Students may contact the Department Office for information and referral to the appropriate Faculty Advisor, Undergraduate Coordinator, Graduate Coordinator, or Credential Coordinator.

The Department of Kinesiology's mission is accomplished by providing excellence in instruction, scholarship and service through a multidisciplinary approach that will foster the development and maintenance of behavior that is essential for a healthy lifestyle in ever changing demographics. The Department's programs offer a course of study for students wishing to prepare for professional careers or related disciplines in physical education teaching (Adapted, Elementary, and Secondary), athletic training, fitness wellness, exercise science, kinesiotherapy, sport psychology and coaching. The programs have been developed from physiological, psychological, biomechanical, and sociological principles. The Department also serves the needs of students completing majors in other fields who find that certain aspects of kinesiology and physical education are important to their professional objectives and personal interests. In meeting the educational needs of these students, the Degrees, Certificates, and Minor available in the Department of Kinesiology include:

- Bachelor of Arts in Kinesiology in four options.
- Bachelor of Science in Kinesiology in four options.
- Master of Arts in Kinesiology in seven options.
- Master of Science in Kinesiology in three options.
- California Single Subject Preliminary Teaching Credential Programs in Physical Education (K-12)
- Adapted Physical Education Specialist Credential (K-12)
- Minor in Physical Education: Single Subject Credential Add-on
- Wilderness Studies Certificate
- Kinesiotherapy Certificate

The Department of Kinesiology, in addition to its Degrees, Certificates, and Minor, assumes the responsibility for the psychological, physiological, and sociological needs and interests of the college student through general education, interdisciplinary, and physical activity course offerings. Students enrolling in physical education activity courses assume responsibility for satisfactory health status appropriate to the class activity.

In addition to the degree requirements for the Bachelor of Arts in Kinesiology and the Bachelor of Science in Kinesiology, the Major must meet the following Department policies and requirements for University graduation:

1. Each major course and prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than a "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite;
2. Upper division courses may not be waived by substitution or examination without Department petition and approval;
3. Current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant..
& Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent);  
4. Department approval.  
5. Bachelor degree Majors must also have Department clearance of lower division courses/activities and skill proficiencies.

**Bachelor of Arts in Kinesiology**  
Students pursuing a Bachelor of Arts degree in Kinesiology must complete lower division and upper division core courses and skill proficiency requirements plus courses in a specific area (Option). Students may select their area of specialization from one of the four Options described below. In meeting the requirements of this degree, the department offers four specialized Options for study which permit students to develop a conceptual understanding related to human movement and to focus on preparation for one or more specific occupations. The student must demonstrate 1) physical skill proficiency, 2) knowledge of physical fitness, and 3) knowledge in the personal performance activity courses completed according to the lower division core requirements for specific Options prior to graduation. A minimum of 120 units are required for graduation.

**Physical Skill Proficiency**  
Each Bachelor of Arts Major is required to demonstrate physical skill proficiency at a 3.5 (1-5 scale) overall average level in fitness (KIN 263 or 343) and the personal performance activity courses required in each Option prior to graduation. Physical skill proficiency examinations are administered by the appropriate personal performance activity courses. Only physical skill proficiency scores in the range of a 2.0-5.0 are recorded and computed to determine a student’s physical skill proficiency average.

**Option in Athletic Training (code KPE_BA01) (120 units)**  
This option is designed for students interested in careers in the prevention/care of athletic injuries and the administration of athletic training programs in public and private schools, colleges, universities, and with professional teams. Students interested in pursuing certification by the National Athletic Trainers Association Board of Certification (NATABOC), should consult the Department Program Director for Athletic Training Education.

The Athletic Training Educational Program (ATEP) is currently in JRC-AT candidacy for CAAHEP Accreditation. Please be aware that candidacy does not guarantee the ATEP accreditation.

**Supplementary Criteria for Admission**  
In the California State University, an undergraduate major is designated as impacted when the number of applications received the first month of the filing period is greater than the available spaces. Such degree majors are authorized to use a pre-major code and supplementary admission criteria to screen applicants. The Option in Athletic Training is an impacted program and has the following supplementary admission criteria:

To be eligible for admission to the Bachelor of Arts in Kinesiology, Option in Athletic Training, applicants must demonstrate the following prior to the semester for which the application is submitted: Applicants must have met requirements for admission to the university as a freshman or transfer student. Applicants must have completed the following prerequisite courses, each with a grade of “C” or better: BIOL 207, BIOL 208, and PSY 100. Applicants must have completed KIN 207 (Prevention and Care of Athletic Injuries) with a grade of “B” or better. Applicants must have completed a minimum of 150 hours of athletic training experience. At least 100 of these hours must be attained by participation in a traditional athletic training setting under the supervision of a NATABOC-certified athletic trainer. A maximum of 50 of these hours may be attained in an allied clinical setting, such as sports medicine clinics, summer sports camps, sports performance facilities, hospital facilities, or dance performance centers. Applicants must submit a supplemental application to the CSULB Department of Kinesiology by February 1 for the fall semester or by October 1 for the spring semester. The supplemental application is available from the Kinesiology Department Office or the Kinesiology website ([http://www.csulb.edu/kinesiology](http://www.csulb.edu/kinesiology)). The supplemental application must be accompanied by 3 letters of recommendation; one letter must be from the athletic training setting noted above. The number of applicants who can be admitted is limited by space availability. Eligible applicants will be selected for admission for admission based on cumulative grade point average.

**Requirements**  
Lower Division: BIOL 207, 208; PSY 100; KIN 207, 215, 263, and eight physical activity units distributed over a minimum of four activity categories:  
- **Aquatics:** KIN 125A, 125B, 237, 238;  
- **Combative:** KIN 106A, 149A;  
- **Dance:** KIN 185, 260;  
- **Individual/Dual Sports:** KIN 100A, 112A, 112B, 264, 265, 266, 267, 268;  
- **Wilderness Studies:** KIN 242, 244, 246A;  
- **Team Sports:** KIN 250, 253, 255, 257.  
Upper Division: KIN 300, 301, 308A, 309, 310, 312, 315, 332I, 335, 363, 407; H SC 427; EDP 434B; Select one course from FCS 430 or H SC 210.

**Option in Adapted Physical Education (code KPE_BA02) (120 units)**  
This option is designed for the preparation of students seeking a California Single Subject Preliminary Teaching Credential in Physical Education (K-12) with a specialist credential in adapted physical education. The emphasis is placed upon teaching school physical education to students with disabilities in preschool through grade 12. The academic and professional course work is designed to provide students with philosophical, theoretical, and applied concepts of teaching adapted physical education.

Lower Division: BIOL 207, 208; PSY 100; KIN 149A, 250, 253, 255, 257, 261, 264, 265, 266, 267, 268, 270; Select one course from 237, 238.

Upper Division: KIN 300, 301, 312, 315, 320, 332I, 335, 343, 370, 380, 387, 388, 427, 460.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Work-
Credentialing, the new course requirements will be in effect and supersede current requirements.

Completion of this option meets Commission on Teacher Credentialing requirements for subject matter competence for the Single Subject Credential in Physical Education. In addition to subject matter competence, prospective teachers must complete professional preparation through the Single Subject Credential Program. Refer to the Single Subject Teacher Education section of the Catalog for details. Note: The Option in Adapted Physical Education is being revised to meet new state standards for subject matter competence for physical education teachers. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements for the Option in Adapted Physical Education will be in effect and supersede current requirements.

**Option in Elementary School Physical Education (code KPE_BA03) (120 units)**

This option is designed for the preparation of students seeking a California Single Subject Preliminary Teaching Credential in Physical Education (K-12). The emphasis is placed upon teaching public school physical education to students in grades K through 6. The academic and professional course work is designed to provide students with philosophical, theoretical, and applied concepts of teaching elementary school physical education.

Completion of this option meets the subject matter competence requirement for the Single Subject Preliminary Credential in Physical Education (code 175). In addition to meeting the subject matter competence requirement for the Preliminary Credential, prospective Physical Education teachers are also required to complete 44 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as postbaccalaureate student. Refer to the Single Subject Teacher Education section of this Catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Prospective students should consult the department's Physical Education Advisor early to plan their program.

The Physical Education Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

**Requirements**

**Lower Division**:
- BIOL 207, 208; PSY 100; KIN 149A, 250, 253, 255, 257, 261, 264, 265, 266, 267, 268, 270; Select one course from 237, 238.

**Upper Division**:
- KIN 300, 301, 312, 315, 320, 332I, 335, 343, 370, 380, 457, 460, 461, 483.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

**Option in Secondary School Physical Education (code KPE_BA04) (120 units)**

This option is designed for the preparation of students seeking a California Single Subject Preliminary Teaching Credential in Physical Education (K-12). The emphasis is placed upon teaching public school physical education to students in grades 6 through 12. The academic and professional course work is designed to provide students with philosophical, theoretical and applied concepts of teaching secondary school physical education.

Completion of this option meets the subject matter competence requirement for the Single Subject Preliminary Credential in Physical Education (code 175). In addition to meeting the subject matter competence requirement for the Preliminary Credential, prospective Physical Education teachers are also required to complete 44 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as postbaccalaureate student. Refer to the Single Subject Teacher Education section of this Catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Prospective students should consult the department's Physical Education Advisor early to plan their program.

The Physical Education Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

**Requirements**

**Lower Division**:
- BIOL 207, 208; PSY 100; KIN 149A, 250, 253, 255, 257, 261, 264, 265, 266, 267, 268, 270; Select one course from 237, 238.

**Upper Division**:
- KIN 300, 301, 312, 315, 320, 332I, 335, 343, 370, 380, 457, 460, 461, 483.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.
Bachelor of Science in Kinesiology

Students pursuing the Bachelor of Science degree in Kinesiology must complete the course requirements and the physical fitness proficiency of each Option. Students may select their area of specialization from the Options described below. These Options develop a student who has an integrated conceptual understanding of the discipline and its relationship to human movement. Each Option focuses on foundation preparation for a specific occupation or graduate work.

Physical Fitness Proficiency

Each Bachelor of Science Major is required to demonstrate a physical fitness proficiency at the minimum level of a 3.0 before graduation. The physical fitness proficiency examination is administered in KIN 263 Techniques of Fitness.

Option in Exercise Science (code KPE_BS01) (120 units)

This option is designed primarily for those students interested in careers in exercise physiology, biomechanics, or motor control/learning as well as those students contemplating graduate work in these areas or one of the health professions, e.g., physical therapy.

Supplementary Criteria for Admission

In the California State University, an undergraduate major is designated as impacted when the number of applications received the first month of the filing period is greater that the available spaces. Such degree majors are authorized to use a pre-major code and supplementary admission criteria to screen applicants. The Option in Exercise Science is an impacted program and has the following supplementary admission criteria:

To be eligible for admission to the Bachelor of Science in Kinesiology Option in Exercise Science, applicants must demonstrate the following prior to the semester for which the application is submitted: Applicants must have met requirements for admission to the university as a freshman or transfer student. Applicants must have completed the following prerequisite courses, each with a grade of “C” or better: BIOL 207, BIOL 208, CHEM 111A, ENGL 100, MATH 112, PHYS 100A, and PSY 100. Applicants must show proof of current First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training; Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Option in Kinesiotherapy (code KPE_BS03) (120 units)

This option is designed primarily for those students interested in careers which provide therapeutic physical activities in rehabilitation settings including clinics, hospitals, schools, universities, convalescent homes and other private and public institutions. Students interested in certification by the American Kinesiotherapy Association (AKTA) must complete additional requirements. Please consult the Department Coordinator and the Kinesiotherapy Certificate Program for additional information.

Supplementary Criteria for Admission

In the California State University, an undergraduate major is designated as impacted when the number of applications received the first month of the filing period is greater than the available spaces. Such degree majors are authorized to use a pre-major code and supplementary admission criteria to screen applicants. The Option in Kinesiotherapy is an impacted program and has the following supplementary admission criteria:

To be eligible for admission to the Bachelor of Science in Kinesiology Option in Kinesiotherapy, applicants must demonstrate the following prior to the semester for which the application is submitted: Applicants must have met requirements for admission to the university as a freshman or transfer student. Applicants must have completed the following prerequisite courses, each with a grade of “C” or better: BIOL 207, BIOL 208, PSY 100, and KIN 210. Applicants must have completed PSY 200 with a grade of “B” or better. Applicants must have completed a minimum of 100 hours of observation or active participation in a therapeutic or rehabilitation setting. Applicants must submit a supplemental application to the CSULB Department of Kinesiology by February 1 for the fall semester or by October 1 for the spring semester. The supplemental application is available from the Kinesiology Department Office or the Kinesiology web site (http://www.csulb.edu/kinesiology). The supplemental application must be accompanied by letters of recommendation, preferably one letter from a natural sciences faculty member. The number of applicants who can be admitted is limited by space availability. Eligible applicants will be selected for admission based on cumulative grade point average.

Requirements

Core Courses: BIOL 207, 208; KIN 300, 301, 312.

Lower Division: CHEM 111A, 111B; KIN 263; PHYS 100A, 100B, PSY 100.

Upper Division: KIN 405, 441, KIN 430 or 431; KIN 483 or BIOL 260; Select three courses from KIN 339I, 462, 465, 466.

Elective Courses: select 18 units (minimum 6 units from KIN) from the following courses: BIOL 200, 211A, 211B, 340, 341, 342 and 342L, 345, 401, 441, 442, 443, 445, 446; CHEM 327, 448; FCS 132, 331A, 331B; HHS 374, 401, 460, 471; H SC 150; KIN 315, 320, 339I*, 363, 430*, 431*, 462*, 465*, 466*, 471, 494, 495, 497.

* If not taken as one of the major required upper division courses.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training; Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.
Requirements

Core Courses: BIOL 207, 208; KIN 300, 301, 312.
Lower Division: PSY 100, 200; KIN 210, 217, 263, and six physical activity units distributed over a minimum of four activity categories:

Aquatics: KIN 125A, 125B, 237, 238;
Combatives: KIN 106A, 149A;
Dance: KIN 185, 260;
Individual/Dual Sports: KIN 100A, 112A, 112B, 264, 265, 266, 267, 268;
Wilderness Studies: KIN 242, 244, 246A;
Team Sports: KIN 250, 253, 255, 257.

Upper Division: GERN 400I or BIOL 401; HHS 374; KIN 309, 315, 320, 332I or 335, 427, 489F; PSY 341, 370. A fieldwork, field experience, or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Option in Sport Psychology and Coaching
(code KPE_BS04) (120 units)
The Option in Sport Psychology and Coaching has two Concentrations - one in Sport Psychology and one in Coaching. The course work for both concentrations is the same except for the elective courses. The Option is designed for students interested in careers in: 1) sport psychology; and 2) coaching outside the public school system (K-12), e.g., coaching professional athletes, coaching college athletes, coaching youth-sport athletes, and coaching in sport academies.

Core Courses: BIOL 207, 208; KIN 300, 301, 312.
Lower Division: FCS 132; KIN 263; PSY 100, 110, 200; and eight physical activity units to be distributed over a minimum of two activity categories:

Aquatics: KIN 125A, 125B, 237, 238;
Combatives: KIN 149A;
Individual/Dual Sports: KIN 264, 265, 266, 267, 268;
Team Sports: KIN 250, 253, 255, 257.

Upper Division: KIN 315, 332I, 335, 339I, 472, 475; PSY 333, 356. Elective Courses for the Concentration in Sport Psychology: Select 15 units (minimum 6 units from KIN) from the following courses: HHS 374; HSC 427; KIN 471, 489B, 495, 497; PSY 141, 332, 370, 373, 475.

Elective Courses for the Concentration in Coaching: Select 15 units (minimum 6 units from KIN) from the following courses: ACCT 310; COMM 411; HRM 360; HSC 427; I S 240; KIN 489B, 497, 499; MKTG 300, 330; REC 321, 322, 324, 427.

A fieldwork, field experience, or internship requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Option in Fitness (code KPE_BS02) (120 units)
This option is designed for students interested in careers in the fitness industry, e.g., fitness director, manager, program specialist, coordinators, personal trainer, or group instructors in corporate, commercial, YMCA, or other public/private facility.

Core Courses: BIOL 207, 208; KIN 300, 301, 312.
Lower Division: FCS 132; PSY 100; KIN 215, 263, and eight physical activity units distributed over a minimum of two activity categories:

Aquatics: KIN 125A, 125B, 237, 238;
Combatives: KIN106A, 149A, 149A;
Dance: KIN 185, 260;
Fitness: KIN 142, 151A, 152A, 198A;
Individual/Dual Sports: KIN 100A, 100B, 112A, 112B, 264, 265, 266, 267, 268;
Wilderness Studies: KIN 242, 244, 246A, 247A;
Team Sports: KIN 250, 253, 255, 257.

Upper Division: HSC 435; KIN 332I or 335, 339I, 363, 364, 367, 368, 405, 467, 469, 483, 489D.
Elective Courses: Select twelve units from the following courses: FCS 433, 439; HSC 421, 423, 429; KIN 207, 309, 315, 332I*, 335*, 462, 465, 495, REC 421, 423, 425, 427.
* If not taken as one of the major required upper division courses.

A fieldwork, field experience, or internship requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Adapted Physical Education Specialist Credential (code 490)
This program is designed for students interested in the administration and implementation of physical activity programs for persons with disabilities. Completion of this credential authorizes the California Adapted Physical Education Specialist Teaching Credential.

Requirements
1. Bachelor’s degree with a teaching major in Kinesiology;
2. Must be obtained concurrently or after completion of the Single Subject Physical Education Teaching Credential, K-12; 3.
KIN 320, 387, 388, 427, 526, 546; ED P 350; Select two courses from CD 280; ED P 405, 526, 546, 564, 570B.

Minor in Physical Education Teaching
(code KPE_UM01)
The minor in Physical Education Teaching is available to any non-Kinesiology major. This minor is designed for those students who are striving for an additional credential. With completion of this minor, the University will recommend the additional credential in Physical Education.
Requirements
A minimum of 34 units as follows: BIOL 207 and KIN 301 or BIOL 208 and KIN 300; KIN 315, 343, 370, 380, 460, 483; EDSS 300P; Eight physical activity units including: KIN 237 or 238; 265; 250 or 257; 253 or 255; 264 or 268; 266 or 267; 270. In addition to the above, each student is required to demonstrate skill proficiency at an average 3.5 level on a 5 point scale in KIN 343 and the 8 physical activity units completed to satisfy requirements for this minor. Only physical skill proficiency scores in the range of 2.0-5.0 are recorded and computed to determine a student's physical skill proficiency average.

Concentration in Physical Education Elementary Teaching
Requirements
A minimum of 21 units as follows: KIN 301, 312, 315, 370, 427, 476, 477.

Concentration in Physical Education Coaching
Requirements
A minimum of 20 units as follows: KIN 301, 207, 332I; a minimum of 11 units selected in consultation with appropriate Kinesiology Advisor from the following: KIN 312, 363, 475, 489B.

Certificate Programs
The Department of Kinesiology offers two different certificate programs each of which is related to a special emphasis provided in the curriculum. All certificate programs are open to students enrolled in the University who meet general admission requirements as follows:
1. Completion of 30 hours of course work;
2. A minimum 2.75 GPA in all completed course work;
3. Admission application and approval by a faculty commit tee in the certificate program selected.

Wilderness Studies Certificate (code KPE_CT02)
This program is designed to develop leaders who can provide safe and challenging situations for individuals seeking self-fulfilling experiences in wilderness environments. The program of study will enable the student to acquire 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
1. Certification in First Aid and Cardiopulmonary Resuscitation;
2. Completion of Log of Outdoor Experiences;
3. Course work (31-33 units as follows): BIOL 100, KIN 346, 448, REC 490 with advisement. The following coursework must be taken in consultation with the advising coordinator: select four courses from KIN 131, 153, 242, 244, 247A; select two courses from KIN 243A, 243C, 245, REC 430; select one course from KIN 141, 446, 497, 499; select one course from FCS 132, REC 407, 431, 433.

Kinesiotherapy Certificate (code KPE_CT04)
This program is designed to prepare the student to pass the American Kinesiotherapy Association (AKTA) Certification Test. AKTA certification will qualify the therapist to provide therapeutic physical activities in rehabilitation settings including clinics, hospitals, schools, universities, convalescent homes and other private and public institutions or in private practice. The student will complete the Kinesiotherapy Option in the undergraduate curriculum plus 27 additional units. Information concerning the certificate can be obtained from the Director of the Kinesiotherapy Program in the Department of Kinesiology. Students seeking National Kinesiotherapy Certification need to complete the Undergraduate Option in Kinesiotherapy, the Undergraduate Kinesiotherapy Certificate, plus 12 post-baccalaureate Internship units with consensus of the Kinesiotherapy Advisor.

Requirements
1. Admission application and approval by Director;
2. Completion of the degree requirements of the Bachelor of Science: Option Kinesiotherapy;
3. Specialization course work requires a “B” or better grade for AKTA Certification;
4. Course work: BIOL 401 or GERN 400I; H SC 210 or 411A or 411B or 427; KIN 210, 309, 320, 405 or 499, 427, 438/538, 488/588, 485, 489F; PSY 341.

Graduate Program
Two degree programs are available to the student: Master of Arts degree in Kinesiology with seven Options and Master of Science degree in Kinesiology with three Options. The student may select the thesis/project track or the comprehensive examination track. The student who chooses the thesis/ project track is required to complete a thesis or a project. The student who chooses the comprehensive examination track is required to take KIN 695. The minimum unit requirement for the MA degree major program is 30 units for thesis/project students and 36 units for comprehensive examination students. The minimum unit requirement for the MS degree major program is 33 units for thesis/project students and 39 units for comprehensive examination students.

Admission Criteria
1. A bachelor's degree from an accredited institution with a major in Kinesiology/Physical Education; or
2. A bachelor's degree in another field with a minimum of 15 units of upper division courses in Kinesiology comprised of foundational courses needed for the tentative degree plan to be determined by the student’s major advisor and approved by the Department Graduate Coordinator. All foundational coursework must be completed prior to Advancement to Candidacy.
3. An overall undergraduate GPA of 2.50 or better and an upper division Kinesiology/Physical Education major GPA of 2.75 or better;
4. A minimum cumulative score of 450 on the verbal, 450 on the quantitative and 3.5 on the analytical writing sections of the Graduate Record Examination.
Advancement to Candidacy
1. Completion of the general University requirements for advancement to candidacy;
2. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
3. A graduate program must have approval of the student’s advisor, Department Graduate Coordinator, and Associate Dean of Graduate Students, Research, and Faculty Affairs for the College of Health and Human Services.

Master of Arts in Kinesiology
Seven Options are under the Master of Arts degree in Kinesiology and are described below. The core courses for thesis students are KIN 590, 696, and 698. The core courses for comprehensive examination students are KIN 590, 695, and 696.

Option in Adapted Physical Education (code KPE_MA04)
This option is designed to provide advanced preparation in adapted physical activity and the study of individuals with disabilities across the lifespan (preschool to adult).
Requirements
1. KIN 590 and 696;
2. Minimum of 12 units selected from the following: KIN 537, 538, 546, 638, and 697;
3. KIN 698 (4 units) for thesis/project students plus a minimum of 8 elective units;
4. KIN 695 for comprehensive exam students plus a minimum of 15 elective units.

Option in Coaching (code KPE_MA07)
This option provides an in-depth study in the scientific, mechanical, emotional, and methodological realms of coaching.
Requirements
1. KIN 590 and 696;
2. Minimum of 12 units selected from the following: KIN 524, 530, 540, 551, 560, 562, 575, 630, and 633;
3. KIN 698 (4 units) for thesis/project students, plus a minimum of 2-5 elective units;
4. KIN 695 for comprehensive examination students, plus a minimum of 12-15 elective units.

Option in Motor Behavior (code KPE_MA06)
This option is designed to provide advanced preparation in human movement from a behavioral perspective; this includes the examination of motor learning, control and development across the lifespan.
Requirements
1. KIN 590 and 696;
2. Minimum of 12 units selected from the following: KIN 540, 546, 630, 633, and 697 (3 units);
3. KIN 698 (4 units) for thesis/project students, plus a minimum of 8 elective units;
4. KIN 695 for comprehensive examination students, plus a minimum of 15 elective units.

Option in Pedagogical Studies (code KPE_MA02)
This option provides preparation in student design, instructional development, and evaluation to improve the supervision of skills and develop expertise in behavioral research methods.
Requirements
1. KIN 524, 525, 526, 590, 696, and 697;
2. KIN 698 (4 units) for thesis/project students, plus a minimum of 8 elective units;
3. KIN 695 for comprehensive examination students, plus a minimum of 15 elective units.

Option in Sport Studies (code KPE_MA05)
This option examines sport from the perspective of sociology, anthropology, history, psychology, and philosophy.
Requirements
1. KIN 590 and 696;
2. Minimum of 12 units from the following: KIN 573, 574, 577, 633, and 697 (3 units);
3. KIN 698 (4 units) for thesis/project students, plus a minimum of 8 elective units;
4. KIN 695 for comprehensive examination students, plus a minimum of 15 elective units.

Option in Sport Management (code KPE_MA03)
This option prepares individuals for careers in athletic administration and sports management. Upon completion of this program (36 units), individuals will be prepared to work in the sports industry in a variety of settings, including professional, intercollegiate, and interscholastic sports and sport-related businesses. The program of study for this option is currently offered only through University and College Extension Services. Instruction in this option is presented in an accelerated cohort program format over 18 months.
Requirements
1. KIN 511, 512, 513, 514, 521, 577, 590, 591, 592A (6 units) and 696.
2. KIN 698 (4 units) for thesis/project students (Not available to students in the cohort format).
3. KIN 695 for comprehensive exam students.

Option in Individualized, Program, and Generalized Areas (code KPE_MA08)
These Options are designed to provide the student with curriculum activities that combine one or more option areas into a program of study. These Options are developed by the student with the advisement of a graduate faculty member and/or the Graduate Advisor. A statement of rationale for the proposal must accompany the program of study.
Requirements
1. KIN 590 and 696;
2. Minimum of 15 units from 500 and/or 600 level coursework in KIN;
3. KIN 698 (4 units) for thesis project students, plus a minimum of 5 elective units (individualized);
4. KIN 695 for comprehensive examination students, plus a minimum of 12 elective units (generalized and program areas only).
Master of Science in Kinesiology

Three Options are under the Master of Science degree in Kinesiology and are described below. The core courses for thesis/project students are KIN 580, 590, 696, and 698. The core courses for comprehensive examination students are KIN 580, 590, 695, and 696.

Option in Exercise Science (code KPE_MS01)

This option is designed to provide up-to-date theoretical principles and practical experiences in exercise physiology and biomechanics.

Requirements

1. KIN 540, 550, 551, 552, 580, 590, 696, and either 594 or 697;
2. Select two of the following four courses or select 6 other units with advisor's approval: KIN 541, 562, 565, and 566;
3. KIN 698 (4 units) for thesis project students;
4. KIN 695 for comprehensive examination students, plus a minimum of 6 elective units.

Option in Sport and Exercise Psychology (code KPE_MS02)

This option is designed to prepare students for careers in sport and exercise psychology, in particular as athletic performance enhancements specialists and/or as researchers and teachers in academic settings.

Requirements

1. KIN 572, 575, 580, 590, 633, 696 (18 units);
2. Two of the following courses: KIN 571, 573 or 574, 577, 630, 697 (6 units);
3. KIN 698 (4 units) for thesis students, plus a minimum of 5 units from PSY/E DP and/or additional KIN electives with advisor approval;
4. KIN 695 for comprehensive examination students, plus 12 units from PSY/ED P courses and/or additional electives in KIN with advisor approval.

Option in Sports Medicine and Injury Studies (code KPE_MS03)

This option is designed to provide the student with an indepth study in the many health-related problems related to individuals who are physically active.

Requirements

1. KIN 540, 551, 560, 561, 562, 580, 590, 633, 696, and 697;
2. KIN 698 (4 units) for thesis/project students; 3. KIN 695 for comprehensive examination students, plus a minimum of 6 elective units.

Kinesiology Courses (KIN)

Activity Courses

100-198. Physical Education Activity (1)

A broad range of physical education activities is offered. These are designed to provide an opportunity for students to meet their health, physical and recreational needs and interests. Maximum of 8 units may be applied toward the University graduation requirement. Students enrolling in physical education courses assume the responsibility for satisfactory health status appropriate for class activity. KIN activity courses may be offered at the beginning (I), intermediate (II), and advanced (III) levels. All classes are co-educational, any student may enroll in the activity courses offered by the Department of Kinesiology.
143. Individual Conditioning (1)
A course designed to introduce the student to the activities, equipment, and techniques used in the development of conditioning programs tailored to one’s individual needs. May be repeated to a maximum of 8 units.

156. Sports Appreciation (3)
Prerequisite: One of the GE Foundation courses (may be taken concurrently). Introduction to the study of sport as a social institution in American society. Letter grade only (A-F) for Kinesiology majors/minors.

157. Fitness for Living (3)
Prerequisite: One of the GE Foundation courses (may be taken concurrently). Analysis and implementation of the concepts related to exercise for health and fitness. Letter grade only (A-F) for Kinesiology majors/minors. (Lecture 2 hours, Activity 2 hours.)

159. Aerobic Teacher Training (2)
Prerequisite: KIN 142 or equivalent. Instruction in organizing and teaching methodology of aerobic fitness concepts including movement principles, and exposure to a variety of activities applicable to aerobic teacher training. (Lecture 1 hour, Activity 2 hours.)

189. Country Dancing (1)
Instruction and practice in various country dance forms including line dancing, two-step, waltz, contra dancing, round dancing, and mixers. This course is useful for lifelong fitness, socialization, and recreation. May be repeated to a maximum of 8 units.

200. Psychological Skills for Peak Performance in Sport (3)
Introduction of psychological strategies and skills designed to help individuals overcome the barriers to optimal performance. Skills such as imagery, goal setting, cognitive restructuring, attentional focusing, arousal regulation, and coping presented. (Lecture, 3 hours)

207. Prevention and Care of Athletic Injuries (3)
Prerequisites: KIN 210 or equivalent. Principles and techniques of the prevention and care of common athletic injuries. (Lecture 2 hours, Activity 2 hours).

210. Advanced Emergency Care (3)
Theory and practice of first aid for the injured. Successful completion of course requirements leads to the American National Red Cross advanced first aid and personal safety and community CPR certificate. Course fee may be required.

215. Career Perspectives in Human Movement (1)
An overview of human movement including professional preparation and employment opportunities. Orientation to current programs and proficiency requirements. Students entering the Kinesiology major are required to enroll in this course their first semester of study.

217. Introduction to Kinesiotherapy (2)
An introduction to the profession of Kinesiotherapy intended to provide the student with information regarding the history of the profession, its educational expectations, standards and scope of practice and a survey of the basic skills needed to enter this field of study. Letter grade only (A-F).

237. Techniques and Analysis of Aquatic Skills (2)
Prerequisites: KIN 125A or 125B or consent of instructor, American Red Cross Community First Aid and CPR certifications or equivalent. Open to Kinesiology majors in the Adapted, Elementary, and Secondary Physical Education options. To maintain enrollment, students must pass the swimming proficiency examination that will be administered the first week of instruction. Instruction and techniques in individual aquatic skills, hydrodynamic and movement principles, and an exposure to a variety of learning procedures applicable to the development of aquatic skills. Letter grade only (A-F). (Lecture 1 hour, Laboratory 3 hours.)

238. Water Safety Instructor (2)
Prerequisites: KIN 125A or 125B or consent of instructor, American Red Cross Community First Aid and Safety and Cardiopulmonary Resuscitation certifications or equivalent. To maintain enrollment, students must pass the swimming proficiency examination that will be administered the first week of instruction. Comprehensive analysis of principles of movement, organizational strategies utilized in presenting aquatic activities and advanced swimming skills in physical education classes. Includes an opportunity to qualify for the American Red Cross Water Safety Instructor certification. Letter grade only (A-F). (Lecture 1 hour, Laboratory 3 hours.)

239. Lifeguard Training (2)
Prerequisites: American Red Cross Community First Aid and Safety or equivalent. Provide lifeguard candidates with the skills and knowledge necessary to keep the patrons of aquatic facilities safe in and around the water. (Lecture 1 hour, Laboratory 3 hours.)

242. Backpacking (2)
An experiential examination and analysis in the judgment, knowledge, equipment and skills necessary to safe wilderness travel and living. (2-3 day field experience required.) Course fee may be required.

243A. Winter Mountain Expedition (3)
Introduction to winter mountaineering skills; study of the mountain environment. (Activity 6 hours) (2-3 day field experience required) Course fee may be required.

243B. Summer Mountain Expedition (3)
Instruction and extended experience developing the attitudes, judgment, knowledge and skills for safe mountain travel and living. Trip planning, logistics, navigation, mountain medicine, mountaineering techniques, safe and ecological camping will be learned and practiced while on a ten-day expedition. Throughout the wilderness expedition group process, leadership, problem solving and judgment all provide growth and experiential education opportunities that develop the successful wilderness traveler. Letter grade only (A-F). (Activity 6 hours) Course fee may be required.

244. Kayaking (2)
An experiential examination and analysis of the judgment, knowledge, equipment and skill development necessary to safe flat and whitewater kayaking. (2-3 day field experience required.) Course fee may be required. (Activity 6 hours.)

245. Wilderness Water Expedition (3)
Introduction to the skills, attitudes and knowledge required for safe use of varied types of wilderness waters. The skills and techniques of boat handling and trip planning. An interdisciplinary introduction to the study of waterways. (Activity 6 hours.) (2-3 day field experience required.) Course fee may be required.

246A. Mountaineering (2)
An experiential examination and analysis in the judgement, knowledge, equipment and skills necessary to safe mountaineering. Course includes field trip. Course fee may be required. (Activity 4 hours.)

247A. Techniques of Rockclimbing (2)
Introduction to the basic skills, judgment and safety for technical rock climbing. The skills and techniques of top roping, belaying rappels and self rescue. Course includes a field trip. Course fee may be required. (Activity 4 hours.)

250. Techniques of Basketball (1)
Open to Kinesiology majors and minors only. Instruction in individual and team skills and techniques utilized in the sport of basketball for successful performance. (Activity 2 hours.)

253. Techniques of Soccer (1)
Open to Kinesiology majors and minors only. Instruction in individual and team skills and techniques utilized in the sport of soccer for successful performance. (Activity 2 hours.)

255. Techniques of Softball (1)
Open to Kinesiology majors and minors only. Instruction and practice in catching, throwing, hitting, sliding, base running, and bunting. Comprehensive teaching of skills and techniques in softball. (Activity 2 hours.)
257. Techniques of Volleyball (1)
Open to Kinesiology majors and minors only. Instruction in individual and
team techniques utilized in the sport of volleyball. (Activity 2 hours.)

260. Fundamental Rhythms (2)
Instruction and practice in fundamental rhythms involving folk and
social dance forms. Designed for Kinesiology majors and minors,
but open to all students. (Activity 4 hours.)

261. Techniques and Analysis of Fundamental Rhythms (2)
Open to Kinesiology Pedagogy Majors only. Instruction, practice and analysis of
social and folk dances necessary for successful teaching of basic
social and folk dances in the public schools. Includes instruction in the
fundamental rhythms that are sequenced to make up the basic rhythm
patterns of nearly all social and folk dances. Various floor pattern and
rhythm variations are taught and analyzed in terms of their
appropriateness for various age groups and skill levels. Letter grade
only (A-F). (Activity 4 hours.)

263. Techniques of Physical Fitness (2)
Open to Kinesiology majors only or consent of instructor. Not open to
Kinesiology majors in the pedagogy options. This course consists of
instruction, practice, and evaluation in physical fitness. Cardiorespiratory,
muscular strength and endurance, and flexibility activities will be
emphasized within the course. Letter grade only (A-F). (Discussion 1
hour, Laboratory 3 hours.)

264. Techniques of Golf (1)
Open to Kinesiology majors and minors only. Instruction and techniques in
individual skills and strategies for successful performance in golf.
(Activity 2 hours.)

265. Techniques and Analysis of Gymnastics (2)
Open to Kinesiology majors and minors only. Techniques, instruction and
comprehensive analysis of the principles of movement in gymnastics.
Organizational strategies utilized in presenting gymnastics in Physical
Education classes. Letter grade only (A-F). (Lecture 1 hour, Laboratory
3 hours)

266. Techniques of Badminton (1)
Open to Kinesiology majors and minors only. Instruction and techniques in
the skills and strategies for successful performance in badminton.
(Activity 2 hours.)

267. Techniques of Tennis (1)
Open to Kinesiology majors and minors only. Instruction, techniques and
analysis in the concepts of teaching, coaching, and playing tennis.
(Activity 2 hours.)

268. Techniques of Track and Field (1)
Open to Kinesiology majors and minors only. Instruction, techniques and
analysis in the concepts of teaching, coaching, and performance in track
and field. Letter grade only (A-F) (Activity 2 hours.)

270. Professional Practices in Public School Physical Education
(3)
Prerequisite: Students must meet the University GE writing course
requirement. Corequisite: Community CPR/First Aid/Safety or current
certification. Open to Adapted, Elementary, and Secondary Option
students in Kinesiology only. An introductory course designed to provide
an overview of current professional practices in public school physical
education. This course is the first course in a series of five sequential
courses that Pedagogy Option majors take toward a Single Subject
Physical Education Preliminary Teaching Credential. In this course,
students begin the first phase of their Physical Education Student
Assessment Portfolio (PESAP), which is used to assess the learning
and progress in teaching throughout their coursework in the five
sequential courses. Pedagogy Option Students (Adapted, Elementary,
Secondary) are required to take this course their first semester of their
junior year or after completing 30 units of college course work. Letter
grade only (A-F). (Lecture 2 hours, Laboratory 2 hours.)

Upper Division

300. Biomechanics of Human Movement (3)
Prerequisites: BIOL 208 or equivalent. Anatomical structure and
function, and mechanical principles relating to human motion, including
analytical application. (Lecture 2 hours, laboratory 3 hours.)

301. Exercise Physiology (3)
Prerequisites: BIOL 207 or equivalent. A 4-unit Human Physiology course
with 3-hour lecture and 3-hour laboratory with grade of "C" or better
or consent of instructor. Basic concepts of the physiology of muscular
exercise with emphasis on the responses and adaptations of the
circulatory system, the respiratory system, and skeletal muscles to the
physical stress of acute and chronic exercise. (Lecture 2 hours,
Laboratory 3 hours). Course fee may be required.

304. Clinical Aspects of Athletic Training (3)
Prerequisites: BIOL 207, 208; KIN 207. Open to Kinesiology majors in
athletic training or consent of instructor. Principles and techniques of
related clinical concepts applicable to the athletic training setting.
Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours).

306. Medical Aspects of Athletic Training (3)
Prerequisites: BIOL 207, 208; KIN 207. Open to Kinesiology majors in
athletic training or consent of instructor. Principles and techniques of
related medical concepts applicable to the athletic training setting.
Letter grade only (A-F).

308A. Athletic Training Evaluation I (2)
Prerequisites: BIOL 207, KIN 207, 300. Open to Kinesiology majors in
Athletic Training or consent of instructor. Theoretical concepts and
clinical skills related the assessment of athletic injury and illness. The
first semester of a two-semester sequence (KIN 308A and 308B).
Emphasis is on the injury evaluation process, injury nomenclature,
lower extremity, thoracic and lumbar spine, and cervical spine. Letter
grade only (A-F). (Lecture 1 hour, Activity 2 hours)

308B. Athletic Training Evaluation II (2)
Prerequisites: BIOL 207, KIN 207, 300, 308A. Open to Kinesiology majors in
Athletic Training or consent of instructor. Theoretical concepts and
clinical skills related the assessment of athletic injury and illness. The
second semester of a two-semester sequence (KIN 308A and 308B).
Emphasis is on the thorax and abdomen, upper extremity, eye, face,
head and neck, environmental, selected cardiopulmonary conditions,
and selected general medical conditions. Letter grade only (A-F).
(lecture 1 hour, Activity 2 hours)

309. Developmental and Therapeutic Exercise (3)
Prerequisites: KIN 300, 301 or consent of instructor, Principles, techniques, and
prescription of exercises for development or rehabilitation of the body.
(Lecture 2 hours, Activity 2 hours.)

310. Therapeutic Approaches in Athletic Training (3)
Prerequisites: KIN 308A or 309 or consent of instructor. Open to Kinesiology majors in
the athletic training option only. Theory and application therapeutic
modalities and exercise rehabilitation commonly used in athletic
training programs. (Lecture 2 hours, Activity 2 hours).

312. Motor Control and Learning (3)
Prerequisites: BIOL 207, 208; PSY 100. Basic concepts of the neuro-
motor and psychological contributions in the control and acquisition of
skilled performance. Letter grade only (A-F). (Lecture 2 hours, Activity
2 hours)

315. Motor Development (3)
Prerequisites: BIOL 207, 208; PSY 100 or equivalent. Developmental
perspective of the factors which contribute to the acquisition of motor
control from the period of infancy through adolescence. (Lecture 2 hours,
Activity 2 hours)

320. Adapted Physical Education (3)
Prerequisites: BIOL 208. This course is designed to prepare Kinesiology
majors to meet the physical activity program needs of persons with
disabilities. Designed primarily to understand the
etiology and characteristics of persons with mental, physical, emotional, sensory, health, learning and/or multiple impairments. When appropriate, be able to successfully integrate the disabled individual into the physical education mainstream. (Lecture 2 hours, Activity 2 hours).

332. Sociocultural Dimensions of Sport and Human Movement (3)
Prerequisites: Completion of GE Foundation requirements, one or more Explorations courses, and upper-division standing. Sociocultural and psychological correlations to human movement.

335. Historical and Cultural Foundations of Sport and Kinesiology in America (3)
Prerequisites: Upper division standing. Open to Kinesiology Majors only. Survey of the history of sport and kinesiology. Historical identification of the cultural trends and functions of sport and kinesiology in America.

338. Women in Sport (3)
Prerequisites: Completion of GE Foundation requirements, one or more Explorations courses, and upper-division standing. Survey of women’s historical and contemporary involvement with sport. The social, cultural and developmental implications of sports participation for women. Same course as W/S 338I.

339. Psychology of Sport Behavior and Athletic Performance (3)
Prerequisites: Completion of GE Foundation, PSY 100, and upper-division standing. Psychological dispositions of attitudes, behaviors, and performance in sport and exercise environments. Same course as PSY 339I.

343. Techniques and Analysis of Physical Fitness and Activity (2)
Prerequisite: KIN 270. Open to Kinesiology/Physical Education Pedagogy Majors and Minors only. Knowledge and understanding needed to plan and implement physical fitness and physical activity programs in the public school setting. Analysis of the development, maintenance, implementation, and self-assessment of physical fitness and physical activity. The activity component of the course includes fitness development that is designed to prepare the student for FITNESSGRAM assessments and the Department’s Physical Fitness Proficiency Examination. Letter grade only (A-F). (Lecture 1 hour, Activity 3 hours).

346. Wilderness Emergency Care (2)
Prerequisites: One wilderness skill course or equivalent; KIN 210 or current certification in first aid and cardiopulmonary resuscitation. Techniques concerned with wilderness emergencies, including advanced first aid, cardiopulmonary resuscitation, search and rescue and emergency evacuation methods. (Lecture 1 hour, Activity 2 hours.) Course fee may be required.

354. Technology in Physical Education (3)
This course is designed to provide an overview of the use of technology applications in education, focusing on the application of technology in physical education. Specifically the development of word processing, spreadsheet, and presentation, documents, the use of video technology (analog and digital), development of web-based information, the use of internet related software and technologies, the creation of pdf documents, the use of personal digital assistants (PDAs) and the use of commercially produced education software. This course meets the computer technology requirement for the California Single Subject Preliminary Teaching Credential. Letter grade only (A-F). (Lecture 2 hours, laboratory 2 hours).

363. Theory and Analysis of Group Fitness Instruction (2)
Prerequisite: KIN 263. Open to Fitness Option students in Kinesiology only, or consent of instructor. Students in this course will learn to become effective group exercise leaders by understanding responsibilities of fitness leaders, principles of fitness, and leadership skill. Techniques for various group exercise activities will be taught. Letter grade only (A-F). (Discussion 1 hour, Activity 2 hours.)

364. Fitness for Adult Populations with Unique Health Considerations (3)
Prerequisites: KIN 301. Open to Fitness Option students in Kinesiology only, or consent of instructor. This course is designed to provide the students with scientific information regarding exercise testing and exercise prescription for adult special populations. Topics include pregnancy, diabetes, arthritis, stroke, respiratory disorder, coronary artery disease, hypertension, and obesity. Letter grade only (A-F).

367. Fitness and the Aging Process (3)
Prerequisites: KIN 301. Open to Fitness Option students in Kinesiology only, or consent of instructor. This course will provide knowledge in the area of fitness and the older adult. Topics will include scientific theories of aging, age-related changes that affect physical capacity, physical activity and its impact on the aging process, and advanced exercise programming for the older adult. Letter grade only (A-F). (Discussion 2 hours, Laboratory 2 hours.)
427./527. Physical and Motor Assessment (3)
Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent. Upper-
division undergraduate or Graduate standing. Consent of instructor
required for graduate students prior to registration. The course includes the
selection, evaluation, administration and interpretation of various tests used
in the physical and motor assessment practices of individuals with
disabilities. The course is a requirement toward the Adapted Physical
Education Specialist Credential. Upper-division students register in KIN
427; Graduate students register in KIN 527. Letter grade only (A-F).
(Lecture 2 hours, Activity 2 hours)

430. Motor Control Principles and Theory (3)
Prerequisite: KIN 312 or equivalent. Study of the principles, models, and
toies of human movement control with an emphasis on application to
sport, physical education, human factors, and human performance.
Instruction is directed toward understanding the research methods used
to evaluate motor control, fundamental principles of motor control, theoretical
propositions of human movement control, and applications to relevant
movement-intensive settings. Letter grade only (A-F).

431. Scientific Foundations of Locomotion (3)
Prerequisites: KIN 300, 312. Instruction is directed towards understanding
the influence of motor control theories, biomechanical principles, and
constraints to human movement on locomotion. Letter grade only (A-F).

439./539. Motor Dysfunction and the Exceptional Person (3)
Prerequisites: A basic undergraduate course in Adapted Physical Education or its
equivalent. Recognition, analysis, assessment and remediation of
movement problems in a child with minor nervous system dysfunctions.

441./541. Applied Biomechanics: Lifting and Work Capacity (3)
Prerequisite: KIN 300 or equivalent (Trigonometry and PHYS 100A recommended).
Study of the mechanical properties of bone, ligament, tendon and skeletal
muscle. Development and description of selected biomechanical models
with application to the evaluation of weight-lifting and rehabilitation
exercises, as well as occupational lifting tasks. Critical analysis of
methods used to test and evaluate strength. Letter grade only (A-F).

448. Wilderness Studies: Leadership Practicum (3)
Prerequisites or corequisites: KIN 346. Analysis and practice of the leadership and
teaching techniques appropriate to the conduct of wilderness adventure
programs. Course fee may be required.

457. Applied Theory of Teaching Team Sports (3)
Prerequisites: KIN 250, 253, 255, 257 or consent of instructor. Com-
prehensive analysis of the principles of movement, corrections of
performance, and organizational strategies utilized in presenting team
sports: basketball, flag football, soccer, softball, volleyball, floor hockey,
speedball, and team handball. Letter grade only (A-F). (Lecture 2 hours,
activity 2 hours.)

460. Applied Theory and Analysis of Non-Traditional Physical Education
Games and Activities (2)
Prerequisites: KIN 370, senior standing, open to Kinesiology majors and
minors only. Organization and management to effectively plan and
implement a variety of non-traditional physical education games and
activities such as cooperative games, problem solving activities,
cultural teams, costing groups, and outdoor educational experiences. Letter
grade only (A-F). (Lecture 1 hour, Laboratory 3 hours.)

461. Applied Theory of Teaching Individual and Dual Sports (3)
Prerequisites: KIN 237 or 238, 264, 265, 266, 267, 268, or consent of instructor; senior
standing. Open to Kinesiology majors in the Adapted, Elementary, and
Secondary Physical Education options. Comprehensive analysis of the
principles of movement and organizational strategies utilized in archery,
badminton, golf, paddle tennis, pickleball, racquetball, tennis, swimming,
oorienteering, and track and field. Letter grade only (A-F). (Lecture 2 hours,
Activity 2 hours.)

462./562. Advanced Strength and Conditioning (3)
Prerequisites: KIN 300, 301. Study of biomechanical and kinesiological
factors which are important in understanding the function and proper
techniques for execution of a wide variety of standard and advanced weight training exercises. Physiological bases for strength
training and adaptations caused by different training regimes are
emphasized. Letter grade only (A-F).

465./565. Clinical Exercise Electrocardiography (3)
Prerequisites: BIOL 207, KIN 301, and/or consent of instructor. A study of the physiology and
patho-physiology of the electrical activity of the heart. Instruction is
directed toward pattern recognition of normal and abnormal resting and
exercise electrocardiograms.

466./566. Biochemical and Hormonal Adaptations to Physical Activity (3)
Prerequisites: Upper-division undergraduate or Graduate standing; KIN 301 or equivalent; CHEM 111A or its equivalent. Consent of instructor
required for upper-division undergraduate students prior to registration.
Study of the biochemical and hormonal changes that occur as a result of
acute and chronic physical activity. Emphasis will be placed on the
application of concepts to the development of exercise training programs.
Upper-division undergraduate students register in KIN 468; graduate
students register in KIN 566. Letter grade only (A-F). Same course as
FCS 468./566.

467. Fundamentals of Personal Training (3)
Prerequisites: KIN 368. Open to Fitness Option students in Kinesiology only,
or consent of instructor. This course is designed to provide the student
with the theoretical knowledge and practical skill needed to become a
personal trainer. The course covers such topics as the business of
personal training, client-trainer relationships, fitness and health
assessments and exercise prescription. Letter grade only (A-F).
(Discussion 2 hours, Laboratory 3 hours.)

469. Fitness Management (3)
Prerequisite: KIN 368. This course will provide knowledge in the area of
management of fitness programs. Topics will include program
development, personnel issues, financial and legal considerations,
equipment purchasing, and marketing strategies for fitness programs.
Open to Fitness Option students in Kinesiology only, or by permission of
instructor. Letter grade only (A-F).

471./571. Biofeedback Applications in Sport and Exercise Science (3)
Prerequisites: Upper-division or graduate standing and consent of
instructor. (Undergraduates register in KIN 471; graduates register in KIN
571.) Application of biofeedback in: 1) enhancing athletic performance; 2) in
developing exercise and bodybuilding skills; and 3) preventing sport and
exercise-related injuries. A written report is required for KIN 571 students.
Letter grade only (A-F).

472./572. Applied Sport and Exercise Psychology (3)
Prerequisites: Upper
division status and consent of instructor or graduate standing. Application
of psychological skills and interventions to enhance athletic performance
and exercise adherence.

475./575. Psychology of Coaching (3)
Current topics of psychological concern and application as related to
athletic performance.

476. Physical Education for the Elementary School Teacher (3)
Junior Standing. This course provides Multiple Subject Credential candidates
with the knowledge and experiences necessary to implement a quality
physical education program based upon the California State Physical
Education Framework. Course content is designed to meet each
subdomain of the CTC physical education content specifications.
Laboratories provide experiences in a variety of skills including hula
hoops, jump bands, flying discs, long and short jump ropes, health
related physical fitness, active games, individual and team sports, lead-
up games, stunts and tumbling and international games and dances.
Implementation of the FITNESSGRAM Education and Assessment
Program (the state mandated fitness test battery) and subject integration
themes are included. (Lecture 2 hours, Activity 2 hours)

477. Innovative Curriculum in Elementary School Physical Education
(3)
Prerequisites: KIN 370 or 476 or consent of instructor. Theory and
application of elementary school physical education curriculum.
Designed for students specializing in elementary school physical
education programs. (Lecture 2 hours, Activity 2 hours)
483. Measurement and Evaluation in Physical Education (3) Prerequisites: Senior Standing, Principles and techniques of construction, organization, administration, interpretation and evaluation of measuring devices used in Kinesiology. (Lecture 2 hours, Activity 2 hours)

485. Neurological and Pathological Foundations for Kinesiotherapy (3) Prerequisites: BIOL 207, 208; KIN 300, 301, 320, 489F, or consent of instructor. Survey of neurological control of normal movement and the implications of various medical pathologies for rehabilitation. Emphasis on inflammatory processes, metabolic and vascular disturbances, traumatic injuries, nutritional deficiencies, neoplasms, degenerative conditions and congenital disorders as related to the practice of Kinesiotherapy. Letter grade only (A-F).

487./587. Supervised Activity Instruction Experience (1-3) Prerequisite: Upper division or graduate standing and consent of instructor. (Undergraduates register in KIN 487; graduates register in KIN 587). Experience in the organization of and methods for the activity component of a course in kinesiology. A written report is required for KIN 587 students. May be repeated to a maximum of 4 units. Letter grade only (A-F). Restricted to major students only. Not open to graduate students who have previously earned KIN 487 credit in this course. (Conference 1 hour, Laboratory 2 hours per unit.)

488./588. Clinical Basis of Kinesiotherapy (3) Prerequisites: Completion of Bachelor's degree in Kinesiology, Physical Therapy, Exercise Physiology, or Kinesiotherapy and admission into the Kinesiotherapy Certificate Program and successful completion of a course(s) in pathological and neurological foundations of rehabilitation or approval of the Director of the Kinesiotherapy Certificate Program. The theoretical foundations of clinical practice in Kinesiotherapy. Letter grade only (A-F).

489. Field Work in Physical Activity Settings (1-3) Prerequisite: Completion of Kinesiology course requirements for the major Option in which field work is taken. Supervised practice in working with individuals or small to large groups in public or private agencies and schools. Credit/No Credit grading only. May be repeated to a maximum of 9 units.

- Fieldwork in Adapted Physical Education B.
- Fieldwork in Athletic Coaching
- Fieldwork in Kinesiotherapy
- Fieldwork in Motor Development
- Fieldwork in Wilderness Studies

Additional Prerequisites: KIN 467, completion of 200 hours in a corporate fitness setting, 200 hours in a traditional fitness setting, and 100 hours of approved fitness experience. Open to Fitness Option students in Kinesiology only. Supervised fitness experience in working with individuals or small to large groups in public or private agencies.

F. Fieldwork in Kinesiotherapy

- Fieldwork in Motor Development
- Fieldwork in Wilderness Studies

Prerequisites: KIN 242, 244, 246 or 247, 243B or 243C or 245. Completion or corequisite of KIN 448, certification in CPR and First Aid, and consent of instructor. Supervised experience and practice in working with individuals and groups in public/private agencies and schools involved in wilderness activities. Students may enroll in 1-3 units of fieldwork. Each unit is equivalent to 40 hours of fieldwork assignment. A minimum of 120 hours are required for 3 units, of which at least 40 hours will be with the CSULB Wilderness Studies Program. The balance of the hours will be with public/private agencies.

490A. Clinical Practicum in Athletic Training (2) Prerequisites: Consent of instructor and Grade of “B” or better in KIN 207; satisfactory completion of CSULB ATEP Physical Exam Form and satisfactory completion of CSULB ATEP Technical Standards Form. Supervised clinical experiences in athletic training. Course is designed to provide students with formal instruction and evaluation in the Entry Level Athletic Training Clinical Proficiencies. This course requires the completion of a minimum of 150 hours of clinical experience performed under the supervision of an NATABOC Approved Clinical Instructor (Credit/No Credit grading only).

490B. Clinical Practicum in Athletic Training (2) Prerequisites: Consent of instructor and successful completion of KIN 490A; satisfactory completion of CSULB ATEP Physical Exam Form and satisfactory completion of CSULB ATEP Technical Standards Form. Continuation of laboratory and clinical experiences designed to provide students with formal instruction and evaluation in the Entry Level Athletic Training Clinical Proficiencies. This course requires the completion of a minimum of 300 hours of clinical experience performed under the supervision of an NATABOC Approved Clinical Instructor (Credit/No Credit grading only).

490C. Clinical Practicum in Athletic Training (2) Prerequisites: Consent of instructor and successful completion of KIN 490B. Continuation of laboratory and clinical experiences designed to provide students with formal instruction and evaluation in the Entry Level Athletic Training Clinical Proficiencies. This course requires the completion of a minimum of 300 hours of clinical experience performed under the supervision of a NATABOC Approved Clinical Instructor (Credit/No Credit grading only).

490D. Clinical Practicum in Athletic Training (2). Prerequisites: Consent of instructor and successful completion of KIN 490C; Continuation of laboratory and clinical experiences designed to provide students with formal instruction and evaluation in the Entry Level Athletic Training Clinical Proficiencies. This course requires the completion of a minimum of 300 hours of clinical experience performed under the supervision of an Approved Clinical Instructor (Credit/No Credit grading only).

490E. Clinical Practicum in Athletic Training (2) Prerequisites: Consent of instructor and successful completion of KIN 490D; Continuation of laboratory and clinical experiences designed to provide students with formal instruction and evaluation in the Entry Level Athletic Training Clinical Proficiencies. This course requires the completion of a minimum of 300 hours of clinical experience performed under the supervision of an Approved Clinical Instructor (Credit/No Credit grading only).

494./594. Exercise Science Internship (3) Prerequisites: Upper-division or graduate standing with a grade of “B” or better in KIN 300 for a biomechanics internship or KIN 301 for an exercise physiology internship or KIN 312 for a motor control and learning internship. Consent of instructor required prior to registration. Provides a minimum of 120 hours of practical experience in applying exercise science concepts in a fieldwork setting. The internship will provide such experiences as conducting the biomechanical/physiological exercise testing and/or leading the exercise training of selected subject populations such as patients undergoing cardiac rehabilitation, asymptomatic adults, and athletes. Upper-division undergraduate students register in KIN 494; Graduate students register in KIN 594. Letter grade only (A-F). May be repeated to a maximum of 6 units.

495./595. Supervised Laboratory Methods (1-3) Prerequisites: Upper division or graduate standing and consent of instructor. (Undergraduates register in KIN 495; graduates register in KIN 595.) Experience in the organization of and methods for a laboratory in kinesiology. Includes assisting students with their experiments, and laboratory reports. A written report is required for KIN 595 students. Letter grade only (A-F). Restricted to Kinesiology major students only. Open to open to graduate students who have previously earned KIN 495 credit in this course. (Conference 1 hour, Laboratory 2 hours per unit.) May be repeated to a maximum of 4 units.

497. Independent Study (1-3) Prerequisites: Major or minor in physical education, senior status and consent of Kinesiology Department. Student will conduct independent library or laboratory research under the supervision of a faculty member and write a report of the investigation. May be repeated to a maximum of 6 units. Letter grade only (A-F).

499. Special Studies (1-3) Group investigation of topics of current interest in kinesiology or athletics. Topics to be announced in the Schedule of Classes. May be repeated to a maximum of 6 units with different topics.
Graduate Level

511. Sports Marketing, Development, and Fund Raising (3) Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sports Management Program. This course will provide students with an overview of sport marketing and basic marketing terminology, as well as concepts of sports marketing and the application of these concepts. Topics for discussion include sport sponsorship, sport licensing, employee relations, community relations, media relations, customer relations, image enhancement, and the use of the Internet in sports marketing. Letter grade only (A-F).

512. Legal and Ethical Issues in Sport (3) Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program. An examination of legal and ethical issues associated with problem-solving and decision-making in sport management. Letter grade only (A-F).

513. Personnel and Facility Management in Athletics (3) Prerequisites: Graduate standing admission into the Kinesiology Graduate Sport Management Program. An examination of the principles and practices associated with managing personnel and facilities in interscholastic, intercollegiate, amateur, and professional athletics. Letter grade only (A-F).

514. Sport Finance Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program. Financial management principles for use in interscholastic, intercollegiate, amateur, and professional sports. Special emphasis will be placed on understanding various means for controlling costs and increasing revenue in athletic organizations. Letter grade only (A-F).

521. Foundations of Sport Management (3) Prerequisite: EDSS 450P or equivalent, or teaching experience (including student teaching). A course in the management and supervisory philosophies; principles and practices of administering and supervising physical education and athletic programs in the public school system, including scheduling, budgeting, public relations, facility planning, liability, supervision of personnel, curriculum and evaluation; techniques of management and supervision as they apply to athletics and physical education at the secondary and college levels.

523. Theory and Practice of College Teaching in Kinesiology (3) Prerequisite: Graduate standing. This course is designed to enhance the teaching knowledge and skills of persons who aspire to become or are currently college and university instructors of kinesiology through an examination of the principles and techniques of adult education associated with the discipline. Letter grade only (AF).

524. Analysis of Teaching in Physical Education (3) Analysis of teachers and teaching in physical activity environment: focus on developing observational competencies, analysis of research completed and future research designs.

525. Instructional Design in Physical Education (3) Prerequisites: Undergraduate major in physical education, EDST 300. A systems approach to designing instruction for the physical education program.

526. Applied Behavior Analysis in Physical Education (3) Application of applied behavior analysis principles to physical education (sport) with particular emphasis on single subject research designs and behavior analysis in the physical education setting.

527./427. Physical and Motor Assessment (3) Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent. Upper-division undergraduate or Graduate standing. Consent of instructor required for graduate students prior to registration. The course includes the selection, evaluation, administration and interpretation of various tests used in the physical and motor assessment practices of individuals with disabilities. The course is a requirement toward the Adapted Physical Education Specialist Credential. Upper-division students register in KIN 427; Graduate students register in KIN 527. Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours)

530. Neuromotor Control (3) Prerequisites: Graduate standing, KIN 312 or equivalent. Study of the neurological and muscular contributions to the control of human movement with emphasis on application of concepts to sports, physical activity, and human factors. Instruction is directed toward understanding the fundamental principles of motor control. Letter grade only (A-F).

537. Physical Education for Special Populations (3) Foundations in the organization and conduct of Adapted Physical Education.

540. Biomechanical Factors in Human Movement (3) Prerequisite: KIN 300 or equivalent. Study of film, video and force plate data collection for human movement evaluation, including data smoothing techniques. Quantitative kinematic and kinetic analysis examples including gait, jumping and lifting activities. Comparison of 2D versus 3D analyses of movement activities. Letter grade only (A-F).

541. Applied Biomechanics: Lifting and Work Capacity (3) Prerequisite: KIN 300 or equivalent (Trigonometry and PHYS 100A recommended). Study of the mechanical properties of bone, ligament, tendon, and skeletal muscle. Development and description of selected biomechanical models with application to the evaluation of weight-lifting and rehabilitation exercises, as well as occupational lifting tasks. Critical analysis of methods used to develop and test strength. Letter grade only (A-F).

546. Developmental Aspects of Motor Behavior (3) Prerequisite: KIN 315 or equivalent. The study of major factors which contribute to the development of motor skillfulness from birth to maturity. Letter grade only (A-F).

550. Instrumentation in the Exercise Sciences (3) Prerequisites: Graduate standing and KIN 301 or equivalent. Theoretical and practical analysis of instrumentation used in the exercise science laboratory. Concepts to be developed include basic fundamentals of scientific instrumentation, equipment validity and reliability. Instruments to be used are those used in the assessment of cardiopulmonary functional capacity, body composition, muscular strength, and power. Use of personal computers in the laboratory will be emphasized. Letter grade only (A-F).

551. Advanced Exercise Physiology (3) Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent. Advanced concepts in exercise physiology. Letter grade only (AF).

552. Physiology of Exercise Testing and Training (3) Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent. Study of the various aspects of health enhancement exercise programs (e.g., physiological assessment, physical training, weight control, and risk factor modification) for healthy individuals and patients with systemic diseases such as hypertension, coronary artery disease, and chronic airway obstruction. Letter grade only (A-F).

553. Environmental Aspects of Human Performance (3) Prerequisites: Graduate standing; KIN 301 or equivalent with a grade of “C” or better or consent from the instructor. A study of the physiological responses and adaptations of humans to the environment during physical activity. Topics to be covered include: physical activity in the heat and cold, work in hypo- and hyperbaric environments, microgravity, and acute and chronic exposure to air pollutants. Emphasis will be placed on human physical performance and its limitations under various environmental conditions. Letter grade only (A-F).

560. Health Related Problems in Sport (3) Prerequisites: KIN 207 and 301 or their equivalents and BIOL 207 and 208 or their equivalents. Examination of health problems related to engaging in vigorous physical activity. Letter grade only (A-F).
Musculoskeletal Injuries in Sport (3)
Prerequisites: KIN 207 and 300 or their equivalents and BIOL 208 or its equivalent. An in-depth study of the most prevalent musculoskeletal injuries occurring in sports activities, including mechanisms, tissue responses, and management procedures. Letter grade only (A-F).

Advanced Strength and Conditioning (3)
Prerequisites: KIN 300, 301. Study of biomechanical and kinesiological factors which are important in understanding the function and proper techniques for execution of a wide variety of standard and advanced weight training exercises. Physiological bases for strength training and adaptations caused by different training regimes are emphasized. Letter grade only (A-F).

Clinical Exercise Electrocardiography (3)
Prerequisites: BIOL 207, KIN 301, and/or consent of instructor. A study of the physiology and patho-physiology of the electrical activity of the heart. Instruction is directed toward pattern recognition of normal and abnormal resting and exercise electrocardiograms.

Biochemical and Hormonal Adaptations to Physical Activity (3)
Prerequisites: Upper-division undergraduate or Graduate standing; KIN 301 or equivalent; CHEM 111A or its equivalent. Consent of instructor required for upper-division undergraduate students prior to registration. Study of the biochemical and hormonal changes that occur as a result of acute and chronic physical activity. Emphasis will be placed on the application of concepts to the development of exercise training programs. Upper-division undergraduate students register in KIN 466; graduate students register in KIN 566. Letter grade only (A-F). Same course as FCS 566/466.

Biofeedback Applications in Sport and Exercise Science (3)
Prerequisites: Upper-division or graduate standing and consent of instructor. (Undergraduates register in KIN 471; graduates register in KIN 571.) Application of biofeedback in: 1) enhancing athletic performance; 2) in developing exercise and bodybuilding skills; and 3) preventing sport and exercise-related injuries. A written report is required for KIN 571 students. Letter grade only (A-F).

Applied Sport and Exercise Psychology (3)
Prerequisites: Upper division status and consent of instructor or graduate standing. Application of psychological skills and interventions to enhance athletic performance and exercise adherence.

History of Sport in the U.S.A. (3)
Prerequisite: KIN 335 or equivalent. An analysis of the history of American sport as it reflects the dominant themes in American society.

Contemporary International Sport (3)
Investigation of contemporary international sport in various world cultures.

Psychology of Coaching (3)
Current topics of psychological concern and application as related to athletic performance.

Sport in U.S. Culture (3)
Prerequisite: KIN 332I or equivalent. Analysis of physical activities in U.S. culture. Consideration of the relationships between sports and games and the factors of status, values, environment and cultural change.

Computer Applications in Physical Education (3)
Prerequisites: Graduate standing, consent from instructor. Introduction to computer hardware and software used in Kinesiology including DOS/Windows and Apple Macintosh operating systems. Topics include: hardware, operating systems, wordprocessing, spreadsheets, data exchange, presentation graphics/authoring tools, and video capture. Emphasis will be placed on integrating the use of hardware and software into a variety of Physical Education environments.

587/487. Supervised Activity Instruction Experience (1-3)
Prerequisite: Upper division or graduate standing and consent of instructor. (Undergraduates register in KIN 487; graduates register in KIN 587). Experience in the organization of and methods for the activity component of a course in kinesiology and physical education. A written report is required for KIN 587 students. May be repeated to a maximum of 4 units. Letter grade only (A-F). Restricted to major students only. Not open to graduate students who have previously earned KIN 487 credit in this course. (Conference 1 hour, Laboratory 2 hours per unit.)

Clinical Basis of Kinesiotherapy (3)
Prerequisites: Completion of Bachelor's degree in Kinesiology, Physical Therapy, Exercise Physiology, or Kinesiotherapy and admission into the Kinesiotherapy Certificate Program and successful completion of a course(s) in pathological and neurological foundations of rehabilitation or approval of the Director of the Kinesiotherapy Certificate Program. The theoretical foundations of clinical practice in Kinesiotherapy. Letter grade only (A-F).

Kinesiotherapy Clinical Training I Laboratory (6)
Corequisite: KIN 588. Instruction and observation at the Long Beach Veterans Administration Medical Center.

Kinesiotherapy Clinical Training II (3)
Prerequisite: Satisfactory completion of KIN 588. The theory and practice of kinesiotherapy techniques in a medical center setting. 500 hours of instruction and observation at the Long Beach Veterans Administration Medical Center.

Kinesiotherapy Clinical Training II (3)
Corequisite: KIN 589. Laboratory instruction and observation at the Long Beach Veterans Administration Medical Center.

Statistical Analysis and Measurement in Kinesiology and Physical Education (3)
Prerequisites: EDSE 421, EDSS 450P or 450W, KIN 483 or equivalent. Consideration of the logic and application of statistical inference, sampling theory, correlation, analysis of variance and design of statistical studies. Critical analysis of selected research publications. Required of all master's degree candidates. To be completed within first 12 units of 500-600 series courses.

Field Studies in Sport Event Management (3)
Prerequisites: Graduate standing; admission to the Kinesiology Graduate Sports Management Program. Focus on planning and development of interscholastic, intercollegiate, amateur, and professional sport-related events. Complete 15 hours of seminar and 120 hours of supervised practical experience in a sporting event setting. Letter grade only (A-F).

Sports Management Internship (3)
Prerequisites: Bachelor degree with a major or minor in Kinesiology or Physical Education or an approved related major; KIN 521 or 685; approval of Intern Coordinator. A minimum of 20 hours per week for 16 weeks of supervised work experience in an approved sport management/administrative setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity. Note: 6 units in one semester may not be taken if student is full-time employed. May be repeated to a maximum of 6 units. Letter grade only (A-F).

Sports Management Internship (6)
Prerequisites: Bachelor degree with a major or minor in Kinesiology or Physical Education or an approved related major; KIN 521 or 685; approval of Intern Coordinator. A minimum of 40 hours per week for 16 weeks of supervised work experience in an approved sport management/administrative setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity. Note: May not be taken if student is full-time employed. Letter grade only (A-F).

Coaching Internship (3)
Prerequisites: Bachelor degree with a major or minor in Kinesiology or Physical Education or an approved related major; advancement to candidacy and approval of Intern Coordinator. A minimum of 20 hours per week for 16 weeks of supervised work experience in an approved coaching setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity. Note: 6 units in one semester may not be taken if student is full-time employed. May be repeated to a maximum of 6 units. Letter grade only (A-F).
593B. Coaching Internship (6)
Prerequisites: Bachelor degree with a major or minor in Kinesiology or Physical Education or an approved related major; advancement to candidacy and approval of Intern Coordinator. A minimum of 40 hours per week for 16 weeks of supervised work experience in an approved coaching setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity. Note: May not be taken if student is full-time employed. Letter grade only (A-F).

594/494. Exercise Science Internship (3)
Prerequisites: Upper-division or graduate standing with a grade of "B" or better in KIN 300 for a biomechanics internship or KIN 301 for an exercise physiology internship or KIN 312 for a motor control and learning internship. Consent of instructor required prior to registration. Provides a minimum of 120 hours of practical experience in applying exercise science concepts in a fieldwork setting. The internship will provide such experiences as conducting the biomechanical/physiological exercise testing and/or leading the exercise training of selected subject populations such as patients undergoing cardiac rehabilitation, asymptomatic adults, and athletes. Upper-division undergraduate students register in KIN 494; Graduate students register in KIN 594. Letter grade only (A-F). May be repeated to a maximum of 6 units.

595/495. Supervised Laboratory Methods (1-3)
Prerequisites: Upper division or graduate standing and consent of instructor. (Undergraduates register in KIN 495; graduates register in KIN 595.) Experience in the organization of and methods for a laboratory in kinesiology and physical education. Includes assisting students with their experiments and laboratory reports. A written report is required for KIN 595 students. May be repeated to a maximum of 4 units. Letter grade only (A-F). Restricted to Kinesiology major students only. Not open to graduate students who have previously earned KIN 495 credit in this course. (Conference 1 hour, laboratory 2 hours per unit) May be repeated to a maximum of 4 units.

596. Practicum in Physical Education Pedagogy (3)
Prerequisites: Graduate standing; admission to the Master of Arts Program in Pedagogical Studies. Students are required to evaluate their teaching and provide documentation that they are addressing all of the physical education standards for individuals ages 3-18 that have been established by the National Board for Teacher Certification (NBPTS). Students are also required to apply concepts associated with the physical education subdisciplines to instructional issues. Letter grade only (A-F).

597. Independent Research (1-3)
Prerequisites: Consent of Kinesiology faculty member and graduate advisor. Independent research under the guidance of a faculty member. Varied learning activities utilized to achieve competency related to Physical Education not offered in regular classes. Written report required. Letter grade only (A-F). (Independent Study)

630. Seminar in Motor Learning (3)
Prerequisites: KIN 312, 590 and 696 (may be taken concurrently). Identification and analysis of principles and concepts applicable to motor learning in physical education.

633. Seminar in Sport Psychology (3)
Prerequisites: KIN 332I or equivalent and PSY 100; teaching or coaching experience (including student teaching). Study of psychological theories and concepts and their relationship to human behavior in sport. Sport viewed in the context of the participant, the teacher/coach, the spectator and the entrepreneur.

638. Seminar in Trends in Adapted Physical Education (3)
Prerequisite: KIN 537 or 538, or equivalent. An examination and analysis of the current trends in Adapted Physical Education.

685. Seminar in Athletics (3)
Experience in the field. Special problems related to the administration of an athletic program including current issues and practices and supervised research in selected areas.