.Jersin (1965) Protessor Emeritus, 1991. Alan We Johnaiton (1968) Associate Director

 Ellzurising Kazan (1955) Professor Emeritus, 1983. Maxionbiobogy
Mine
Keonan (1971) Associate Professor Emeritus, 1981,
 B Boyd Kendall. P.E. (1969) Professor Emeritus, 1979,
Eloctrical Enponexing Harvey L K Kendall (1966) Professor Emeritus, 1990 John Po Kemney (1966) Professor Emeritus, 1983. Grethimak Jessishaw (1966) Professor Emeritus, 1983.
 Earl C. Kidd (1952) Professor Emeritus, 1973. Julic Van N. Kierbow (1957) Prolessor Emeritus, 1978, John c. Kimura (1967) Professor Emeritus, 1991.
 Kephhes A. Kinsmman (1949) Professor Emeritus, 1972. James J. Kirkpatirick ( 1967 ) Professor Emeritus, 1986. Carl E. Klafe (1956) Professor Emeritus, 1976. Paul IL Llisieitiene (1954) Professor Emeritus, 1979.
 A. Ailedeny Poold Physiobogy (1959) Professor Emeritus, 197 Margaret \(L\) L Koehlier (1970) Professor Emeritus, 1988.
Nursing Georsging W. Korber (1952) Professor Emeritus, 1978 .
socilo Loyd A. Kramer (1973) Associate Director Library-Emerius, 1986.
Ronald A. Kroman (1959) Professor Emeritus, 1990. Onaioboy.
Broman (1959) Protessor Emeritus, 1990 Chester Ricke Kyle (1959) Professor Emeritus, 1984. Mechanial En (ineosing
Horofessor Emeritus, 193
Musici
Hel (1965) Professor Emeritus, 1983. Hans Lampl (1965) Professor Emeritus, 1983.
Invin Tic Lathrop (1959) Protessor Emeritus, 198
Industral Education Arthur C . LLauter (1957) Professor Emeritus, 1983. Alvin H. Lawson (1962) Professor Emeritus, 1990. Enpish
Dorothy Loach (1988) Counselor-Ememitus, 1987.
Richard E. Lee (1955) Professor Emeritus, 1983.

Gordon Lois (1966) Professor Emeritus, 1988.
Scociology Mary Jane Leland (1959) Professor Emeritus, 1986. John M. Lenoir (1974) Professor Emeritus, 1984. Aren A. Lewis (1967) Protessor Emeritus, 1982 Aren A. Lewis (1967) Professor Emeritus, 1982.
Aocounting (Lewis), P.E. (1958) Professor Emeritus, \(19,3\).
 Jameen C. Lien (1954) Professor Emeritus, 1983.
Poilicial Scenece Richard Q. Lincoln (1956) Professor Emeritus, 1986. \(\substack{\text { Biology } \\ \text { Raymond } \\ \text { History } \\ \text { E. Undgren (1961) Professor Emeritus, } \\ \text { (1980. }}\) John R. Lindquiat (1966) Career Counselor-Emeritus, 1987.
Ruth D. Undsey (1976) Professor Emeritis - 1988 . Ruth D. Undsey (1976) Professor Emeritus, 1988. Alexander Lipasil (1958) Professor Emeritus, 1984.
Histor, Peligious Studies Robert TT. Litrell (1957) Institutional Studies-Emeritus, 1987 .
Lucille cologan (1964) Assistant Professor Emeritus, 1975.
Micorobiology Dinna M. Longatroet (1998) Senior Assistant Librarian Emeritus, 199
 W. William Lummden, Jr. (1958) Professor Emeritus, 1983. Walter J.Lyche (1957) Associate Professor Emeritus, 1974. Michael C. Lyman (1965) Professor Emeritus, 1983. Richard E. Lyon (1958) Professor Emeritus, 1983. Endilenh
David
Theata Aarthur (
(1964) Professor Emeritus, 1996. B. David Macon (1957) Associate Professor Emeritus, 1986 Jerome H. Manheim (1971) Professor Emeritus, 1988.
 Anthony Merd Merdilis (1956) Protessor Emeritus, 1990.
Mantematise Howard S. Martin (1965) Professor Emeritus, 1991. Radio. Tolevision (and film
John M. Martin (1955) Professor Emertius, 1982.
At Fraderic J. Masback (1964) Professor Emeritus, 1989.
Endish. Phyllis F. Maslow (1975 Professor Emeritus, 1990. Charies FFMason (1964) Professor Emeritus, 1979 Goorgo E.Massey (1959) Professor Emeritus, 1983.
 Kennoeth E. Maxwell (1963) Professor Emeritus, 1973. Darwin L. Mayfied (1956) Professor Emeritus, 1990. R. Clyde McCone (1961) Professor Emeritus, 1980. John J. McConnell (1953) Protessor Emeritus, 1986
 John M. McFaul (1963) Professor Emeritus, 1988.
History Edward B. McLood, J. (1965) Professor Emeritus, 1986 Flora A Meisenheimer (1973) Associate Professor Emeritus, 1991. Halvor G. Melom (1950) Professor Emeritus, 1974. Hasisoy
Mat
At
O. Merlino (1952) Professor Emeritus, 1975.
 Harold T. Miller, (1958) Associaite Professor Emeritus, 1971 .
Margarereve E.Miller (1966) Protessor Emeritus, 1989.

John Minar ( (1988) Profossor Emeritus, 1989. Reth Moore (1970) Professoror Emeritus, 1986. Mabel S. Moore (1967) Associate Professor Emeritus, 1983
 C. Douglas Moryl (1963) Professor Emeritus, 1991
 M. Camal Mostana ( 1968 ) Professor Emeritus, 1987 . Julien Musafia (1959) Professor Emeritus, 1983. Charioes LMy Myers (1956) Professor Emeritus, 1986. Dean W. Myere (1969) Professor Emeritus, 1985. Dean Dosion

 Doris Nelson (1967) Professor Emeritus, 1987.
Enplish John A. Nolson, Jr. (1971) Professor Emeritus, 1983. Theocdore E. Nichols (1956) Professor Emeritus, 1984. Theoodore E. Nichols (1956) Protessor Emerius, 1964 Robert LL Nicholson ( 1957 ) Professor Emeritus, 1983.
Industrial deduataon

 Frankskaa Nofkerapy (1964) Counselor-Emeritus, 1981.
John E. Ny gard (1963) Protessor Emeritus, 1990. John E. Nygaard (1963) Protessor Emeritus, 1990
Hazocionogon Aliver (1960) Senior Assistant LibrarianHazeil A. Oliver ( (1960) Senior Assistant Librarian-Emeritus, 1980
Paul E.Ostad (1958) Counselor-Emeritus, 1983 , Paul I. O. Ostad (1958) Counselor-Emeitius, 1933 .
Douglas H Orgill (1951) Professor Emeritus, 1983. Douglosish H Orgil ( (1951) Professor Emerlus, 1 Clydo E. Osborne (1975) Assistant Protessor Eme
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Duogsas soborne (1964) Protessor Emeritus, 1977 , Douglas Osoborne (1964) Professor Emeritus, 1977
Caroltyy M. M. Wen (1970) Protessor Emeritus, 1986 Felikicast Palulubinskas (1965) Protessor Emeritus, 198 Anna M. Parmley (1969) Associate Professor Emeritus, 1988. Lyman M. Patrtridge (1964) Protessor Emeritus, 1978 . Lyman M. Patridgge (1964) Protessor Emeritus, 1978 ,
Willimm Pantaterseon (19055) Professor Emeritus, 1983.
 Carl| Payne ( 1968 ) Professor Emeritus, 1990. Fermando Penalosa (1970) Professor Emeritus, 1990.
Sociology Wanda L. Pentecost (1963) Protessor Emeritus, 1987, Louis E. Perigut (1965) Professor Emeritus, 1982. Louis E. Perigut (1965) Professor Emeritus, 1982.
Lelandity. M. Perry (1956) Protessor Emeritus, 1990. Leland M. Perry (1956) Professor Emeritus, 1990.
Robebort A. Puesatoloesi (1955) Protessor Emeritus, 1986. Donald W. Peters (1953) Professor Emeritus 1981. Paul O. Petersen (1962) Protessor Emeritus, 1985 Audrey Buckiland Peterson (1966) Professor Emeritus, 1983. Audrey Buckland Peterson (1966) Professor Emeritus, 1983 .
Milton Als. Petty (1969) Associate Protessor Emeritus, 1977.
Microboborogy Mactobiow
Dora Beale Polk (1968) Professor Emeritus, 1987.
Engish Marion B. Pollock (1964) Protessor Emeritus, 1981. Frank M. Pooler (1959) Prolessor Emeritus, 1988. Music
Donald P. Popham (1956) Professor Emeritus, 1986. Donald F. Popham (1956) Professor Emeritus, 1986 ,
Richaerd C. P. Potation (1967) Prolessor Emeritus, 1983. Richacrar C. Covetior (1967) Protessor Emeritus, 1983
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Paul E. Powoll ( (1955) Protessor Emeritus, 1981
Alan R. Probet (1968) Associate Professor Emeritus, 1980. Jane F. Purcell (1964) Associate Protessor Emeritus, 1980 Mary-Joe Purcell (1959) Professor Emeritus, 1987. Eliesboth M. Quillen (1964) Protessor Emeritus, 1985. Bonioe J. Raderer (1970) Professor Emeritus, 1990.
Home EComomice Jamee F. Ragland (1955) Professor Emeritus, 1984 Watier J. Raine (1968) Profossor Emeritus, 1983. Penychology
Denis
G. Rainey (
(1956) Professor Emeritus, 1988. Bidiogy
Robert
Aft
W. Ramsey (
(1957) Protessor Emeritus, 1990. ailman W. Rankin (1969) Associate Professor Emeritus, 1979.
Theate Als Clare Q. Rayner (1957) Professor Emeritus, 1986. Don F. Roed (1957) Associate Professor Emeritus, 1980. Willard H. Reed (1962) Protessor Emeritus, 1983. C. Patticnolaneoenid (1951) Professor Emeritus, 1974.
 Henry Peyna (1970) Counselor-Emeritus, 1987.
Hans P R Ridder 1 (1964) Associate Professor Emertus, 1991. Charitiaes A. Rocione bers, JJ. (1956) Professor Emeritus, 1986. Delmer \(J\). Rodabaugh (1955) Professor Emeritus, 1978. Johanna W. Roden (1962) Profossor Emeritus, 1991. , Clara e. Rodney (1968) Professor Emeritus, 1983.
 Howard C. . .olife (1960) Prolessor Emeritus, 1980.
Elomentary Education Harry Q. Romig (1966) Professor Emeritus, 1972. Alioe W. Rose (1951) Professor Emeritus, 1974. Arlene A. Roster (1952) Professor Emeritus, 1975.
 Kenneth W, Rugag (1964) Professor Emeritus, 1989 James E. Ryan (1954) Professor Emeritus, 1983. Eva Sakamoto (1967) Assistant Professor Emeritus, 1982. Merra A. Samples (1967) Protessor Emeritus, 1981. Merne A. Sampleses (1967) Professor Emeritus, 198
Janoet B. Somomyer (1957) Professor Emeritus, 1986. Janet B. Bowner (1957) Professor Emeritus, 1986.
Rilchard Scalethar (1968) Professor Emeritus, 1992. Froderick H . Scantling (1966) Associate Professor Emeritus, 1980. Milton E. Schmict (1959) Protessor Emeritus, 1979. John W. Schmitt (1974) Professor Emeritus, 1989. James W. Schultze (1963) Associate Protessor Emeritus, 1980. Josephine B. Schultz (1951) Protessor Emeritus, 1977
Af Arnol T. Schwab (1961) Protessor Emeritus, 1980.
Endisish Herman Schwartzkopt (1950) Professor Emeritus, 1979 Frank C. Schatzzlein (1959) Protessor Emeritus, 1991.
 Thomas M. Serront (1963) Assistant Librarian-Emeritus, 1980.
Jothn W. Shainline (1966) Vice President for Student Services Emeritus,
1990.


Alfred W. Sheots (1959) Protessor Emeritus, 1975 .
 Qail Shoup (1969) Professor Emeritus, 1989. Robort M. Simmone (1959) Professor Emeritus, 1983.
 Chemistry
Gene Renimonsen (1958) Professor Emeritus, 1990.
Economicse Loroele P. Sinclair (1966) Assistant Librarian Emeritus, 1991.
A. Keith Skarsten (1956) Professor Emeritus, 1982 A. Konh Skarsten (1956) Professor Emeritus, 1982 Donald HH. Smith (1980) Professor Emeritus, 1986.
Industraial Education Eari. M. Smititu (1906) Professor Emeritus, 1991. Dorisis. S. Spochth (1985) Hoad, Humanities Librarian-Emeritus, 197 Crahem K. Spring (1966.) Associate Professor Emeritus, 1976.
 Roberit A. Steffes (1959) Professor Emeritus, 1972. Meyerrialstoin (1974) Professor Emeritus, 1989.

 Loe Bi Stophens, Jr. (1962) Profossor Emeritus, 1983. Perrit St Stineon (1969) Professor Emeritus, 1988. Harry E. Itiver, Jr. (1964) Professor Emeritus, 1983 Theatre Alts
Lavone
Stock (1959) Professor Emeritus, 1980.
 Geralld B. strickler (1958) Professor Emeritus, 1986. Paul Mssicophy (rroud (1957) Professor Emeritus, 1980 Vivian M. Sucher (1962) Professor Emeritus, 1986
 Neil V. Sullivan (1972) Profossor Emeritus, 1986. Sabri Sungu (1961) Professor Emeritus, 1983.
 Lois J. Swanson (1951) Associate Dean Emeritus, 1969 . Studen Aftais
Froderick M. Swensen (1961) Professor Emeritus, 1990 . Froderick M. S. Senseen (1961) Professor Emeritus, 1990
Richard F . Swifit (1958) Professor Emeritus, 1980. Dorie D. Tabor (1967) Professor Emeritus, 1987. Kenneth S. Teeel (1969) Professor Emeritus, 1988.


 Charies M. Thompeon (1956) Professor Emeritus, 1983 Jesese J. Thompson (1956) Professor Emeritus, 1979. Charlos H. TTideon (1955) Professor Emeritus, 1976.
 F. Alan limmons (1954) Professor Emeritus 1980 John A. Tormey, ill (1957) Professor Emeritus, 1986.
Hoaith Science Leonard Torroes (1956) Professor Emeritus, 1988. Lidustrial Edocalion
Leonard W. Towner, Jr. (1955) Professor Emeritus, 1986.
John Trevennen, Jr. (1952) Information Dosk Librarian-Emeritus, 197 .

Thomas Trombetas (1961) Professor Emeritus, 1989.
Poritical Science
 Ching H. TTeas (19605) Professor Emeritus, 1986. Mochancall Enoinoering Robert E. Tyndall (1955) Professor Emeritus, 1983.
Musio.
Alexander D. Porquhart (1953) Professor Emeritus, 1982 Hann H .. Vinander Meyden (1961) Associate Professor Emeritus, 1983. Marilyn vandorwarf (1957) Associate Professor Emeritus, 1983. Home Economits
Georgie B. Vaughn (1960) Senior Associate Librarian-Emeritus, 198

 Joseph A. Wagner (1952) Professor Emeritus, 1978 .
Sopech C.C.munication
Charlee \(T\). Walker (1964) Professor Emeritus, 1991 .

 Eughene C. Wallin (1956) Professor Emeritus, 1990. Dorothy L. Walsh (1956) Professor Emeritus, 1970

 Harold W. Wesenhusrn (1965) Professor Emeritus, 1972.
Kennetical C . Weinesibrod (1964) Associate Dean Emeritus, 1
 Williano T. Wellhouse (1955) Professor Emeritus, 1983.
Roberte. Wells (1963) Professor Emeritus, 1985. Marion A. Wharton (1965) Professor Emeritus, 1978. Marion A. Wonamicos (Heb) Professor Ementus, 1970.
David B. Whitcomb (1967) Counselor Emeritus, 1987. David B. Whitcomb ( (1967) Counselor Emeritus, 1987.
Susanne Whitcomb (1937) Professor Emeritus, 1987 . Sushool ti business Administration
Richard H . Widde (1951) Professor Emeritus, 1983. Richard H . Wilde (1951) Professor Emeritus, 1983.
Havid A. Williams (1965) Professor Emeritus, 1980. Lustertoy
Endish
Hilliams (1956) Protessor Emeritus, 1983. R. Orn Williams (1968) Professor Emeritus, 1988. Stanley w. Williams (1952) Professor Emeritus, 1983 .

 Geagraphy
Suzanile
Endish
. Wilson (1958) Professor Emeritus, 1980. Roborntwh. Winchell ( 1961 ) Protessor Emeritus, 1980.
Heditial Robertica. Winelow (1952) Professor Emeritus, 1980. Music
Herbert A. Winter (1959) Associate Professor Emeritus, 1988.
FToenhbialian
 Charioes E. Woiff (1957) Protessor Emeritus, 1980. Chathoting
Edward A. Wright (1966) Professor Emeritus, 1973.

 Jo Ann R. Yates (1968) Professor Emeritus, 1986. Daie Yoder (19966) Professor Emeritus, 1975.
 L Ward Youry (1952) Professor Emeritus, 1980.
\begin{tabular}{|c|c|}
\hline Barcellona, John (1989) \(\qquad\) Assistant Professor Music B.M. University of Hartford; MA, California State Universily, Long Beach; D.M.A.,
University of Southern California & \begin{tabular}{l}
tory \\
Lehigh University; M.A., University of M
\end{tabular} \\
\hline is, Robert E. & Bernstein, History \\
\hline Havard Un & BA, Muhtenberg Collese, Aler \\
\hline arrett, R. Conrad (1988) \(\qquad\) Associate Professor Comparative Literature and Classics B.A., Stanford University; M.A., University of California, Los Angeles; Ph.D., University & \begin{tabular}{l}
y, Arnold J. (1973) \\
Chemistry and Bicchemistry \\
S., Pennsyivania State University; M.S., Michigan State Uni niversity.
\end{tabular} \\
\hline Bartiett, Kenneth T. (195 Physical Education & Berryhill, Stuart R. (1979) Chemistry and Biochemistry BA. Williams College, Massachusetts; Ph.D., University of California, Berkeley. \\
\hline Bates, Donald L. (1974) Management/Human & Bersi, Robert M. (1987) ............................ Profes
Public Policy and Administration \\
\hline B.5, M. A. A, modiena & for Deferred Giving \\
\hline &  \\
\hline BA, MA, La Salil Collog & \\
\hline uer, Roger D. (19 Chemistry and B & B.E, M. M, University of South \\
\hline S. Ph.D, Kansas State Unversity. & efeth \\
\hline um, Alwin L. (1989) ...........................Assietant Profeseor & \begin{tabular}{l}
Music \\
A.A. University of California, Los Angeles; M.M., University of Southern California D. M. A. University of Southern California
\end{tabular} \\
\hline Beattie, Randall C. (1972) ............................ Profee & (1988) .... Aneocte Proteeor \\
\hline & \\
\hline  &  \\
\hline Beaumont, Marion S. (1967) Economics & Binder, Virginia L. (1967) Psychology
\(\qquad\) Professor \\
\hline B.S., Ohio State Univesity: MA, Duke Univesity: Ph.D, Claremon Graduate Scho & BA, William Jow \\
\hline Beck, Louis L. (1970)
Teacher Education & \begin{tabular}{l}
Birkemeier, Richard P. (198) \\
Music
\end{tabular} \\
\hline BA, MA, Univesity of Reollands; Ph.D. U. U., Internationa University, Emeritus, 1989. & B.ME, Uninerity of Wsconsin, Madison; M.M, Memphis State Univerity; D.M. \\
\hline Becker, Harold K. (1963) \(\qquad\) Protaeoso Criminal Justice & Brmele \\
\hline & \\
\hline Becker, K Technol & Janat E, \\
\hline  & \begin{tabular}{l}
ck, Janet E. (1990) \\
Prof
\(\qquad\)
\end{tabular} \\
\hline Beckman, Alexander L ( 1986 ) . . . . . . . . . . . . . . . . . . Prote & A, Whitior Colloge; MS.W, University of Southern Callomia \\
\hline  & \begin{tabular}{l}
Black, Paul V. (1969) \\
Profess
\end{tabular} \\
\hline & BS., MS. Universily of Southe \\
\hline Beckwith & Blankley, Elyse M. (1986) ................. Aseociate Protessor \\
\hline & \\
\hline Beocher Earts. (1961) & Autaers Uninestity, MA, Ph.D, University of Calliomia \\
\hline her, & Blazey, Michaol A. (1990) .... \\
\hline BA, Univesily of Utar: MBA, Ph.D. University of Califormia, Los Angetes & - \\
\hline , \({ }^{\text {an, Bruce E. (1958) }}\) & \\
\hline & bery \\
\hline & \\
\hline Behm, Robert J. (1971) Occupational Studies &  \\
\hline & Blumenthal, Sharyn C. (1988) ................. Assistant Protessor \\
\hline & Radio, Television and Film \\
\hline Bell, A. Ro & Bordeaux, Valerie (1986) \\
\hline & \\
\hline BA, MA, Uninesity of Mami, P.D.D. University ot Maryland & \\
\hline elt, Virginia M. (1963) & English \\
\hline Southem Illinois University; MS. Ph.D., University ofllinois. Emeitis, 1983. & \\
\hline Bennish, Joseph (1988) ........................Assistant Profes
Mathematics & Art \\
\hline BA, & Bott, Paul A. (1976) .......................... Protasar \\
\hline rdan, & Occupational Studies ............................ Protasor \\
\hline BA, Nottwestern Colloge; Ph.D. Univesity of Texas, Austin. & And \\
\hline \begin{tabular}{l}
rger, Raymond M. (1986) Social Work \\
BA, State University of New
\end{tabular} & \begin{tabular}{l}
Bourret, James A. (1968) Biology \\
B.S., M.S, University of Woming: Ph D, Universty ot Calo
\end{tabular} \\
\hline Bergin, Marilyn J. (1971) \(\qquad\) Senior Assistant BA, California State University, Long Beach; M.LS., University of Califon Angeles. & Boutelle, Do History \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline  & \begin{tabular}{l}
Campbell, Joyce M. (1988) \(\qquad\) Associate Professor Physical Therapy \\
B.S, M.S. Ph.D. University of Southern California' Registered Physical Therapist Cas. Miores, Filemon C. (1972)
\end{tabular} \\
\hline Bramble, Karra J. (1987) ..................... Assistant Protessor & Managementhluman Resources Maragement ............ \\
\hline Nursing &  \\
\hline BS, Unversity of Calltomia, San francisoo; MS, Callomia State Univesity, Long & Cannon, Harold L L (1968) ........................ Protessor \\
\hline ay, Richard N. & - \\
\hline Biology & Cantey, Richard E. (1972) ........................... Counselor \\
\hline Brett, James R. (1977) \(\qquad\) Director & BS. Louisiana Sate Unionstry MA, Callomia State Univesity, Los Angolos; Ph.D. \\
\hline Office University Research and Curricular Administration B.A., University of Virginia; M.A, California State University, Long Beach; Ph.D. University of California, Los Angeles. & \begin{tabular}{l}
Carisesimo, Jool W. (1969) Computer Engineering and Computer Science \\

\end{tabular} \\
\hline Briggs, Nancy E. (1970) Professor Speech Communication & Carlberg, David (1966) \(\qquad\) Professor Microbiology \\
\hline Brophy, Robert J. (1968) ............................Proi & n, E \\
\hline & \\
\hline Gon & \\
\hline Broughton, Jeffrey L. (1976) \(\qquad\) Associate Professor Religious Studies BA, M, A, Ph.D., Columbia University. & \begin{tabular}{l}
Carnahan, John A. (1990) . .........................Assistant Professor Music \\
BS, Duquesne University, Pittsburgh; MA, University of San Francisco.
\end{tabular} \\
\hline - \({ }^{\text {a }}\), Loster B. (1989) & Carmey, Michaol R. (1981) .................... Associate Professor \\
\hline & \\
\hline AB, AM, Pr.D. Univesity o Chicaso. & BM, \\
\hline Buck, Steven M. (1961) . Speech Communication & Carr, Ashliy B. (1984) ............................. Protessor \\
\hline BA, MA, Washtington State Univesity, Ph.D. Purdue Unimensty. Emeitus, 1990. & Ats \\
\hline Bunte, Pamela A. (1987) .....................Associate & BA, Henodix Collope, Atransa \\
\hline Anthropology & Carsen, Michael R. (1985) ................................ Professor \\
\hline  &  \\
\hline e-Stipanov, Linda K. (1973) .....................Prot & Carter, Charies L (1985) \\
\hline  & \\
\hline B.A. California State & BA, Comell Colloege, M \\
\hline Hrke, Albie D. (1967) ................................Prote & Jean Marie (1987) ................... Associlate Professor \\
\hline \({ }_{B}\) H. A, American Conseralory 1 M & cher Education \\
\hline rman, Howard V. (1988) & y) ot limoin Champaion: \\
\hline & Cash, Robert W. (1970) ............................... Profos \\
\hline BA, Ph.D., The Ohio State University. & \%og \\
\hline oughe Nancy (1990) .................... Assistant Professor & BA, Donison Unimesity, MA, Iowa Stat Univesity, EdD. Unheresity of Aizona \\
\hline Corsily of Californ & Causey, Faya (1987) ....................... Associate Protes \\
\hline , Weos virimia Unveraity. & \\
\hline Buah, Roland E. (1969) &  \\
\hline BA, California State University, Long Beach; MA, Ph.D., University of Sout BA, California & veness, Jeane (1990) Women's Resource Center \\
\hline an, Hyeja (19 &  \\
\hline  & Engineeing \\
\hline Caine, Randy M. (1983) ..................Assocoiate Professor &  \\
\hline & Coisi, Richard \\
\hline  & Ma, Menemfed Unimesily, Peonssw \\
\hline Caldwell, John T. (1989) & Augustus, Jr. (1967) \\
\hline Racio, Teievision, and Film & \\
\hline  & B.S, Evangel College, \\
\hline Callison, George L (1969) ............................ Prot & Comy, Kay (1982) \\
\hline & \\
\hline , Kansess Stata Unversir, MA, PrD. Unoweraity 0 K Kanseas &  \\
\hline Camburn, Herbert L (1960) Theatre Arts & Chaderilian, Bruce J. (1989) \(\qquad\) Mathematics \\
\hline CA, MA, Mchionan saie & BS, Cal Poy San Luis Obisoo, M \\
\hline Sociology & Che \\
\hline (1962) .t. . . . . . . . . Associate Protessor & \\
\hline Campbell, Daniel A. (192) Phyical Education &  \\
\hline BA, University of California, Santa Barbara; MA Beach. Emeritus 1990. & Geological Sciences \\
\hline \begin{tabular}{l}
Campbell, Janet (1965) . \\
Senior Assistant LJbrarian BA, California State University, Long Beach; M.S. in LS, University of California, Los Angeles.
\end{tabular} & \begin{tabular}{l}
Chase, Michael D. (1983) \(\qquad\) Professor Accountancy \\
BA, Roanoke College; M.A. San Diego State University; Ph.D. University of Southern
\end{tabular} \\
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\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Chassiakos, Anastassios (1989) \\
.............. Associate Professor Engineering and Industrial Technology Engineering Dippoma, National Technical Univeristy, Greece; M.S., Purdue; M.S., Ph.D
University of Southern California.
\end{tabular} & \begin{tabular}{l}
Collins, Charles T. (1968) Biology Prof
\(\qquad\) \\
B.A., Amherst College; M.S., University of Michigan; Ph.D., University of Florida
\end{tabular} \\
\hline ,au, Kenneth K. (1984) & \begin{tabular}{l}
Collins, Keith E. (1969) \\
Professor
\end{tabular} \\
\hline Social Work &  \\
\hline BA, Wha Kuw Clloge, Heng Kongi M.S.W. McGill University, Canada; & Colman, Koith R. (1970) .................... Asesociate Profoes \\
\hline Chavez, Marcela (1991) ........................... Senior Director
Women's Resource Center & \begin{tabular}{l}
Psychology \\
BA., California State University, Long Beach; M.A., Ph.D., University Angeles.
\end{tabular} \\
\hline Chawla, Sudershhan (1962) ........... & Connor, Michael E. (1971) \\
\hline Political Science & \\
\hline & \\
\hline \begin{tabular}{l}
Chelapatl, Chunduri V. (1965) \(\qquad\) Professor Civil Engineering \\
B.S., College of Engineering, Kakinada, India; M.S., Ph.D., University of Illinois.
\end{tabular} & Conroy, Jean L. (1961) \(\qquad\) Asooclate Protoesor Mathematics \\
\hline Chen, Chia-Hwa (1964) .............................. Professor & Cook, Raymond (1966). \\
\hline Physics and Astronomy & Recreation and Leisur \\
\hline BS. National Tawan Uninersit, M.S. National Tsing Hua Univessty; Ph.D., Slate & B.S., Southwest Missouri State Colloge; M.A, University of llinols; Ed.D., University of \\
\hline en, Hsin-Piao (1986) ...................... Associate Professor & Cooper, Gene R. (1969) .................... Proteseor \\
\hline ospace Engineering & \\
\hline B.S. National Cheng Kung Univesty, Taman; M.S., National Tsing Hua University, & BA, MA, University of Hewail \\
\hline Chen, Hsun Hu (1985) .... & Cooper, Ralph (1987) \\
\hline orspace End & \\
\hline  & College of Engineer \\
\hline en, Kuang-Ho (1981) . . . . . . . . . . . . . . . . . . . . . Professor &  \\
\hline & A. (1958) .......................... Protessor \\
\hline BS., National Tamian Univesist, Taipei; M.S., Ph.D., Nottrwesten Uninestity, llilomis. & \\
\hline Robert H. (1991) & Councilman, Samuel C . (1988) \\
\hline & \\
\hline B.S. National Chiao Tung University, Taiwan; M.S., University of Wisconsin, Madis & \({ }_{B A,}\) Mat \\
\hline Chinchilla, Norma S. (198) & Cowan, Peter A. (1981) ........................... Protessor \\
\hline & \\
\hline BA, University of Pacific; MA, Ph. D. University of Wsoconsin, Madison. &  \\
\hline Chong, Philip S. (1986) & Cox, Carole (19 \\
\hline & \\
\hline , Unversity of Simgapore; MS., Ph.D., University o \(M\) &  \\
\hline Physics and Astronomy & Craven, Duane C. (1967) .................. Asecciate Profeseor \\
\hline . MA, University of British Columbia; Ph.D. University of Calliforia, Los Angeles. &  \\
\hline Chu, Hsiao-Ling, (1972) & Crayton, Ce Etta F. (1972) .................. Associate \\
\hline & Studie \\
\hline BS.C.E. M.S., National Cheng-Kung University, Tawan; Ph.D., North Carolina State Univerity & BA, Lewis and Clark Colloge; MS. Calliomia State University, Los Angelos \\
\hline Clark, Carter B. (1979) & Creamer, Lyle R. (1962) \\
\hline & \\
\hline BA, MS, Ph.D. University of Okathoma, Norman. & Crego, Clyde A. (1983) \\
\hline Clark, Cheryl (1969) & Counseling Center \\
\hline & BA, University of Montana, Missour \\
\hline \({ }_{\text {BA }} \mathrm{BA}, \mathrm{MA}\), Univasty of Callomia, Los Angeles. & y, Da \\
\hline Clark, Patricia J. (1990) & \\
\hline \({ }_{\text {BS }}^{\text {Aft }}\) & BA, MS, Ph. \({ }^{\text {d }}\) University \\
\hline Cleary, Patriciala Ann (1989) & Cretara, Domenic (1986) \\
\hline History & BFA, MFA, Boston University \\
\hline BA, Rince Univestisy PhD. Nottrwestern. & Crowther, Simeon J. (1968) \\
\hline Clover, Robert C. (1975) ...................... Associate Profeseor & \\
\hline Biology & BS, University of Oregon; Ph. U, University of Pennsywania \\
\hline BA, Uninesaly of Calitoma, Beokoley, MA, Calliomia State Univestity Chico: Ph.D., & Culotta, Wendy A. (1973) ............................ Lbrarian \\
\hline Coan, Donald L (1989) ................................Director & BA, Unviersiry or carifornia, San Diopo; M.L.S., Unversity of California, Los Angeles \\
\hline  & Curtis, Kenneth R. (1990) .......................Assistant Profese \\
\hline Cohen, Floyd A. (1965) ........... & BA, Lam \\
\hline & \\
\hline BA, MA, Ph.D. University of Califoria, Los Angoles & Music \\
\hline Cohberg, Jeffrey A. (1975) .......................... Prot & \({ }_{\text {BM, }}^{\text {M, East Texas Stat U Unversia }}\) \\
\hline BA, Cormell Unversity, PR D O, Unve & Cyn \\
\hline & Computer Engineering and Computer Science \\
\hline Economics & \\
\hline (esty Caltomis Suthe & \\
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\end{tabular}

\begin{tabular}{|c|c|}
\hline Eliason, Lowell J. (1965) Physics and Astronomy & Ford, Gerald L. (1969) \(\qquad\) Associate Prot Management/Human Resources Management \\
\hline B.S., Stanford University; Ph.D., University of Uta &  \\
\hline  & Forney, Kristine K. (1978) \\
\hline fandiari, Ramin S. (1991) ...................A & B.M, Southem Illnois Unvesistr, MA, Ph.D. Univessity of Kentuck, Lexing \\
\hline Mechanical Engineering & -rnia, Dorothy L. (1956) . ............................ \\
\hline B.S., MA, P. P.D. University of Callomia, Santa Batbara & Physical Education \\
\hline hett, All (1966) ............................... Profess & B.ECd, MA, Ohio State University \\
\hline \({ }_{\text {Cinil }}^{\text {Cinl }}\) Iengineering & Forouzesh, Mohammed P. (1) \\
\hline Evans, Dale W. (1988) & Heath Sclence \\
\hline & Unversity of ten \\
\hline B.S, MS. Seorge Williams Colloge; HS.D., Indiana Universty, Blomingoton. & Foter, L. Sheila (1987) \\
\hline ans, Edward N. (1970) & Computer Engineering and Computer Science \\
\hline Computer Engineering & BA, Onio Westeyan Unvesity, MA, Ph.D, University of Southern Calliomia \\
\hline  & Fradkin, Howard E. (1967) ................... Associate Pro \\
\hline Eveland, Vern K. (1984) .......................... Professor & \\
\hline & Univesty : \\
\hline B.S., State Uninesity yf lowa, lowa City; M.S., Ph.D., University of towa, lowa City. & Francis, Robert D. (1987) \\
\hline lar, Harry D. (1963) & Geological Sciences \\
\hline thematics & BA, \\
\hline Montana State Univers & \\
\hline ber, Stuart (1990) & Frank, Gail C. (1989) \\
\hline Callo & BS, Texas Tech Unive \\
\hline Stalito & Franklin, Bashara J. (1967) \\
\hline  & (tankin, Barbara J. \({ }^{\text {Physical Education }}\) \\
\hline Heaeth Scienceosocio & B.S. Memphis State Unversity M.S., Unversity of Wastington. \\
\hline BA, MA, Callfornia State University, Long Beach; D.P.H. University of Calliomia, & Fried, Elliot (1970) \\
\hline Farrell, Michael J. (1969) ................. Associate Protese & \\
\hline &  \\
\hline BA, Pomona College; MA, P.D.D., Stanterd U & Fris, Robert H . (1988) \\
\hline Fata, Frank J. (1986) . ............................. Profese & \\
\hline Comperative Literature and & AB, Univesisity of Callionia, Berkeley, AM, Ph.D.D. Columbia University. \\
\hline AB, Columbia Colloge, New York, Ph.D, The Johns Hopkins Univestity. & Fung, Henry C., Jr. (1966) . ......................... Professo \\
\hline Fatt, Milton J. (1963)
Mathematics & Acting Associate Dean, College of Natural Sc \\
\hline BA, MA, University of Califomia, Los Angeles; Dokor der Mathematik, Swiss Federal Insititute of Technology. & Un \\
\hline Fayek, Mamdouth M. (1989) ................. Associate Profes & San Francisoc; MA, San Francisco State University, Ph.D. Wastinglon Stato \\
\hline & Galt, Charles P. (1973) ............................ Protes \\
\hline BFA, Colloge ot Fine Ats, Cairo; MA, Caltiomia State Universit, Long Beach. & Biology \\
\hline \(\underset{\text { Art }}{\text { Ferreira, Armando } T \text {. (1957) }}\) & \({ }^{\text {BA, }}\), University of Calliomia, Santa \\
\hline & Garhammer, John J. (1985) \\
\hline Collige of the Ate & Bs Paneucain \\
\hline \({ }_{\text {BA, MA, Unvesity of Call }}^{\text {Brem }}\) &  \\
\hline Fiebert, Martin S. (1965) Psychology & \begin{tabular}{l}
Garrott, Roy C. (1969) \\
. Assistant P
\end{tabular} \\
\hline BS, Queons Colloge, Fusshing. New York, PhD, University of Rochesster. & \({ }_{B A}\), MA, Westem Kentuchy Universit. \\
\hline ne, David M. (1968) & rvey, Daniel E. (1976) ............................ Profe \\
\hline English & Journalism \\
\hline  & BA, Hararard Collope, MA, PhD, Stantord Univesisty. \\
\hline ney, Robert Q . (1977) & D. (1988) .................. Associate Professor \\
\hline Radio, Television and Film & \\
\hline AB, Mariotala Colloge: MA, Ph.D., Ohio State Univerity. & Gebre-Meskel \\
\hline Finney, Stanley C. (1986) ............................ Professor & Engineeing and Industria Tee \\
\hline Geology & BS, MS, Electro Endineocing Institito of Communiation, Mosco \\
\hline BS. MS, Univesisty of Calliomia, Aliveside; Ph.D, Otio Stale University. & Geosey, aill C . \\
\hline ot, Patricia (1977) ............................. Protessor & Microbiology \\
\hline \begin{tabular}{l}
Dance \\
dental Collog: MA
\end{tabular} & \({ }^{\mathrm{BA}}\), University of Callomia, San Diego: MS. Ph.D., Oregon State University, \\
\hline Fischer, David W. (1986) .................... & George, Bartara C. (1) \\
\hline Public Policy and Administation & Finance, Real Estate and Law \\
\hline BS, Trinity University, M.S, Mishigan State University; Ph.D., Colorado Stat &  \\
\hline her, Janet M. (1989) . . . . . . . . . . . . . . . Associate P & George, Donna D. (1991) \\
\hline & \\
\hline BS, Onio Univesily, MEd, Ph.D. University of Tolado. & BA, MA, Calitomia State Univesity, Long Bach; Ed. . Univesity of Southeo \\
\hline Fisher, Steven A. (1990) ........................ Associate Professor & George, \\
\hline BS, MS. University ot Acon: DBA, Kent State Unimensit. & \\
\hline daca & BA, Unvessity ot Caltiomia, Inine; MA, Ph. , Princoton \\
\hline sychology & -orge, Simon (1961) .. \\
\hline BA, Sarah Lamence Colloge: Ph.D. Univeristy of Pochese & Phy \\
\hline & Univesity of Brmb Colum \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Gessford, John E. (1990) \(\qquad\) Associate Profess Information Systems BS M , PhD Stantorc University. & \begin{tabular}{l}
Gordon, Joanne L (1989) . . . . . . . . . . . . . . . . . . . . Associate Professor Theatre Arts \\
BA, MA, University of Witwaterssand, South Atrica; Ph.D., University of Califomia, Los
\end{tabular} \\
\hline Gharakhanian, Editte (1990) .................. Aessitant Protes & Gooseolin, Edward A. (1969) \\
\hline  & History \\
\hline Giarratano, Susan C. (1988) .........................Protes & \\
\hline Heath Science & Coasetre, Framklin E. (1987) ................. Associate Protessor \\
\hline & \\
\hline Cibbe, Norma B. (1966) Educational Psychology and Administration Ph.B., Northwestern University; M.Ed, University of llinois. & Graham, Harold V. (1969) . .................................... Professor \\
\hline Gibson, J. William (1991) \(\qquad\) Assistant Profess Sociology & BA, Universily of Southern California; M.A., California State University, Los Angeles; Ed.D., University of Florida. Emeritus, 1983. \\
\hline BA, Univesily of Texas, Austin MA, M. Ph. ., Yale University. & Graham, John A. (1975) .....................Asesistant Professor \\
\hline Gilde, Helen C. (1959) & Educational Psy \\
\hline English &  \\
\hline allon, Paul R. (1969) & Granger, Jean M. (1972) ............................Professor \\
\hline Intormation Systems & cial Work \\
\hline B.S., New York Cily Colloge; MA, Ph.D. Unversity of Southen Calliomia &  \\
\hline Ipin, C. Barclay, (1966) & Grannell, Roswitha B. (1967) ......................... Protessor \\
\hline Mechanical Engineoring & Geoclogical Sciencos Pb \\
\hline  & \\
\hline Gilsdorf, Joanett & r \\
\hline  &  \\
\hline Gilst, Jan (1986) & Green, Kenneth F. (1968) ........................... Protessor \\
\hline atro Art & \\
\hline  & Greenberg, seth (1990) \\
\hline Comouter Engineering and Computer Science & \\
\hline BA, MA, Ph.D, Ununesily of Calliomia, Los Angeles. & biogn Disixinoon Univ \\
\hline azer-Danay, Richard (1985) & Greogory, James R. (1970) ............................. Protessor \\
\hline  &  \\
\hline Unversity of caliomia, Divis & ogory, Kenneth M. (1973) \\
\hline Glenn, Constance W. (1973) & Anatomy and Physiology \\
\hline Ar & Grenot-Scheyer, Marquita (1988) ..............Aseistant Professor \\
\hline University At Museum & Educational Psychology and Admi \\
\hline  & mas \\
\hline , Kennoth (1 & \\
\hline  &  \\
\hline ezakos, Constantine (1968) .........................Profese &  \\
\hline Economics & Griffin, Peter (1990) \\
\hline BA, Altens School 0 Econom & \\
\hline adard, Kathryn E. (1990) ........................... & AA, San Diaso State Uninesity, MA, Ph.D. Universily of Calliomil, Santa Bra \\
\hline BA. University of Califormia, Berkeley, MS., Indiana University; Ed.D., University & Griftut, William H. (1989) ........................Vice Prosident \\
\hline Southem Cailiomia (1989) ............... Aseistant Profoeo &  \\
\hline Oodrrey, R. Michaor (1989) ... & Orimmoth, Dixica Ann (1965) \\
\hline BA, Amherst Colloge: M.PA, Ph.D, Unimenity of Sa & Edu \\
\hline jom, Teatal (1983) & B. Bromam Yound \\
\hline Engineel
B. N. National University, Ethiopia; BS, University ot Wiconsin, Plateon & Grobar, Lisa M. (1989) \\
\hline Gold V. Yvonne (1972) .............................Protes & BA, Smun, Ph. U, Uniorst \\
\hline ducation & Groses, Calvin D. (1962) \\
\hline BA, MA, Callomia State Unversity, Lono &  \\
\hline deh, Dorothy M. (1958) & Groes, Mark W. (1988) \\
\hline Chemistry and Bicchemistry & Physics and Aatronomy \\
\hline BS, Stantord Unversat, PhD. Univesisiy or cailomia &  \\
\hline Golddatein, Avery E. (1990) & -rote, Kar-Helinich ( \(1984-1986,1990)\).......... Aseociate Protessor \\
\hline Home Economies & Sel \\
\hline & Querriere, Danile ( 1969 ) ............................. Protes \\
\hline Ves, John, Jr. (1969) ..................Asosciale Proloseor & Phio \\
\hline \({ }_{B A}\), MA, Cailominia State University, Long Beach & BA, MA, PhD, Ouquess Univoriaty. \\
\hline dmman, Catherine C. (19 & ogy \\
\hline ial & BS. MS. Callomia S \\
\hline & \\
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\end{tabular}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
unatilake, Sarath (1987) \(\qquad\) Health Science \\
Professor \\
B., Medicine \& Surgery, University of Colombo, Sri Lanka; M.P.H., Universily of Hawaii,
Manoa; D.P.H., University of Hawaii, Manoa.
\end{tabular} & \begin{tabular}{l}
Harman, Robert C. (1969) Anthropology \\
B.A., University of California, Santa Barbara; M.A., Ph.D., University of Arizona
\end{tabular} \\
\hline underson, Emma Jean (1971) ........................ Profoseor & Harrie, Alice M. (1969) \\
\hline , & BA, dato State Univessity M. M. Ph.D., University of Orogon. \\
\hline Gunns, Albert F. (1967) ................................. Professor
History & Harris, Edwin R. (1959) ................................ Professor Chemistry and Biochemistry \\
\hline BA, Univesity of Puget Sound MA, Ph.D., University of Washinglon. & B., M.S. University of Okahoma; Ph.D. Unwersity of Callionma, Beakeley. \\
\hline Guthrie, Sharon R. (1990) \(\qquad\) .Assistant Pro Physical Education BA. University of Calt & Harris, Nap (1990) tent Life and Development BA, Calitomia State Unversity, Long Beoch \\
\hline Northridge; MA., California State University, Long Beach; University. & Hartley, Joellen T. (1981) ............................. Professor \\
\hline Hadlock, David A. (1985) & B.S. MS. University o Calitomia, \\
\hline \[
\begin{gathered}
\mathrm{A}_{\mathrm{Br}} \mathrm{~F}
\end{gathered}
\] & Hartung, Elisabeth S. (1988) ................... Associate Profe \\
\hline Haglund, Elaine J. (1972) ............................ Professor & BS, lowa Westeran Colloge; MA, University of Northem lowa; Ph.D. Artora Stato \\
\hline \({ }_{\text {BA , Univesilty of Coailomenia, Los Angole }}\) & vey, Bernard N. (19e) \\
\hline Halberg, Kathloen J. (1988) ................. Associate Profe & Mathema \\
\hline & \(\xrightarrow{\text { Br, }}\) Unimin \\
\hline Cynthia M. (1990) ... & Hassul, Mic \\
\hline udent Life & \\
\hline BA, Colorado Crisitia University MA, Azusa Pasifica University &  \\
\hline Hall, Darwin C. (1986) & Hauth, Luster E. (196) \\
\hline & \\
\hline arivele & BA, MA, University of Rediands; \\
\hline \begin{tabular}{l}
Hall, Thomas E. (1981) \\
Art
\end{tabular} & awley, Wade (1991) \\
\hline BFA Kanasas & \\
\hline Halliwell, Michael J. (1968) & Political Science (1961) ............................ Protessor \\
\hline \({ }_{\text {BA, MA, Ph }}\) Soid & BA, MA, Unversity or Mmmesoa; PhD, Univensity of Colorado. \\
\hline Hamano, & Heeger, Jack (1990) ...................... Associate Protessor \\
\hline ctrical Engineering & \\
\hline E, MS.E, Tohyo institue of Tochnology; Ph. . University &  \\
\hline & Aerospace Engineering (1)........... Associale Protessor \\
\hline M. Unimesity of Callormia &  \\
\hline Hanley, Gerard L. (1984) & Heineman, Stephen S. (1969) ....................... Protessor \\
\hline & astral \\
\hline BA, MA, PhD. Stale University of New York, Story Brook & , \\
\hline Managementuluman . ....................Assistan & Henderson, Alan C. (1987) ........................... Professor \\
\hline & \\
\hline , Rillec & BA, University of Califomia, Santa Barbara; M. M, D. P. P. Un, University of Califonia, Los \\
\hline Hanson, Raphael & Herman, Martin (198) \\
\hline of & \\
\hline Haralson, Sally A. (1966) & , \\
\hline Mhology & Hermandez, Juan R. (1989) ................... Associate Profos \\
\hline  & Spanish/Portuguese \\
\hline Harari, Maurice (1983) & Hermann, Jo \\
\hline BA, Columbia College: PhD. Cociumbia Univensity. & Managementhuman Resources Management \\
\hline Harbinger, Holly (1986) & Caliomia , Unversity of Alizona, Tusson; MS, D.BA, University of Southern \\
\hline  & Hertz, Robert M. (1969) ............................ Profe \\
\hline d, & \\
\hline \[
\begin{aligned}
& \text { Harding, Forrest E. (1971) } \\
& \text { Marketing }
\end{aligned}
\] &  \\
\hline B.S., Southern Illinois University; M.S., Northern Illinois University; Ph.D., Arizona S & Hickerson, Truman O., Jr. (1965) ........................ Protes \\
\hline rdy, Leroy c. & BS, MBA, Univesity of Califoria, Los Angeles: CPA Cortificate, C \\
\hline & Hickman, Roger C. (1988) .................. Associate Profess \\
\hline BA, University of California, Santa Barbara; Ph.D. University of Calfornia, Los & Music \\
\hline Harlow, Charles V. (1968) ........................... Pr & BA, Univesily of Catiomia, Innine; MA, Ph.D. University of Callomia, Beatcoloy. \\
\hline  & \begin{tabular}{l}
Hickman, William J. (1989) \\
....................Asoistant Profess
\end{tabular} \\
\hline & t \\
\hline Harman, Marsha s. (1966) ......................... Prow
Sociology & \\
\hline  & Hile, Loyd R. (1968) .............................. Profes \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Hill, Colleen E. (1991) Technology Education \\
B.Ed, University of Alberta, Canada; M.S., Ph.D. Texas A \& M Un
\end{tabular} & lsbell, Clinton H. (1989) \(\qquad\) Associate Profes Technology Education BA, M.Ed, Sam Houston State University; ; Ed.D., Texas A \& M University \\
\hline Hinde, John E. (1981) & Ishimine, Tomotaka (1967) ......................... \\
\hline Accountancy &  \\
\hline  & Hatani, Carol A. (1975) ...................... Associate Profe \\
\hline Hipkiss, Robert A. (1966) Protes English \(\qquad\)
\(\qquad\) & \begin{tabular}{l}
Microbiology \\
BA, University of California los Angeles; MS, California State University, Beach; Ph.D. University of Southern California
\end{tabular} \\
\hline Hirshtal, Edith H. (1984) . . . . . . . . . . . . . . . . . . . . Protes & Jacob, Mary (1980) ............................... Profes \\
\hline Music & Home Economics \\
\hline BM, MM, Juilierd School of Musio. Now York and Temple Unhersidy, Ponnsy &  \\
\hline Hlousek, ZVonimir (1990) .................... Assistant Proteseor & Jahn \\
\hline Physics and Astronomy &  \\
\hline B.So, Univessty o Z Zagreb, & James, Kenneth (1982) \\
\hline Biology & Electical Engineeoting \\
\hline BS, National Taman Unieresit; MA, Ph.D. Boston Univesity. & B. Case ingutut on tech \\
\hline Hofft Joan c. (1957) & Jamgochian, George R. ( \\
\hline \({ }_{\text {HS. }}^{\text {Home Geocres Pepeperdine Coll }}\) & \\
\hline Holmes, Robert T. (1961) ...........................Profeser & BA, Pemona Colion \\
\hline \begin{tabular}{l}
Marketing \\
B.S., Purdue University; M.BA, Northwestern University; Ph.D, State Universily of
\end{tabular} &  \\
\hline (iomer, Pamela M. (1991) ..................Associate Professor &  \\
\hline Marketing &  \\
\hline BA, Mchigan Stale Uni & Jarasunas, Emanuel (1976) \\
\hline Hood, David C. (1966) History & BS California State University, Long Beach; M.A, Iro Technology Institute Germany; Ed.D., Nova University. \\
\hline & Jenkins, Kenneth D. (1970) .......................... Profees \\
\hline Horn, Stephen (1970) Political Science & Biology BA, Calif \\
\hline  & Jensen, James L ( 1968 ) \\
\hline Horne, David A. (1988) \(\qquad\) & Chemistry and Bicchemistr ............... Acting \\
\hline &  \\
\hline \begin{tabular}{l}
Marketing \\
B. ., M.BA. Ph.D., University of Michigan, Ann Arbor
\end{tabular} & \({ }^{8,}\) Wi Westmont C Colloge: \(\mathrm{MA}, \mathrm{U}\) \\
\hline Hou, Jack W. (1989) & Jensen, Marilyn A. (1965) ..... Recreation and Leisure Studies \\
\hline Economics & Recreation and L.e.....................Associate Vice-Pre \\
\hline Hotchkiss, Wilhelmina L (1990) ............... Assistant Profesa & Academic Affairs, Program Development and Strategic Planning \\
\hline  & Jenson, Owen 0. (1966) . ......................... Profes \\
\hline hlyu Yang (195) & Speech Communication \\
\hline Physics and Astronomy & BS, Brioham Younn U Unvesily, MS, PhD, Purdve Unimesity. \\
\hline  & Jernigan, John C. (1970) ......... \\
\hline Hubbard, Herold G . (1970) & BA, Southestern Unimesily, MA, Pur \\
\hline  & Mary Ann (1988) \\
\hline BA, UnMorsty of Caliomia Loo & Social Work \\
\hline Huckabay, Loucine (1984) &  \\
\hline & Johnson, Cynthias S. (1989) \\
\hline  & Educational Psychology and \\
\hline ckaby, David G. (1973) ....................Assoc &  \\
\hline Biology & ohnson, Gretchen A. (1969) ..........................Lbbrarian \\
\hline Hughes, Edward J. (1990) ................... Assis & Intomation Programs, Li \\
\hline  & \({ }^{\text {BA, }}\), St, Out Colloog \\
\hline BA, Manatan Colvego, New Yơk & Johnson, Henry s. (1966) \\
\hline Hunter, Harold R. (1987) & Asian and Asian American Stucies \\
\hline Heath Care Adminisistal & Johnsoon, Richard J. (1959) \\
\hline  & Instuetona Sydemb tommi \\
\hline (taka, Ralph B. (1969) .................... & BS, Michigan State Unversis\% MS. Ed. . \\
\hline Psychology & Johnoon, Thomas Q. (1989) \\
\hline BA, MA, San francisosal &  \\
\hline Physical Education & Johnsoon, William M. (1965) ............... Associate Professor \\
\hline BS, State Uniessiy or vow rork Comand....................Protessor & Prilosophy \\
\hline Asian and Asian American Studies & BA, \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Johnston, Michael W. (1987) \(\qquad\) Counselor B.A., Missouri Southern State College; M.S., University of Kansas; Ed.D., Indiana & oarney, Patricia (1987) Speech Communication \\
\hline nees, Ira (1969) &  \\
\hline & Kefgen, Mary F. (195 \\
\hline  & Home Eo \\
\hline Jones, Irane (198) & B.S, Iowa State Unversty, MA, Now Yook University. \\
\hline ench/t & Kellor, Kathloen L (1983) \\
\hline Ph.D. University of florence, taly & Nursing \\
\hline  &  \\
\hline BA, Lindenmuod Colloge: M. & Kell \\
\hline nes, Rita H. (1964) & Home \\
\hline Teacher Education & Sanas Stat Unh \\
\hline  & Kellogg, Bonnie E. (1989) \\
\hline  & \({ }_{\text {BA, }}\) Nount Ms. Mar's Colloge: M \\
\hline \({ }_{\text {BA, }}\) Reigious Yate & dy James J. (1) \\
\hline  & social Wo \\
\hline Jrdanides, Thimios J & B.S., Edinboro College; M.S.S.W. University of Tennosssę; Ph.D., Brandeis University. \\
\hline Electrical Engineeing & Kolly, Wayne F. (197 \\
\hline B.a, Wame State University; M.S., San Jose State University, Ph.D. Unversity & BA, Buter Univesitr: MS. \\
\hline rgenson, Dale & Kendall, Harvey L ( 1966 ) \\
\hline & \\
\hline  & BA, MA, PhD. Indiana Univershy \\
\hline Pug, John R. (1968) & Kenealy, Patrick F. (1988) \\
\hline University & Phys, Lo \\
\hline cl, Judith A. (1972) & Kennedy, Coleste K. (1970) \\
\hline iminal Justice & \\
\hline B.S. Loma Linda Uniwastry, M. & BA, Washington University: MA, Humb \\
\hline  & rr, Rowland (1990) \\
\hline Theatre Arts \(\qquad\) Profess & Student Life and Development \\
\hline BA, Cliy Colloge of New York; M, M, Ph.D., University of Wisconsin. & esler, Eugene E. (1969) \\
\hline \begin{tabular}{l}
albus, Gene E. (1957) \\
Chemistry and Biochemistry
\end{tabular} & \begin{tabular}{l}
French/talian \\
BA. City College of Now York MA
\end{tabular} \\
\hline B.S., Ph.D.U University of Wesonsin & Sity of Califomia, Inim \\
\hline Kaminsky, A & , Mon, \\
\hline  & \\
\hline mmermeyor, Michaell J. (1968) ....... & Univeraty. \\
\hline & Khatra, Balwant S. (1987) \\
\hline B. S. University of Southern Califo &  \\
\hline Kampwirth, Thomas J. (1971)
Educational Psychology and Administration ................ Professor & BV. So., Voterinary College, Hissar, India; B.S, Puniab University, India; M.S, Punjab (i, University of Leeds, England. \\
\hline BS. Univesity ofllinois, MA, Dopaul Univesasty: Ph. D. University yoflinois & Khoiny, Frarideh (1990) ..................... Aselitant Professor
Nursing \\
\hline Kao, Hsin-Sheng C. (1989) Asian and Asian American Studies ............... Associate Profess & B.S. Boston Univesty; MPA, Calliomia Slate Univerily, Long Boach; M.N. Univesaty of Calliomiai, Los Angeise. \\
\hline BA, National Taman Univerist, MA, University of Saskatchewan: P.D.D. Univesity of & Kim, Juheo(1966) \\
\hline Kapche, Robert W. (1966) .................. Associate Profe & \({ }_{\text {BS , Soul }}\) Mictional Univers \\
\hline Psychology & Kimura, John C. (1967) \\
\hline Karabenick, Edward (1959) & Geography Sue \\
\hline & , \\
\hline BA, MA, Wame State University. Ph.D., University o M Michigan & Kingsford, Laura (1980) \\
\hline ga, Maulana N. (1989) ......................... Professor & \\
\hline & B. S, Botes State Universis, Ph.D. Uninersity of Ulah. \\
\hline BA, MA, & Klig, Lisa S. (1990) . . . . . . . . . . . . . . . . . . . . . . . Aseociate Professor \\
\hline Katz, Steve M. (1973) ........................ Senior Director & BA, Unine \\
\hline & , \\
\hline  & Klink, Elloen s. \\
\hline (eutman, Ellizaboth S. (1963) ........................ Proteseor & End, Unversity of Callomia, Los Angoles: MA Califomia Stal \\
\hline Nursing ( &  \\
\hline BA, Starlord Univesty, MS, University of Cailtoria, Los Angeles. Emeritus, 1989 & Sto \\
\hline ianian, Hamid R. (1984) & \\
\hline B.S., Shirza University, Iran; M. S, Ph.D. Colorado & BA, Union Collogo, Scheneostay, Now Yook, MA, Columbia Univesity; Ph.D, Brow \\
\hline \(\begin{aligned} & \text { Kearney, Michael L ( } 1960 \text { ) } \\ & \text { Finance, Real Estate and Law }\end{aligned} \ldots \ldots \ldots . . . . . . . . . . . .\). Professor & Kochan, Roman V. (1969)
Administration and Finance ........ Acting Assistant Vice President \\
\hline & \begin{tabular}{l}
 Kokaska, Charles J. (1969) Educational Psychology and Administration \\

\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Koppenhaver, Albert H. (1969) ...........................................essor Teacher Education \\
B.S., State Teachers College, Pennsytvania; M.S., California State University, Los
Angeles; Ed.D., University of Southern California.
\end{tabular} & Lavay, Barry (1989) Associate Professor Physical Education BS, PYymouth State Colloge; M.S. Eastern Illinois University, Ph.D. University of New Mexco. \\
\hline \begin{tabular}{l}
Koval, James E. (1985) Home Economics \\
B.S., Creighton University, Nebraska; M.S., Texas Technological University; Ph
\end{tabular} & \begin{tabular}{l}
weon, Alvin H. (1962) English \\
BA, University of California, Berkeley; MA. Ph.D., Stanford University. Eme
\end{tabular} \\
\hline \begin{tabular}{l}
Krause, Joseph H. (1955) \(\qquad\) Professor Art \\
EdD. University of Southern California
\end{tabular} & Lax, Melvin (1977) \(\qquad\) Professor Mathematics B.S., M.S., Ph.D., Rensselaer Polytechnic Institule. \\
\hline Krause, Marina C. (1968) \(\qquad\) Profes Teacher Education BA. University of Arizona; MA., Ed.D., Arizona State University. & Le, Son V. (1986) \(\qquad\) Associate Profess Finance, Real Estate and Law B.S., M.S. Ph.D., Iowa State University \\
\hline Krauser, Henry (1970) .......................Associate Profes Engineering and Industrial Technology ES, \(\operatorname{liob}\) State College: MEd Pennsivania State University. & Lea, Joseph A. (1968) Instructional Systems Technology BA. University of California, Los Angeles; M.S. University of Southern California. \\
\hline Kroman, Ronald A. (1959) Biology & \begin{tabular}{l}
Leach, Mary Ellen (1968) \\
Physical Education \\
B. ., Florida State University, M.A, University of California, Santa Barbara.
\end{tabular} \\
\hline  & \begin{tabular}{l}
Lee, lsaiah C. (1972) Professor Social Work \\
BA, Tawan Chung-Hsing University, M.S.W. University of Nebraska; M.P.H, Dr. P.H.
\end{tabular} \\
\hline Kukalie, Salah M. (1986) ..Associate Profes Managemenththuman Resources Management BS. M.BA, The American University, Caino, PhD. Unowersity o Arizona & \begin{tabular}{l}
Lee, Jacqueline D. (1989) \(\qquad\) Assistant Professor Home Economics \\
BA, San Diego State University, M.S., California State University Los Angeles; Ph.D.
\end{tabular} \\
\hline Kumar, Rajendra (1983) &  \\
\hline \begin{tabular}{l}
Electrical Engineering \\
B. Tech, M. Tech, Indian Institute of Technology; Ph.D. University of Newc Australia.
\end{tabular} & \begin{tabular}{l}
Lee, Richard E. (1955) English \\
BA, MA, Ph.D. Now York University. Emeritus, 1983
\end{tabular} \\
\hline \begin{tabular}{l}
Kumpf, Lorraine E. (1987) English \\
BA, Syracuse University; MA, University of Colorado, Boulder, Ph.D. Universit Caitania Los Angeles
\end{tabular} & Lee, Ronald A. (1970) Associate Vice President Information Management and Analysis BA. University of Houston; M.S. Ph.D. University of OWahoma \\
\hline unat, Robert J. (1969) & Lether, William M. (1966) ............................ Protessor \\
\hline \begin{tabular}{l}
Technology Education \\
B.S., Northern llinois University; M.S., Kansas State College of Pittsburg: Arizona State University
\end{tabular} & \begin{tabular}{l}
BA. University of Massachusetts; M.A. Ph.D., University of Chicago \\
Leland, Mary Jane (1959) \\
Professor
\end{tabular} \\
\hline Kvapil, James A. (1988) &  \\
\hline  & Lerner, Lawrence s. (1969) ......................... Professor \\
\hline Lacay, John M. (1989) &  \\
\hline BS., M.BA., University of Southern California; Ph.D., University of California, Angeles. & Leung, Alfred F. (1989) Physics and Astronomy \\
\hline course, Michael C . &  \\
\hline Physical Education B.S., Springfield College & Lovine, Arthur M. (1974) Finance, Real Estal \\
\hline Shui F. (1985) & BA, Princolon Unimesity, LLB, Yate University. \\
\hline Computer Engineering and Computer Sciencie & Lewie, Ralph J. (1972) \\
\hline Lane, H. John (1963) Computer Engineering & \begin{tabular}{l}
California, Los Angeles. \\
................................Professor
\end{tabular} \\
\hline BS, Gorzaga Unvesity, MS. & - San Pao (1976) \\
\hline LaPage, Peter P. (1957) & Ba, Tumpai U \\
\hline & Ueberman, Noll ( \\
\hline & \\
\hline Daniel O. (1988) ..................... Assistant Prote & Ma, \\
\hline  & Lhemistry and Bicchemie \\
\hline Barama &  \\
\hline Lase, Mary J. (1966) & Um, Paulino M., Jr. (1967) \\
\hline BA, Pepperdine Colloge: MA, Calitomia State University, Long Beach; & mono Tor \\
\hline Lethrop, Ann (1989) .......................Associate Professor & Mnotn, John R. (1968) ............................ Protessor \\
\hline instructional sy & \\
\hline  & BA, MA, Castiomia Sale University, Long Baech. \\
\hline English & Lincoln, Richard Q. (1956) Biology \\
\hline ba,ma & as, Orom \\
\hline ustrial Education & Unden, James 1. (1968) \\
\hline College of Health and Human Services BA, M.S. Wayne State College; Ph.D., lowa State University & \begin{tabular}{l}
BA. University of Michigan; MA. Ph.D., Michigan State University. Lindgren, Kenneth (1985) . . . . . Michigan State University. Nater Polo \\
B.S., M.A, California State University, Long Beach.
\end{tabular} \\
\hline
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\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Mason, Andrew Z. (1989) \(\qquad\) Associate Professor Biology \\
B.S., Ph.D., University of Wales.
\end{tabular} & Mena, Roberto A. (1988) . . . . . Mathematics B.S., M.S., Ph.D., University of Houston \\
\hline \begin{tabular}{l}
Mastropaolo, Joseph A. (1968) \(\qquad\) Professor Physical Education \\
B.S., Brooklyn College; M.S., University of Milinois; Maitre d' Escrime, Institut
Nationeledes Sports Paris; Ph.D., State University of lowa
\end{tabular} & Mendez, Peter J. (1976) \(\qquad\) Associate Professor Art MA, M.A, California State University, Long Beach; M.FA, University of California, Los AA, MA, \\
\hline Matkin, Ralph E. (1987) .Associate Professor Educational Psychology and Administration BA., Kansas Wesleyan University; MEd, University of Missouri, Columbia; Ph.D. & \begin{tabular}{l}
Merryfield, Kent G. (1988) \(\qquad\) Assistant Professor Mathematics \\
BA, Rice University, MS, Ph.D. University of Chicago.
\end{tabular} \\
\hline Matthewe, Justus F . & Merryfield, Margaret L. (1984) \\
\hline husic & BA, Rico Unversist, Texas, Ph.D. Univesity of Wisoonsin, Madison. \\
\hline At MA, Calliomia State Unversity, Notrthidge: Ph. . S & Mestas, Juan (1991)
Educational Equity Services \\
\hline Nursing & BA, University OP Peoto \\
\hline B.S., California State University, Los Angeles; M.S., California State University, Los Angeles; M.A., California State University, Los Angeles; Ph.D., Claremont Graduate Angeles, M.A., Cailomia Stais & \begin{tabular}{l}
eyer, ournalism \\
BA, MA. University of California, Los A
\end{tabular} \\
\hline \begin{tabular}{l}
Maurer, Donald L. (1981) \(\qquad\) Professo Biology \\
- Hinis Champaign; MS, University of Washington, Seattle; Ph
\end{tabular} & Mijares, Emest R. (1965) Mechanical Engineering BS, Now York University; MS M M, M S AE, University of Southern Califonia \\
\hline Univesasty O Cricaso. & Miller, Alan C. (1974) .............................. \\
\hline English & BA, Stantord Univesity, MA, Ph.D. Univorsity of Oreg \\
\hline AB, Morehead Stale Colloge MA, PhD., Ohic Un & Miller, Edward (1988) \\
\hline Mayberry, M. Adrienne (1975) & anical Engin \\
\hline B.S., Tuskegee Institute; M.A. New York University B.S., Tusk & Miller, Julia I. (1988) \\
\hline McAnlis, John A. (1969) & BA, Bamard Colloge: MA, Univeristy o V Viginia; Ph. D. Columbia Unvesily. \\
\hline - \({ }_{\text {Graduate }}\) & Minar, John (1968) \\
\hline  & , witiore Colloge: MA, Unvesity \\
\hline Ilister & ley, Bartara B. (1988) \\
\hline Management/Human Resources Mana & tantord Uninesist, MS. D.NSC, University of Calliomial San Fra \\
\hline McCauliy, Joan E. (1969) . ........................... Lbrar & Mittleman, Leslie B. (1957) \\
\hline \({ }_{\text {Ba }}^{\text {BA, Union }}\) & MA, Univesity y Calliomia, Los Angoles: Pr.i. Univesity o \\
\hline \[
\begin{aligned}
& \text { McCray, Curtis L. (1988) } \\
& \text { English }
\end{aligned}
\] & Miyazakl, Akira (1969) Asian and Asian American Studies \\
\hline BA................adrow Wison & Ohamed-Nour Hassan I. (1988) . . . . . . . . . Associate Pr \\
\hline Culloch, Wendell H & BS, MS, Asssit Unumesity, Evpt: Pho \\
\hline Finance, Real Estata & Monat, Jonathan S. (1978) \\
\hline \({ }^{\text {AA }}\), Goorge Washington Unversity, & Managementululman Resources Management \\
\hline McCullough, Gloria Q. (1969) & \({ }^{\text {BS }}\) B. Uninosity of Cailumia \\
\hline BA, Califonia State University, Long Beach; MA, University of Southern Calito EAD., University of Southen Cailtomia & Moore, Walter H., Jr. (1979) Communicative Disorders \\
\hline McCullough, Thomas A. (1969) & AS, Mitchell Colloge; BA University \\
\hline \({ }_{\text {BA, MA, Ph. }}\) M, Unvesisty of Calliforia, Los Angoles & organ, To \\
\hline \begin{tabular}{l}
McGowan, William H. (1967) \\
.Professor Philosophy
\end{tabular} & \begin{tabular}{l}
Physical Education \\
BA, MA. Califonia State University, Los Angoles; Ed.D. University of Southern Califoria
\end{tabular} \\
\hline \({ }^{\text {BA, , Kenys }}\) Colineo. PhD, & (1989) .................... Associate Prote \\
\hline Mechanical Engineering & Criminal Justice \\
\hline BS. Califomia Stale University, Long Beach; M.S. Ph.D. University of Callion & BS Camilumas Suat unmernty Noth \\
\hline \begin{tabular}{l}
McLaughlin, Richard C. (1969) ................. . . Associate Professor Instructional Systems Technology \\
BS, State University of New York, Albany, M. S, Ph.D., Syracuse University.
\end{tabular} & \begin{tabular}{l}
Morris, Frank S. (1969) \\
Teacher Education \\
BS, East Texas Baptist College; M. . Stephen F. Austin College; Ed.D., University of
\end{tabular} \\
\hline McLood, Edward B., Jr. (1965) .........................PProtes & Morris, Gene P. (1967) \\
\hline & Finance, Real Estate and Law \\
\hline  &  \\
\hline dio, &  \\
\hline 8A. Univesty of Mssourt M & BA, MA, \\
\hline edoff, Marshall H . (197) & Morse, Betty R. (1991) \\
\hline & Home Economics \\
\hline . Ilinois Institute of Technolog & BS, M Ed. U Uniosisty A A \\
\hline \begin{tabular}{l}
Medora, Nilufer P. (1989) ........................Associate Profes Home Economics \\
BA, St. Xavier's Colloge, India, MS, Maharaia Sayaifirao University, India;
\end{tabular} & \begin{tabular}{l}
Moshirvaziri, Khosrow Information Systems \\
B.S., Arya Mehr Technical University, Iran; M.S., Stanford University; Ph.D., University of California, Los Angeles.
\end{tabular} \\
\hline
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\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
oustafa, Mohamed E. (1969) \\
Accountancy \\
B. Comm., University of Cairo, Egyp
\end{tabular} & oble, Charles (1987) Political Science \\
\hline lier-Stach, Dieter K. (1968) .................. &  \\
\hline Att & Noble, Vicente N. (1974) \\
\hline Diplo & Edicationa \\
\hline ulligan, William A. (1986) .................. Aseociate Professor & BA, MA, Calliomia Stat \\
\hline B.S., Brosocia Collego; MS. Murray Stat University, Ph.D., University & Psychology \\
\hline Nursing & \\
\hline , Calioma & Wersity of Califomia, Berkele \\
\hline , & gaard, John E. (1963) ........................ Professor \\
\hline reee, Jack & Psychology (196) \\
\hline Collese of Woost & BA, Colloge of Wooster, Otio: Ph.D. University of lliliosis. Emeritus, 1990 \\
\hline . Colose of Wooster & O'Brien, David P. (1991) ........................Acting D \\
\hline Muraoka, Dennis D. (1982) & \\
\hline & BA, Moravian College; JD, Solon Hall Unieserity. \\
\hline BA, MA, Ph. ., University of Callomia, Santa Batara & Oden, Richard S. (1961) \\
\hline urdock, Everett E, & \\
\hline & 'Donnell, Robert J. (1978) \\
\hline zona State Unversity, M. M, M, A, Ph.D, University of Ulah. & ManagementiHuman Resources Manage..... \\
\hline Musio Julien (1959) ............................ Professor &  \\
\hline BA, MA, Univesity of Calitomia, Los Angoles. Emeritus, 1893. & Ohtmer, O \\
\hline ( \({ }^{\text {a idus, Beverly E. (1987) ................... Associate Profese }}\) & Mechanical Engineering ........................... Protessor \\
\hline & Of.tho. Tecthineal Univesity of Braunchwoig. West Germany. \\
\hline BA, Cara & Olguin, Le \\
\hline Mimpaly, Ashok V. (1978) ......................... Protess & \\
\hline  & BA, MA, Calliomia State Univesisty, Los Angeles; Ph.D, Univesity of Southem \\
\hline Nakayama, Kensaku (1987) & Oliver, John (1988) \\
\hline & \\
\hline BS, Univesily of Cailiomia, Los Angoles. Ph.D, University of Califomia &  \\
\hline James (1990) & \\
\hline  & Nurs \\
\hline Nelms, Barbara J. (1974) & \\
\hline Nelme, Barbara J. (1974) & Univesisty. \\
\hline bSN, Un & Olsen, R. Warmer (1960) ................Senior Assistant Librarian \\
\hline Nelson, Dale E. (1956) &  \\
\hline ion Systems & Orpet, Russel E. (1959) ............................. Profeseor \\
\hline BA, University of California, Los Angeles; MA, Calliforia State University, Long
Beach & Educational Psychotogy an \\
\hline Ison, Donald R. (1965) & Oriza, Elizabeth T. (1983) \\
\hline & Social Work ( \\
\hline BA., Rufgers University; MS. Ph.D., University of Miami. & BA, Banard Colloge; MS, DS.W., Columbia University. \\
\hline Nelson, John A. (1971) & \begin{tabular}{l}
Osborne, Cynthia A. (1975) \\
Professor
\end{tabular} \\
\hline & \({ }_{B A}\), \\
\hline Newcastle, Helen P. (1969) . & Ostrowskl, John W. (1988) ................... Associate Professor \\
\hline Teacher Education & \\
\hline  & BA, Youngstow State Unhesity, MA, Ph.D, Kent State Universily. \\
\hline Nowman, J. Robert (1967) ........................... Protese & Outwater, Richard A. (1969) ......................... Professor \\
\hline  & \\
\hline  & aty, Chico, MA, University of Okahoma; Ph.D. Uninessity \\
\hline Nguyen, Loc T. (1989) & Owen, Carolyn M. (1970) ........................... Protessor \\
\hline \({ }^{\mathrm{BA}}\), Saigon Univesity, BA, National Institue of Public Administration; & Cational Psychology and Adminiistration \\
\hline San Diogo Stale Unveststy MBA, Faitieion &  \\
\hline Chill Engineeing & Paal, Frank F. (1968) \\
\hline Nguyen, Thinh V. (1986) & BS. Mcoill Unvensity MA, Slantord Univensity, MS, Ph.D. University of Calliom \\
\hline \begin{tabular}{l}
Computer Engineering and Computer Sc \\
BS, Ph. D. Unimesily of Cand
\end{tabular} & Panagiotacopuloe, Nick D. (1980) \\
\hline cholson, Robert L. (1957) ................. & Electrical Engineering \\
\hline & Univesty of Bussols, Beligium. \\
\hline BS, State Toachers Colloge, Oswogo, New York; MS, Oregon State University.
Emertus 1 19e3 & Para, Donald J. (19 \\
\hline Nieeto, Consuelo (1975) & BM, MM, Western Mchichan University: Ph. D, Mchichan State Univerat \\
\hline  & Parker, Douglas A. (1968) \\
\hline hio, Alan T. (19 & \({ }_{\text {BA, San fracisoco State Unio }}\) \\
\hline Educational Equity Services & Parker, Joan M. (1986) \\
\hline & BA, Texas Lutheran Collogo; MS, Caltiomia State Unversity, Northicidec: M. \\
\hline
\end{tabular}

Noble, Charles (1987)
Profeseor \({ }^{\mathrm{B}} \mathrm{BA}\) Cocmen Uninersity; M
Educational Psychology and Administration ................ Professor BA, MA, Califomia State Univesily, Los Angeles: Ph.D. Claremont Graduate School

Nygaard, John E. (1963)
Psychology

Athetios (19i) Professor

'Donnell, Robert J. (1978) .............. Aseociate Professor
Management/Human Resourcos Management
 Ohtmer, Ortwin A. (1988)


aliver, John (1988)
Professor

Olivor, Nancy Rainville (1988)
Nursing . nsin, Mimaukeo: Ph.D. Now York
Oisen, R. Warner (1960) .................Senior Assistant Librarian
B. Mus. Ed. Uniwesisty of

Educational Psycholog
BA, MS, MEd, Ed.D., Uninesity of Southern Callfomia
Ortiz, Elizabeath \(T .(1983)\)
Social Work
BA, Banard Colloge; MS, D. \(\mathrm{D}, \mathrm{w}\), , Columbia University.
Associate Professor
Att Cynthia A. (1975)
te Professor Ostrowskl, John w. (1988)

Outwer, Richard A. (1969) .......................... Professor


Paal, Frank F. (1968) Proterear

Panagiotacopulos, Nick D. (1980)
 \(\underset{\substack{\text { Para, Donald J. (1988) } \\ \text { Music }}}{ }\)
naly. Professor
BA, San Francisco State Uninositity; MA, Ph.D. University of Callomia, Betreteay.



Powoll, Melohior D . (1973) ..............................Protessor G................................................Doan
 Satimoo,
 Prieto-Bayard, Mary (1988) .......................Asisitant Professor BA, Unomenity of Calliforias, Santa Batbara; PhD. Univesity of Calliomia, Los
 Princose, John H. (1974)
Music

Pusavat, Yoko S. (1972) ................... Associate Protessor
 Quost, Charlose E. (1966)
Philooophy
BA, Ouve U
Quinn, Michehael T. (1970) ....................

auinones, Louis E. (1965).

Rehali, Hemid R. (1989) .......................Assitatant Protessor
Rahal, Hamid R R (1989)
Mechanical (Engineering ..................Assitant Protesso

Rahh, Amen (1970)
Black Studies


Rajpoot, Subhash (1990) ...................... Aseociate Protessor Rajpoot, Subhanh (1950)
Remiraz, Gonenvieve M. (1974) ........................ Protessor





Rayner, Clare Q. (1957) .............................. Protessor


Roddy, Harnatha C. (1987)
Eloctrica Engineesing

Redmon, Jo A. (1964) .. Aesociate Professor
Rodmon, Po Ad (isation
Rosychology \(M\). (1964) …........................


 Rhoo, Thomas A. (1988)
Finance, Read Etate and
 Rhoasde, Thomas. . (1976)

BS. MBA U Uneraily
Rhodese Fen (1966)


\begin{tabular}{|c|c|}
\hline Scopanakl, Jordan M. (1984) & \begin{tabular}{l}
Shaw-Sutton, Carol (1989) \\
Art
\end{tabular} \\
\hline and Learning R & Shaw, Peter L ( 1974 ) \\
\hline B.S. Manhatan Colege, New Yook, Mastere of Libaran & Publio Policy and Administration \\
\hline Scheftaki, Harold K. (1986) . & BA, Ococidonala Colloge: MPA, Ph.D. \\
\hline eman, Russian and & Shen, Kwang Y. (1961) ............................ Protossor \\
\hline & Physica and A \\
\hline chladeh, Joan M. (1965) ............................ Proteseor & herman, Lawrence F. (1989) \\
\hline B.S., Boston Uninessity, MA, Coumbia University, Ph.D, US. International & Finance, Real Estate and law \\
\hline Schmidt, Alfred I. (1967) .....................Aseociate Protessor &  \\
\hline Educa & Shim, Jae K. (1981) .................................protessor \\
\hline York &  \\
\hline midt, Paul C. (1968) .....................Associate Protessor & Shoup, Gall (1969) ................................ Professor \\
\hline & \\
\hline BA, Hamilin Uniovisly St. Pau & BA, University of Michigan; MA., Ph.D., University of Callfomia, Los Angeles. \\
\hline Schmidt, Ronald J. (1972) & Shuster, Terrence A. (1989) .................Assistant Professor \\
\hline PA, MA, Unversily of Callomia, B & Anatomy and Physiolo \\
\hline Schmitt, John H. (1974) &  \\
\hline &  \\
\hline BA, Uniuesity ot Minnees & BS, Univesity ot Minesota; MS, Unversity of Calliomia, Los Angoles. \\
\hline Schratz, Mary Kathleen (1988) Psychology & Sievers, Sharon L. (1968) \(\qquad\) Professor \\
\hline B.S. MA, Ph.D., Fordham Uninerasty & BA, Augustana Colleop; MA, Univesity of Nebraska; Ph.D, Stantord Univesily. \\
\hline ggart, Kimberly A. (1989) .................. Assisitant Protessor & Sikula, John P. (1984) ............................. Protessor \\
\hline Chemistr and Biochemistry & Educational Psychology and Admininitration \\
\hline Schwartz, Donald (1987) .............................Pro & Graduate S \\
\hline & BA, Hiram Colloes, Otho: MA, Ph \\
\hline Secondary Education Single Subiject Credential Program-Colloge of & monsoon, Gene \\
\hline Socal and Benavioral sciences. & \\
\hline A. ariy Collogo o Now Yokk, & \({ }^{\text {BS }}\) BS. Uunverit of Wisans \\
\hline  & Sims, Sidney B., Jr. (1960) ............... Senior Asesitant Libra \\
\hline B. S, MS. Ph.D. Univesily of Toledo. & BA, Baylor Uniwesidy, MA, Unineraty of Domer. \\
\hline hwartz, Morton D. (1970) & Sinclair, Loroelel P. (1966) \\
\hline Computer Engineering and CC &  \\
\hline B.s, Ms, & Phy \\
\hline Astronomy & \\
\hline  &  \\
\hline Ott, George M. (1990) ..................... Asoistant Protes & Singh, Davinder (1983) \\
\hline & \\
\hline BA, Universily of Texas, Austin: & B., , Banodicic Collope: MA, \\
\hline ewerker & Singh, Michaol P. (1988) ........................... Protessor \\
\hline & \\
\hline BA, Pomona College: Ph.D. Unwersity of Cailiomia, Los Anooles. Proteseor & BS. Unversm \\
\hline Egolhorst, Elibert W. (1964) ..........................Protoseor & Singhal, Bhupendra K. \({ }^{\text {a }}\) (1900) \\
\hline  & \\
\hline coiumbia Unversit & BA, Scheoco of Paming and Acchtoc \\
\hline anozan, & Eugone atich P. (1900) \\
\hline Chemistry and Bioch & \\
\hline Bxa, Brow Norman E. (1967) ...........................Profoseor & BS, Unverity of Poorte \\
\hline Mathematics & \\
\hline B.S., Notthwestem Uninersity M. M. &  \\
\hline Sexauer, Roxanne D. (1990) &  \\
\hline  & Skov, va L (1972) ................................ Protes \\
\hline Shaak, John J. (1962) ..............................Pro & Economice \\
\hline  & Slawaki, Carl J. (1970) \\
\hline  & Sociology \\
\hline Shahian, Bahram (1983) Electrical Engineering & BA, Unowsiy of Souther \\
\hline B.S. University of Texas & Slayton, Jeffrey C. (198) \\
\hline & \\
\hline Chemistry and Biochemistry & Merce Cunningham Danco Studio, New York, Vola F Futer Danco Studio, New Yorik Sleeper, Elbert L. (1957) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor \\
\hline & Biology \\
\hline BS. U Unversisty ofllinois, Utrana: Ph.D. University ol Callomi & BS., MS, Pr.D. Ohio Stat \\
\hline & inth, A. William (1988) \\
\hline &  \\
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\end{tabular}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Smith, Alton H. (1957) Mathematics \\
B.A., George Pepperdine College; M.A, Ph.D., University of Southern California
\end{tabular} & \begin{tabular}{l}
Springer, Arnold R. (1968) History \\
BA, Ph.D., University of California, Los Angeles.
\end{tabular} \\
\hline Sith, Craig R. (1988) & enealo, Bede (197T) ................ Associate Profe \\
\hline Speech Commur & Black Studies \\
\hline Univesity of Calitemia, Sanla Barbara; MA, Cliy Univesity of Now York & BA, Makerere Uninesist, Uganda; MA, Ph.D. University of Califome \\
\hline th, Donald H. (1960) & Stanberry, Kurt B. (1989) .................... Aseociate Protese \\
\hline & \\
\hline  & Stanley, M. Sue (1986) \\
\hline Smith, Judy E. (1980) . ............................ Proter & Home Economics \\
\hline & B.a, Calitomia State Unive \\
\hline BA, MA, Univesty of Callormia, Los Angeles. & \\
\hline Then, Nancy Jo (1987) ..................... Associate Professor & Stanton, Roger R. (19 Management/Huma \\
\hline \({ }_{\text {AA }}\), Midiwesters State University, MA, M.FA, University of Michigan, &  \\
\hline noth, Poggy J. (1968) & Stanton, Toni L (1987) .................. Associate Professor \\
\hline B.A, Wastingolon Slate Universty; P. P.D. University & Anatomy and Physiology M \\
\hline ith, &  \\
\hline agmenilluma & \\
\hline B.S. Callomia State Univesisty Los Angoles; M.S., Calliomia State Unversity, Long & B.S., Notre Dame University; M.S. Ph.D., University A Aitzona. \\
\hline Pith, Sera W. (1969) & Stein, James D. (1989) ................................. Profoseor \\
\hline Psychology ( & . Unversity of Calliomia, Beareley. \\
\hline Smith-Omari, Mikelle ( 1985 ) & H. (1968) \\
\hline Black & mal Science \\
\hline Cairomia Stale University, Hayward; MFA, Wastington State & Unwesasty of Sou \\
\hline & Steiner, W, Rodney (1956) \\
\hline  & \\
\hline BA, MA, Calformia Satat University, Long Beach. & \\
\hline (1970) & phens, Loe B. Jr. (1962) \\
\hline  & BS. Morehose Colloge; MS, \\
\hline & Stern, Andrew ( \\
\hline BA., California Poktechnic State University, San Luis Obispo; M.A, California BA., California Poly
University, Fullerton & BA MA \\
\hline der, Lynn & AA, MA, Now York University, Ph.D. Columbia University. \\
\hline mur & Stetier, Charles E. (1967) \(\qquad\) Pro \\
\hline  & BA, MA, Duquesne University: Ph.D, Tulune Univeratiy. \\
\hline e, Christian & Stevens, A. Jay (1968) ............................. Prof \\
\hline & \\
\hline Un & BS., Brigham Young U \\
\hline . ................................ Profes & Stevens, Thomas G. (1973) \(\qquad\) Counselor \\
\hline  & \\
\hline Lydia E. (1985) .................. Associate Professor & Stewart-Hill, Anne B. (1990) ...................... Assistant Professor \\
\hline Ome Economics & \({ }_{\text {BA, }}\), Salat \\
\hline B.S. Univesily of Missouri, Columbia; MS., OKahoma State Univestly, Ph.D, & Stone, Herbert L. (1958) \\
\hline Soni, Praveen K. (1991) ................... Associate Proterin & Managementy Human Resourco \\
\hline  &  \\
\hline  & Strahl, Ronald J. (1986) ........................ \\
\hline outer, Ed & English \\
\hline Phy & BA, Dopaum University, MA, Ph.D. Indiana University, Blommingoton. \\
\hline BA, MA, Calliomia State University & Stroud, Paul W. (1957) ............................. Profossor \\
\hline well, Jim (1991) .........................Assistant Prot & \\
\hline Acountancy & B.S, BM, State University of Missourr; M.Mus, University of lliniois; D.MA, University \\
\hline Spangler, George A. (1971) & I, Thomas Z (1987) \\
\hline & Psychology \\
\hline  & BA, Waxno State Un \\
\hline rks, Col & Stuart, Jack \\
\hline Nursing & \\
\hline  & Sullivan, Gerald L ( 1968 ) \\
\hline ese, Ric & Engli \\
\hline & B.S, General Beadile State Colliege, Madison, South Dakota; MA, South Dakota \\
\hline BA, MA, Peonsyswnia State University; Ph.D. University of New Mexico. & Sullivan, Maureen (1990) ........ \\
\hline Spilier, Richard (1969) \(\qquad\) Professo & Design \\
\hline BS, Syracuse Univesity, MBA, Ph.D. University of Calliomia, Los Angoles. & \\
\hline Splansky, Jool B. (1969) ......................... Pr & Sun, Dee Bruce (1990) ......................... Assoclate Profess
Information Systems \\
\hline & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Svec, William R. (1964) ...................................... Professor History \\
B.S., Loyola University, Chicago, Illinois; M.A, Northwestern University; Ph.D University of Texas.
\end{tabular} & Torby, Bruce J. (1961) Mechanical Engineering BM.E. City Colloge of Now York; M.S., University of California, Los Angoles; Ph.D University of Southern California. \\
\hline Swan, James H. (1989) \(\qquad\) Associate Professor Health Science & Torres, Rodolfo D. (1989) Chicano Latino Studies and \\
\hline BA, MA, Wehita State Unwosity; Ph., Northwestern Univerity. & ublio Policy and Administration \\
\hline Swan, Robert J. (1964) Profeseor Educational Psychology and Administration &  \\
\hline  & ......................... Protesor \\
\hline Swatek, Frank E. (1956) ................................. Profeseor &  \\
\hline BS, San Diopo State Unvesity, MA, Ph.D &  \\
\hline Swigart, Leslie K. (1971) .......................Aseociate Ubrarian BA, Universily of Southem Califomia, M.L.S.
MA, Cailionia
ander & BS. United States Naval Academy; M.S., George Washington Brigham Young University. \\
\hline Tang, Paul C.L L (1986) ....................Associate Professor & Trippl, Robert R. (1989) Finance, Real Estate and Law \\
\hline B.S. University of British Columbia; M.A, Simon Fraser University, Canada; M.A., P. ., D. Weshington Unimessity Missouri, & \begin{tabular}{l}
BA, Cornell University, Now York; S.M., Ph.D., Massachussetts Institute of Technology \\
Trombetas, Thomas P. (1961)
\end{tabular} \\
\hline Tanouye, Allison (1990) \(\qquad\) Counselor B.S., M.Ed., University of Hawaii, Manoa; Ph.D., University of Missouri-Columbia. & \begin{tabular}{l}
Political Science \\
Law Degree, University of Athens, Greece; M.PA., Ph.D., University of Washington Emeritus, 1989.
\end{tabular} \\
\hline Tarrow, Norma Bernstein (1968) \(\qquad\) .Protessor Teacher Education & Teal, Chan-Feng (1982) Chill Engineering \\
\hline BA, Brooksm Colloes & \({ }_{\text {BS }}\) C, \\
\hline Tartre, Lindsay A. (1985) .....................Asesciate Professor & University 6 Caliomia \\
\hline , & nai, Shirley C. (1983) \\
\hline BA, MA, & \\
\hline Taylor-Schmidt, Rosemary (1990) Student Life and Development & BS. National Tewan Unvors \\
\hline BA, Calliforial State Unvers & \\
\hline \begin{tabular}{l}
Teng, Robert K. F. (1989) \\
lectrical Engineering
\end{tabular} &  \\
\hline B.S. Misisisippi State Uninersity, MS. P. Ph., Purdue. & Tumelty, Robort E. (1974) \\
\hline ayer, Robert E. (1963) & Heath Care Adminis \\
\hline BA, Universty of fadlands; P. D.D. & Turban, Etraim (1991) \\
\hline Thibeault, Marie C. (1989) ................... Assitatant Profossor &  \\
\hline &  \\
\hline B.FA, Rhode Island School of Design; M.A., San Francisco State University; M.FA University of California, Berkeley. & Turk, Theresa ©. (1970) sociology \\
\hline Thomas, Cher (1982) &  \\
\hline  & Turner, M. Barbara (1966) ........................... Protessor \\
\hline Homas, Joy E. (1981) & \\
\hline  & Comen Uni \\
\hline homas, Lindeay, Jr. (1961) .........................Profeseor & Hveon, Ric \\
\hline , &  \\
\hline BA, Le Sominait Adonotiste, Sowobe & Tyner, Judith A. (1970) \\
\hline Thompeon, Charies M. (1956) ........................Profeseor &  \\
\hline Art Le ligh University: BA, MA, At Institute ot Chicago; EdD., Teachers Col & Tyrnauuer, Herbert H. (1961) \\
\hline  & \({ }_{\text {design }}^{\text {BFA }}\) \\
\hline TJIoe, Djoe T. (1970) & Uku-Wertimer, Skyne R. (1970) \\
\hline Stux Eals Colope: MS & Black Studies \\
\hline Toma, Ramsees B. (1984) ...........................Protes &  \\
\hline Home Economics & Ullman, Paul S. (1958) \\
\hline  &  \\
\hline y, Dale P. (1972) ............................Prof & nt, \\
\hline Physical Educ & Mechanical \\
\hline BS. Wasthingto Statu Uniorsit, & C. (1989) ................... Aesociate Pr \\
\hline \begin{tabular}{l}
Toohey-Costa, D. Margaret (1974) \\
Toohy-co Edication
\end{tabular} & Mathematice \\
\hline BS, MEd, Universily ot Massachusets, Ph.D. Onio State U & BA, Camejo Melolon: MS. Ph.D. Onio State Unhersity. \\
\hline Toossi, Reza (1991) .......................Assoclate Profe & Valle, Victor M. 1989) \\
\hline & \\
\hline BS. Unversily of Toch & BA, MA, \\
\hline palian, Teny (1989) ....................... Asoistant Profe & Vanasee, Ro \\
\hline ce Eucaion &  \\
\hline may. & Van Camp, Julie (1990) ......................Aseietant Protessor \\
\hline (orabzadeh, Jala (1986) & \\
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\end{tabular}
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an Eimeren, James J. (1961) \\
Art \\
Art
B.S., University of Wisconsin; M.S., Florida State University,
\end{tabular} & arren, Virginia Q. (1973) Communicative Disorders \\
\hline Q Iffifen, Katherine (1987) ............. Aseoclate Pr & Colliege of Humanities \\
\hline \({ }_{\text {BA }}\) Human Dovelopment)Educatio & BA, Marymount Colloge: MA, Ph.D., Univesity of Southern Califomia \\
\hline BA, Meyden, Hans H. (1961) & rter, Stuart L. (1965) \(\qquad\) Professor \\
\hline chanical Engineering &  \\
\hline  & Watson, Saleom H. (1986) .......................... Profeseor \\
\hline Joseph (1959) &  \\
\hline matics & \begin{tabular}{l}
Wayman, Arthur K. (1976) \\
Aenctiv Proreor
\end{tabular} \\
\hline  & Mathematics \\
\hline , a, John David (1983) &  \\
\hline  & Webb, Charies H. (1987) \\
\hline & \\
\hline (1) , & , \\
\hline BA, University of llinois, Chicago; M.A, Sa & Weber, William A. (1968) . ................................ Professor \\
\hline Ngo & BA, Havard Colloge: MA, Ph.D. University of Chicago. \\
\hline hen & Webster, Jay L (1967) .............................. Profeseor \\
\hline B.S., Univesity of Minessas; Ph.D., Univessity of Califormia, Berkeleg. & Engineoric \\
\hline (end, Dianne L. (1988) .................... Associate Profeseor & BA. MA, Callionia State Univestity, Long Beach; Ed.D., University of Callfomia, Los \\
\hline B.S., McGill University, Montreal; M.A., Concordia University, Montreal; Ph.D., York University Toronto & Weinstock, Donald J. (1969) . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor English \\
\hline on & BA, MA, Ph.D. Uninersity of Calliomia, Los Angoles. \\
\hline ninal Justice & Welch, William H. (1983) .................... Associate Proteseor \\
\hline Wesiern New England C &  \\
\hline ogt, MaryEllen (1989) & Werlick, Stephen ©. (1964) \\
\hline & \\
\hline BA, Colorado State University; & MFA, Tulane Uninesisty. \\
\hline er, Deonnis J. (1988) & Wertheimer, Roger (1989) ...................... Associate Professor \\
\hline Omputer Engineering and C & AB, Brandelis; MA, Ph.D. Havard. \\
\hline A. Unhesisiy of Caillomina San Diego; M.S., San Diego State Univessity, P- & Wheeler, Joan D. (1966) .................... Associate Professor \\
\hline Voulgaris, Nicholas C. (1990) ........................ Professor & \({ }_{\text {GS MS M }}\) Geograph \\
\hline Engineering and Industrial Techno B.E.E., The City University of Now York & Whisenand, Paul M. (1965) . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor Criminal \\
\hline Vu, Hung Viot (1988) & B.S, MS, P. P.D. Univesity of Southen Calliomia \\
\hline ing & White, Barbara (1990) \\
\hline B. Univerity of Washingto, Saatle; M.S. Massachusetts institue of Toecholooy & Nursing
BSN \\
\hline gdy, Mahmoud F. (1989) & Whito, Elaine E. (1974) \\
\hline & \\
\hline \({ }^{\text {B.S., M. M, C, Cairo Unionsty, Ph. }, \text {, Kannas State Unver }}\) &  \\
\hline akiil, Eiloe & Angoese EED. Univesitly f Southem Calitomia \\
\hline B.A., University of California, Los An &  \\
\hline Eugene C. (19 & Wiley, Juniper (1990) . . . . . . . . . . . . . . . . . Aesietant Pris \\
\hline Art & Sociol \\
\hline BA, Beobit Colloge; MFA, State University of lowa; EdD, Pennsy/vania State & BA, University of California, Santa Cruz; MA., Ph.D. University of Califomia, San \\
\hline Wang, Derming (19 & Wiley, Terrence Q. (19 \\
\hline themal & Educational Psychology and A \\
\hline \({ }_{\text {BA }}^{\text {BA }}\), National Chung Hsing Univesity, Tawar; MA, Ph. . Univessty of Georg & BA, MA, Calitionia State University, Long Beacht: Ph.D. University of Southem \\
\hline g, Rei-T & Williams, Betty (1989) \\
\hline Engineering and Industrial Techn & Nursing \\
\hline BEd, National Tawan Nomal Uniersisty. MEd, University of Wisconss &  \\
\hline f Temnossoe & ame, J. Richard (1983) \\
\hline Ward, Barbara A. (1968)
Instructional Systems Technology ............ Associate Prof & Aerospace Engineering Mechanical Engineering \\
\hline BA, MS, University of Washington; Ed.D. University of Southern California Emeritu, & College of Engineering \\
\hline drip-Fruin, Carolyn A. (1981) & Williams, John B. (1966) \\
\hline & \\
\hline :MA, Ph.D. Stantord Universisty. &  \\
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B Arch., Tung-Hai University, Taiwan; M. Arch, MS. University of Illinois, Urbana
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\hline soon, Robert R. (1966) & Uunvesisty of Pachester. \\
\hline Computer Engineering and & Yates, Jery W. (1974) \\
\hline BA, MA, Ph.D. University of & Design \\
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\hline B.S., Stanford University, M.S., Michigan Technological University, Ph.D., Ohio State University. &  \\
\hline ines, M. (1989) ............................. Assistant Professor Anatomy and Physiology &  \\
\hline  & Yeh, Hen-Geul (1983) Electrical Engineerin \\
\hline Winter, Herbert A. (1959) ....................Associate Profess & BS. Cheng Kung Uni \\
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\hline BS, MS. & BA,Ms. Ph. \\
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\hline Marketing & Comell Ma PrD Unoresity ( M Mchioan \\
\hline BS, Vandeatil Unversity, M. PPA, Ph. D. University of Cas & Young Owl, Marcus (1989) ....................Assistant Protessor \\
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\hline BA, Wheaton Colloge, II: &  \\
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\hline right, Rebecca (1987) ...................Associate Professor & A, MS, Wester llinois Univessit. \\
\hline Dance & Zarrillo, James J. (1988) ..........................Assistant Professor \\
\hline  & BA, Unversatr of Rediands, M \\
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\hline  & Zepede, Rafael J. (198) \\
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\hline ylie, Frank W. (1988)
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\hline  & ctrical Engineering \\
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Walter Reed
Virginia E. Ringer
T. William Smith

Mary E. Smoke


CALIFORNIA STATE UNIVERSITY, LONG BEACH 1250 BELLFLOWER BOULEVARD
LONG BEACH, CA 90840
ADDRESS CORRECTION REQUESTED


THE CALIFORNIA STATE UNIVERSITY```

