

# CALIFORNIA STATE UNIVERSITY, LONG BEACH 2006-2007 Undergraduate and Graduate Catalog 

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The Undergraduate and Graduate Catalog is printed by Forty-Niner Shops, Inc. at no expense to the State of California.
3. Completion of at least 30 units in residence at CSULB of which at least 24 must be upper-division and at least 12 must be in the major. Units earned in Extended Education cannot be counted toward fulfillment of the residence requirement.
4. Completion of the General Education program, described below, including at least 9 units in upperdivision courses completed at CSULB.
5. Completion of the specific course and unit requirements for the academic major, as shown in the alphabetic listing for the major department. If the requirements are changed during students' continuous attendance at CSULB, they have the right to meet either the requirements in effect when they entered the major or the requirements in effect at the time they graduate. All upper-division courses required for a 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 the subject as may be prescribed by the department offering the course.
6. Satisfactory fulfillment of the Graduation Writing Assessment Requirement (GWAR) (See a description of the requirement at the end of this section:)
7. Achievement of a minimum 2.0 ("C") grade-point average in each of the following:
a. The entire college record.
b. All units attempted at CSULB.
c. All courses in the major.
d. All upper-division courses in the major completed at CSULB.
8. Formal approval by the faculty of the university.

The on-line Catalog includes Road Maps showing a suggested sequence of courses to enable students to complete all degree requirements in a timely fashion. Since individual circumstances can vary, students should consult their major advisors for assistance in planning appropriate programs.

## Student Levels



## Restrictions on Units That May Be Counted Toward the Minimum Required for the Baccalaureate

## Activity Courses

Activity courses provide practice in such areas as music, dance, physical education and Sports, Athletics, and Recreation. Except as required by a student's major, students may apply to the degree no more than eight units each of activity course credit in music, dance, or physical education and no more than four units of activity course
credit in SAR, up to a total of no more than 20 units in all areas.

## Transfer Courses

No more than 70 units of courses from a Community College may be counted toward the minimum unit requirement for the baccalaureate. (For more detail, see the section on Transfer Credit in the Academic Information section of this Catalog.)

## Extension Credit

A maximum of 24 semester units of Extension Credit may be accepted toward a baccalaureate degree.

## Open University

The Open University program allows enrollment in regular university credit courses by those people who are not currently admitted to and/or registered at CSULB. Enrollment is on a "space available" basis, subject to the approval of the instructor and the department chair concerned. No more than 24 units of special session course credit earned through Open University or UCES Special Sessions course offerings at CSULB in non-matriculated status may count toward any undergraduate degree requirement. Students are considered in non-matriculated status in terms prior to the term of official admission to the degree granting program and during terms of disqualification from the degree granting program.

## Special Session

There is no limit on UCES Special Sessions course credit, including. Winter session, applicable to the degree if taken while in matriculated status in the degree program.

## General Education

General Education is an important component of the baccalaureate degree and of students' personal development. It is the part of the university program which encourages students to develop or improve such basic life skills as self-motivation, independence, creativity, critical thinking, an understanding of values, and a general philosophy by which to make decisions throughout life. Possession of these skills makes possible continued personal growth and the further development of students' creative and adaptive capabilities. It is the basis for lifelong learning, and it can increase the student's ability to be selfdirecting.

At California State University, Long Beach, courses approved for General Education credit provide:

- Information: the raw material for thinking, analysis, reflection, and discourse;
- 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;
- Methods of inquiry: direction and practice in methodologies of the several disciplines;
- Qualities of Mind: a respect for data and unpleasant facts; tolerance, commitment, a taste for learning; an appreciation of the arts; creativity, perpetual curiosity, and a sensitivity to ethical considerations.

The General Education Learning Objectives are as follows:

## 1. Communication

Students will be able to communicate their ideas clearly to others, in both oral and written forms.
2. Critical Thinking

Students will demonstrate the abilities of critical thinkers, including abilities to synthesize, draw connections and make reasonable conclusions based on the analysis of large amounts of source material, with a willingness to analyze their own assumptions and biases objectively in this process.
3. Quantitative Reasoning

Students will demonstrate quantitative understanding of data presented in numerical, graphical, or geometric
formats and will be able to use quantitative methods to solve real problems.
4. Information Literacy

Students will be critical users of the Internet and print information resources and will demonstrate the abilities to use and to apply what they learn.
5. Personal and Civic Responsibility

Students will demonstrate an understanding of ethics and civic responsibility in local, national, and global society; understand their own connections to the global society; and be able to use this information to make informed decisions.
6. Interpersonal Skills

Students will be able to work with others effectively in diverse settings and will be skilled in perspective taking (putting oneself in the audience's shoes), and in managing conflict constructively.
7. Cultural Awareness

Students will display cultural awareness by demonstrating an appreciation of artistic and cultural productions; an understanding of the world, the people in it, and the structures people create; and they will be able to compare and contrast their own cultural background to other communities.
8. Self-Understanding

Students will display a sense of self (in a personal as well as an historical context) and an ability to make successful personal choices, including an initiative to choose an educational path to meet their personal goals.
9. Interdisciplinary Methods of Inquiry

Students will demonstrate an ability to examine issues
from the viewpoints of different disciplines, recognizing different ways in which people approach knowledge, different ways of asking questions, and different ways of interpreting evidence.
10. Lifelong Learning

Students will demonstrate the traits of open-mindedness, a willingness to take risk, self-initiative, and curiosity as well as a desire to continue questioning and learning beyond their major discipline.
The General Education Program at CSULB includes both the breadth requirement defined by policy of the Board of Trustees of The California State University campus and the graduation requirements in United States History and in American Institutions (Sections 40405 and 40404, Title

5, California Code of Regulations). Within the program, a minimum of 9 semester units must be upper-division general education courses taken at the campus conferring the degree. Credit toward the remainder of the program may be transferred from another institution. A participating, regionally-accredited institution may certify completion of an approved pattern of lower-division course units that meets all breadth categories.

## General Education Requirements

To receive a baccalaureate degree from California State University, Long Beach, students must complete at least 51 semester units of General Education courses distributed as specified below. Only courses specifically approved for General Education and so listed in the Schedule of Classes for the semester in which the student takes the course may be used to fulfill General Education requirements. At least three units of the 51 General Education units must be instruction which focuses on global issues or world societies and cultures (Global Issues Courses). At least three units of the 51 General Education units must be instruction which focuses on instructive examples of human diversity (Human Diversity Courses). At least nine of the 51 General Education units must be upper-division units taken at CSULB and after achieving upper-division standing (completion of 60 semester units). 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, Title 5, Galifornia Code of Regulations. (See Category D: below). Title 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 the student's major department may be used to satisfy GE requirements with these exceptions: all courses in Category A, Category B.1. a for life science majors, Category B. 2 for mathematics majors, Category C. 1 and C. 3 for art and music majors, Category D.1.a for history majors, Category D.1.b for political science majors, all interdisciplinary courses (I), and human diversity courses ( H , identified with " ${ }^{\text {" }}$ in the Schedule of Classes) for all majors. A cross-categorized Interdisciplinary Course may be counted (at the student's option) in any one of the approved categories, but not in more than one.

Engineering and Technology students may have special GE requirements.

## First Year: Foundation

The first year at CSULB is designed to devote special attention to the development and improvement of fundamental academic skills that are critical to student success in college. Every CSULB student will be expected to demonstrate mastery of key academic skills early in their course of study, ideally within the first year. Among the skills most central to success are communication in English, both written and oral, mathematical concepts and quantitative reasoning, and analytical and critical thinking. Students also need a solid foundation in skills for learning, including the ability to read for information, information retrieval skills, the use of the library, and basic computer skills. In
addition, all first-year students will receive an introduction to the University. Finally, the University is committed to fostering the development of communities of learners, and it will provide to all incoming students opportunities for the formation of learning communities.

The Foundation curriculum consists of twelve units of general education courses that meet the distribution requirements in Categories A and B 2 , and one unit of University 100. The following courses make up the Foundation:

- University 100 ( 1 unit), "The University," This course is a graduation requirement for students entering as lowerdivision students. It is coordinated pedagogically with the skills and content of the first-year curriculum. It introduces students to the history of universities (including the history: mission, and character of CSULB) and current issues in higher education. It introduces students to the use of our academic research library and also introduces them to the skills essential for success in an academic environment. It does not count toward the 51 units required in General Education.
- One 3-unit course in written composition in English.
- One 3 -unit course in oral communications.
- One 3 -unit course in mathematical concepts and quantitative reasoning.
- One 3 -unit course in critical thinking.

The courses listed above must all be completed with a grade of at least " $C$ ". Where appropriate exams exist, Foundation requirements may be met by advanced placement.

The 13 -unit Foundation curriculum must be completed by the time a student has completed 36 units of baccalaureatelevel work at CSULB, except that lower-division transfer students have at least one semester in residence to complete the requirements.

Courses in the Foundation curriculum are numbered from 100 to 199. All other General Education courses have pre- or co-requisites from the Foundation curriculum, and all General Education courses numbered 200 or higher have the entire Foundation curriculum as prerequisites. General Education courses numbered between 100 and 199 may appropriately be taken at the same time as courses in the Foundation curriculum.

## Explorations

After an early focus on fundamental learning and academic skills, students will have an opportunity to explore human knowledge in many disciplines. The Explorations stage encompasses all areas outside the Foundation curriculum, except the final nine units of General Education, described under "Capstone."

Although the primary purpose of Explorations is the development of breadth of knowledge, all courses offer opportunities for continued development of foundational skills. Reading, writing, oral discussion and presentation, problem solving and/or quantitative reasoning, and criticallyand analytically-based research are central to the learning of content.
in addition, as students progress though the Explorations, they are expected to develop additional
skills and attributes, including ethical reasoning, analytical reading, creativity, respect for difference, awareness of other cultures, questioning of stereotypes, the values of citizenship, negotiating skills, and other attributes of use in a diverse society.

## Capstone

The final nine General Education units form the Capstone. All students, including transfer students who have completed a certified lower-division General Education program, must complete 9 units of Capstone courses. Students must take these courses at CSULB. The purpose of the Capstone is to bring the strands of the General Education experience into focus, to reinforce knowledge and skills acquired from many areas, and to incorporate depth in the form of more sophisticated tools and analysis, if not necessarily in terms of content knowledge.

Capstone General Education courses are at the upperdivision level. Prerequisites for these courses include upperdivision standing and the entire Foundation curriculum, along with one or more prerequisites from the Explorations stage. All Capstone courses are designed to develop advanced college skills, including synthesis and application of knowledge, analysis, critique, and research.

Capstone classes are classified as Interdisciplinary (identified with the letter "I" in the Schedule of Classes), Advanced Skills (identified with the letter " $A$ " in the Schedule of Classes), Service Learning (identified with the letter " S " in the Schedule of Classes), or Linked (identified with the letter "L" in the Schedule of Classes). Students are permitted to count no more than one Advanced Skills class and one Service Learning class toward the 9 -unit Capstone requirement.

## Global Issues

Students must complete at least three units of course work devoted to global issues or world societies and cultures (designated with a W or " $\Theta$ " in the Schedule of Classes). This may be in any category. (For students under the 1998 or earlier catalog, the Global Issues course must be in Category D.) Students who transfer with all lower-division requirements certified are exempt from this requirement.

## Human Diversity Requirement

At least three units of the General Education program must be course work that focuses on instructive examples of human diversity in the United States. The course may be in any category. Human Diversity courses are identified with a "ه."

## General Education Distribution Requirement

General Education units must be distributed as follows:

## Category A

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.

## Category B

Physical Universe - 12 units to include:

1. At least six units of inquiry into the physical universe and its life forms to include one approved 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 merely providing instruction in basic computational skills;
3. Another three units as necessary, selected from approved courses, to achieve a minimum of 12 units.

## Category C

Humanities 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 include 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 History - 15 units to include:

1. Citizenship:
a. Three units selected from courses in U.S. History;
b. Three units selected from courses in U.S. Constitution and Ideals, including state and local government.

## 2. Social and Behavioral Sciences

At least 9 units from the approved courses in at least two disciplines.

## Category E

Self-Integration - 3 units:
At least three units selected from approved courses which facilitate understanding of the human being as an integrated physiological, psychological, and social organism.

## General Education Certification for Transfer Students

General education certification is available from California community colleges and CSU campuses. Fully certified students have completed all of their lower-division GE courses at either institution. CSULB also accepts partial certification in one or more GE categories. Students with GE certification must complete 9 units of upper-division general education courses at CSULB, and must satisfy the US History requirement (an approved three unit course in either early or recent US History, ) and the US Constitutions requirement (an approved three unit course in national government, and California state and local government.)

## Majors

Choosing a major is one of the most important, and sometimes most difficult, academic decision students will make during their college careers. There may be many possible choices of major that would provide preparation for a given career The section on Degrees, Options, Minors, and Certificates earlier in this Catalog shows the many choices available and where to find information on each. Many departments have additional information posted on their web pages, accessible from the university's home page. Students are encouraged to interview faculty in possible majors and to seek the help of student services professionals to assist them in making this important decision.

A choice of major is not a final decision. There is no limit to the number of times a student may change majors.

## Declaration of a Major

To help insure timely completion of graduation requirements, students who have a total of 60 units completed must have declared a major before they may register for the next term. Upper-division transfer students are required to declare their intended major on their application for admission. (PS 06-04)

## Change of Major or Other Objective

Undergraduate students declaring a major for the first time or changing from one degree program or degree option program to another must submit an approved Change of Major/Declaration form to the Office of Enrollment Services. Some departments may submit these forms electronically.

Students who are candidates for a certificate or credential program must also file a Request to Graduate. (Please see Graduation section of the Catalog.)

The evaluation of credits transferred to the University is 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.

## Double Major

Students may complete the requirements for two baccalaureate programs concurrently, but only one degree will be conferred and only one diploma issued. Therefore, one baccalaureate program must be designated as the primary major: The degree will then take on the designation, i.e., Bachelor of Arts or Bachelor of Science, associated with that primary major. The fact that the requirements of two majors have been completed will be noted on both the diploma and the transcript. A course, or courses, may be used to satisfy the individual requirements of both majors, without limit, as long as the required pattern of course work is completed for each major.

## Minors

A minor is a structured selection of courses by which a student can enrich his or her academic preparation: through concentrated study of a discipline that is different from, but may be related to, the student's declared major. A minor is a means to augment or complement the major by

