KINESIOLOGY

Kinesiology Bldg. (43A), Room 451
Phone: 805.756.2545
Email: kinesiology@calpoly.edu
https://kinesiology.calpoly.edu
https://stride.calpoly.edu

Department Chair: Kris Jankovitz

Academic Programs

<table>
<thead>
<tr>
<th>Program name</th>
<th>Program type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinesiology</td>
<td>BS, MS</td>
</tr>
</tbody>
</table>

The Kinesiology Department offers undergraduate and graduate degree programs in Kinesiology. The department also contributes to the general education and elective needs of all students by providing health education, first aid/CPR courses, two upper-division elective courses in GE Area D5 and other sub-disciplines in kinesiology (e.g., biomechanics, exercise physiology, and motor behavior). The curriculum and coursework in the Kinesiology Department is designed to meet the mission of preparing students to be leaders in the fields of physical activity, health, and disease prevention and treatment.

The Kinesiology and Recreation Center complex provides laboratory, research and office space for the Kinesiology Department, and provides access to quality physical activity and sport facilities for students, faculty and staff.

The Kinesiology Department is also home to the STRIDE Center (Solutions through Research in Diet & Exercise). STRIDE is a university-wide, multidisciplinary, translational research center, initiated in 2007 by the Kinesiology Department. The STRIDE center provides students with unique opportunities to contribute to ongoing research and programming.

Undergraduate Program

BS Kinesiology

The BS in Kinesiology provides training in the multiple sub-disciplines of kinesiology (biomechanics, exercise physiology, health, motor behavior, and sport and exercise psychology/ sociology). The program offers a broad based curriculum incorporating the scientific and clinical knowledge of exercise science, sport science and health promotion that is applicable to preventive and clinical exercise, commercial fitness, sport instruction and educational settings. Students can elect to follow one of three concentrations: Exercise Science, Sport Science or Health Promotion. Each concentration provides students with the knowledge, skills and abilities they need to pursue further education or move into a variety of entry level positions in exercise and sport sciences and health promotion.

Concentrations

Exercise Science

Exercise science professionals lead and demonstrate safe and effective methods of exercise to clients in a variety of settings. Students who complete the Exercise Science Concentration will be prepared to work in a wide range of enterprises that include clinical exercise physiology, cardiac rehabilitation, worksite health promotion and commercial fitness facilities. Completion of this concentration could lead to certification as a Certified Health and Fitness Specialist (ACSM), Clinical Exercise Specialist (ACSM), Certified Strength and Conditioning Specialist (NSCA) and Exercise Physiologist-Certified (ASEP).

Health Promotion

Students who complete the Health Promotion Concentration will be prepared for employment in a variety of health promotion related careers. Possible job titles include: Health Promotion Program Coordinator, Health and Wellness Manager, Prevention Coordinator, Physical Activity and Public Health Specialist, Worksite Health Promotion Specialist, Military Wellness Center Manager, Personal Trainer, Health & Fitness Specialist, University Wellness Coordinator, Fitness Manager, and Lifestyle Coach.

Sport Science

Students who complete the BS in Kinesiology with the sport science concentration will be prepared for entry level leadership positions in competitive sport settings which include coaching at the youth, club/ interscholastic, college/university and international levels. They would also be prepared for advanced study in master's degree programs with an emphasis in coaching, or for employment as a personal trainer or group exercise instructor. Course content and learning experiences are focused on fundamentals of athletic and sport performance, psychological and sociological benefits of participating in sport and athletics and skill development in leadership and mentoring. Students who complete this concentration will also be well prepared to take the American College of Sports Medicine (ACSM) Certified Personal Trainer Exam and the ACSM Certified Group Instructor Exam. They will also be prepared to complete a wide variety of American Sport Education Program (ASEP) certification courses, request inclusion in the National Registry of Coaches (coordinated by ASEP) and pursue coaching certification from sport specific governing bodies (e.g. USA Track and Field, USA Swimming, USA Soccer, etc.).

Graduate Program

Master of Science Degree in Kinesiology

NOTE: Applications for Fall 2018 admission to the MS Kinesiology program are not currently being accepted. Contact the Kinesiology department for further information.

General Characteristics

The degree program offers advanced study in kinesiology to prepare graduates to enter occupations that may require training beyond the bachelor's degree. The program is designed to strengthen the breadth and depth of the student's academic preparation in kinesiology and its sub-disciplines and improve competence for: a) positions in corporate/ commercial, community, non-profit or government exercise and health promotion programs, b) teaching physical education, health or exercise science at the community college level, c) positions in obesity, diabetes and heart disease prevention in community, clinical or rehabilitative health care settings, d) independent research in the field of emphasis, and e) continued graduate study at doctoral granting institutions.

Two program options are available:

Thesis Option: 39 units of graduate committee approved coursework, 6 units of thesis research/project design, and successful completion of an oral defense of the thesis/project.

Non-Thesis Option: 45 units of graduate committee approved coursework and a comprehensive examination.
Most kinesiology graduate courses are offered every other year on a rotational basis. Students admitted with classified graduate standing can typically complete the program within two academic years. Applications to the program are currently accepted every quarter; however, a fall quarter entry is best for optimal progression toward completion of the degree.

Prerequisites

Applicants to the program must have a bachelor’s degree from an accredited institution with a minimum grade point average of 3.0 in the last 90-quarter units. Letters of recommendation from persons knowledgeable about the applicant’s academic achievement and potential as a graduate student are required.

Classified Graduate Standing

For admission to the program with classified graduate standing, the applicant must have an undergraduate degree in kinesiology or the equivalent academic preparation as determined by the coordinator of the kinesiology graduate program. Applicants with a grade point average below the required 3.0 and an undergraduate degree in kinesiology may appeal to the graduate coordinator to be "conditionally" accepted. This procedure involves a review process and a specified contract to be successfully completed before admission to classified graduate standing. Special attention is focused upon student performance in undergraduate science and kinesiology coursework for applicants with a GPA below 3.0 requesting to be conditionally accepted.

Conditionally Classified Graduate Standing

Applicants to the program without an undergraduate degree in kinesiology or closely related academic preparation may be admitted to the program with conditionally classified graduate standing. Applicants with undergraduate deficiencies must remove these deficiencies through coursework or examination before Advancement to Candidacy and may complete this coursework while enrolled as a graduate student at Cal Poly.

Information regarding specific coursework prerequisites and application procedures for admission to the kinesiology master of science program is available on the department website at https://kinesiology.calpoly.edu or from the graduate program coordinator.

Advancement to Candidacy

For Advancement to Candidacy a student shall have:

- successfully completed all conditionally classified requirements
- successfully completed the Graduation Writing Requirement
- filed a formal study plan
- maintained a minimum 3.0 GPA for all course work completed on the formal study plan

Requirements for the Degree

The formal study plan must include 45 units of graduate committee approved coursework. The approved coursework on the formal study plan is designed to prepare the student to achieve his/her stated career objective. At least 30 of the units must be completed at the 500 level in Kinesiology.

All candidates must meet the current Graduation Writing Requirement.

Each candidate must successfully complete a comprehensive examination before the degree is granted. The examination can take one of two forms: (1) those students following the thesis option must successfully defend the thesis or project in an oral examination, or (2) those students following the non-thesis option must pass a comprehensive examination dealing with current general knowledge in the discipline of kinesiology and the application of coursework taken on the formal study plan.

If the degree requirements are not completed within 7 years, the student will need to complete additional requirements as determined by the graduate committee. See the catalog for "Time Limit for Degree" for more information.

Up to 15 units may be taken in 400/500-level courses outside of the Kinesiology Department with graduate committee approval provided these courses were not required as part of the undergraduate degree program. Only 12 units of 400-level kinesiology courses may be put on the formal study plan.

At least 32 units must be completed in residence and no more than 9 units of graduate committee approved extension courses may be included on the formal study plan.

KINE Courses

KINE 100. Physical Activity for Students with Disabilities. 1 unit
CR/NC
Term Typically Offered: TBD
Prerequisite: Consent of instructor.

Basic instruction in the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 108. Basketball. 1 unit
CR/NC
Term Typically Offered: F, W, SP
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Term Typically Offered</th>
<th>CR/NC</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINE 109</td>
<td>Bowling</td>
<td>1</td>
<td>F, W, SP</td>
<td>CR/NC</td>
<td>Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
<tr>
<td>KINE 112</td>
<td>Intermediate Bowling</td>
<td>1</td>
<td>F, W, SP</td>
<td>CR/NC</td>
<td>Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
<tr>
<td>KINE 121</td>
<td>Golf</td>
<td>1</td>
<td>F, W, SP</td>
<td>CR/NC</td>
<td>Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
<tr>
<td>KINE 122</td>
<td>Golf, Int.-Adv.</td>
<td>1</td>
<td>F, SP</td>
<td>CR/NC</td>
<td>Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
<tr>
<td>KINE 125</td>
<td>Jogging</td>
<td>1</td>
<td>F, W, SP</td>
<td>CR/NC</td>
<td>Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
<tr>
<td>KINE 129</td>
<td>Yoga/Pilates</td>
<td>1</td>
<td>TBD</td>
<td>CR/NC</td>
<td>Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
<tr>
<td>KINE 131</td>
<td>Group Fitness Combine</td>
<td>1</td>
<td>TBD</td>
<td>CR/NC</td>
<td>Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.</td>
</tr>
</tbody>
</table>
KINE 132. Beginning Racquetball. 1 unit
CR/NC
Term Typically Offered: F, W, SP
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 133. Racquetball, Int. - Adv.. 1 unit
CR/NC
Term Typically Offered: F, W, SP
Prerequisite: KINE 132.
Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 137. Self-Defense. 1 unit
CR/NC
Term Typically Offered: TBD
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 138. Karate. 1 unit
CR/NC
Term Typically Offered: TBD
Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 3 units. Credit/No Credit grading only. 1 laboratory.

KINE 139. Soccer. 1 unit
CR/NC
Term Typically Offered: F, SP
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 143. Swimming for Non-Swimmers. 1 unit
CR/NC
Term Typically Offered: TBD
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 144. Swimming: Advanced Beginner. 1 unit
CR/NC
Term Typically Offered: F, SP
Enrollment is open to all students except for designated intramural courses. Courses carry 1 unit of credit, meet 2 hours per week, and are designed to develop skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. The beginning course or its equivalent is prerequisite to the intermediate, and the intermediate to the advanced. Prerequisite may be waived by consent of the instructor. No more than two different activity courses nor more than one section of an individual activity course may be taken for credit in any one quarter. A student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course. Any level of an activity course can be repeated only once for credit. Students not majoring in kinesiology may apply a maximum of 12 units of credit earned in general and intramural activity courses toward the bachelor’s degree. All basic instructional courses (KINE 100-176) are evaluated on a Credit/No Credit basis. A miscellaneous course fee may be required-see the Schedule of Classes.
KINE 145. Intermediate Swimming. 1 unit  
CR/NC  
Enrollment is open to all students except for designated intramural courses. Courses carry 1 unit of credit, meet 2 hours per week, and are designed to develop skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. The beginning course or its equivalent is prerequisite to the intermediate, and the intermediate to the advanced. Prerequisite may be waived by consent of the instructor. No more than two different activity courses nor more than one section of an individual activity course may be taken for credit in any one quarter. A student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course. Any level of an activity course can be repeated only once for credit. Students not majoring in kinesiology may apply a maximum of 12 units of credit earned in general and intramural activity courses toward the bachelor's degree. All basic instructional courses (KINE 100-176) are evaluated on a Credit/No Credit basis. A miscellaneous course fee may be required—see the Schedule of Classes.

KINE 147. Swim Conditioning. 1 unit  
CR/NC  
Term Typically Offered: F, W, SP  
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 148. Tennis, Beg.. 1 unit  
CR/NC  
Term Typically Offered: F, SP  
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 149. Tennis, Int. - Adv.. 1 unit  
CR/NC  
Term Typically Offered: F, SP  
Prerequisite: KINE 148.  
Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 151. Volleyball. 1 unit  
CR/NC  
Term Typically Offered: F, W, SP  
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 154. Weight Training. 1 unit  
CR/NC  
Term Typically Offered: TBD  
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 176. Fitness Walking. 1 unit  
CR/NC  
Term Typically Offered: TBD  
Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.
KINE 180. Orientation to Kinesiology. 2 units
CR/NC
Term Typically Offered: F, W
Prerequisite: Kinesiology majors only.
Disciplinary and professional perspectives in Kinesiology and the Kinesiology program at Cal Poly. Credit/No Credit grading only. 2 lectures.

KINE 181. First Aid/CPR/AED. 1 unit
CR/NC
Term Typically Offered: TBD
An American Red Cross certification course in Standard First Aid, CPR, and AED (Automated External Defibrillation). Skills and knowledge necessary in the treatment of life-threatening emergencies, other injuries, and sudden illnesses. Red Cross First Aid/CPR/AED certifications issued upon successful completion of certification requirements. Credit/No Credit grading only. 1 activity.

KINE 208. Golf. 1 unit
Term Typically Offered: TBD
Beginning to intermediate golf skills, rules, and etiquette including a combination of skill instruction and course play. Leadership activity assigned. 1 activity.

KINE 210. Tennis. 1 unit
Term Typically Offered: TBD
Beginning to intermediate tennis skills, etiquette, rules, and equipment. Singles and doubles play. Leadership activity assigned. 1 activity.

KINE 212. Racquetball. 1 unit
Term Typically Offered: TBD
Beginning to intermediate racquetball skills. Rules, regulations, basic strokes and shots, strategies and tournament play. Leadership activity assigned. 1 activity.

KINE 213. Basketball. 1 unit
Term Typically Offered: TBD
Beginning to intermediate basketball skills. Skill development, knowledge of rules, advanced strategies for playing basketball. Leadership activity assigned. 1 activity.

KINE 214. Volleyball. 1 unit
Term Typically Offered: TBD
Beginning to intermediate volleyball skills. Basic fundamentals, rules, regulations, strategies, skill development and games. Leadership activity assigned. 1 activity.

KINE 223. Cross Country and Track Events. 1 unit
Term Typically Offered: TBD
Beginning to intermediate skills in performance and analysis. Knowledge of rules and strategies. Development of skills and knowledge relating to performance, training, and scoring for cross-country and track running events. Leadership activity assigned. 1 activity.

KINE 224. Field Events. 1 unit
Term Typically Offered: TBD

KINE 226. Soccer. 1 unit
Term Typically Offered: TBD
Development of beginning and intermediate skills. Rules, regulations and game play. Leadership activity assigned. 1 activity.

KINE 229. Badminton. 1 unit
Term Typically Offered: TBD
Beginning and intermediate skills. Rules, regulations and strategies for competition. Leadership activity assigned. 1 activity.

KINE 230. Aquatic Fitness Activities. 1 unit
Term Typically Offered: TBD
Aquatic based resistance and cardiovascular activities for individual and group settings. Stroke development also included for front crawl, backstroke, breaststroke, butterfly, elementary backstroke and sidestroke. Must be able to swim 25 yards non-stop in order to participate. Leadership activity assigned. 1 laboratory.

KINE 231. Leading Group Fitness Activities. 2 units
Term Typically Offered: TBD
Prerequisite: KINE 230.
Aerobic fitness activities appropriate for large and small group exercise sessions. Development of instructional competency in the basic components of aerobic exercise, and leadership skills associated with the delivery of these activities. Emphasis on warm-up, cardiovascular fitness, heart-rate monitoring, dance choreography, elements of higher risk stretching and relaxation protocols, and equipment, and muscle conditioning. 2 activities.

KINE 250. Healthy Living. 4 units
GE Area D4
Term Typically Offered: F, W, SP
Personal health with emphasis on healthful behavioral practices including physical fitness, nutrition, psychosocial well-being, alcohol and other drugs, intentional and unintentional injury, reproductive health, infectious and non-infectious diseases. Course may be offered in classroom-based or online format. 4 lectures. Not open to students with credit in KINE 255 or Liberal Studies majors. Fulfills GE D4.

KINE 255. Personal Health: A Multicultural Approach. 4 units
GE Area D4; USCP
Term Typically Offered: F, W, SP
Personal health with special emphasis on multicultural practices. Not open to students with credit in KINE 250. 4 lectures. Fulfills GE D4 and USCP.

KINE 260. Women's Health Issues. 4 units
GE Area D4; USCP
Term Typically Offered: F, W, SP
Introduction to major health issues that affect women disproportionately or differently from men. Topics include female sexual health and reproduction, exercise and eating behaviors, substance abuse, mental health and stress, and violence against women. 4 lectures. Fulfills GE D4 and USCP.
KINE 265. Introduction to Community and Public Health. 3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 180; and one of the following: KINE 250, KINE 255, or KINE 260.

Introduction to community health and the core functions of public health. Social-ecological, behavioral, and policy influences on community and population health. Health promotion in community/public health settings. 3 lectures.

KINE 266. Sport and Exercise Psychology. 4 units
Term Typically Offered: F, W, SP
Prerequisite: Completion of GE Area A. Recommended: PSY 201 or PSY 202.

An introduction to the field of sport and exercise psychology. Psychological theories and research related to topics such as motivation to participate in sport and exercise, exercise and psychological well-being, teamwork and leadership, aggression, anxiety, psychological response to athletic injuries and exercise addiction. 4 lectures.

KINE 278. Introduction to Perspectives in Physical Activity. 4 units
Term Typically Offered: F, W, SP
Prerequisite: Completion of GE Area A and GE Area C2. Recommended: PHIL 230 or PHIL 231.

Current and historical trends in human movement from philosophical perspectives including Western and Eastern intellectual traditions; exploration of the effects of culture on the view of the human body and the understanding of the role of physical activity and sport in people's lives. 4 lectures.

KINE 280. Assessment Team for Health Promotion Activities. 1 unit
CR/NC
Term Typically Offered: SP
Prerequisite: KINE 250, KINE 255, or KINE 260. Recommended: KINE 319 and STAT 218.

Introduction to multiple health and fitness assessment protocols through participation in community-based activities and/or as assistants on faculty-led research projects. Experiential and service learning. Total credit limited to 3 units. Credit/ No Credit grading only. 1 activity.

KINE 281. Health Ambassadors. 1 unit
CR/NC
Term Typically Offered: TBD
Prerequisite: KINE 250, KINE 255, or KINE 260. Recommended: FSN 210 and KINE 265.

Introduction to health education and promotion strategies through participation in community-based activities and/or as assistants on faculty-led projects. Experiential and service learning. Field trip required. Total credit limited to 3 units. Credit/No Credit grading only. 1 activity.

KINE 290. Selected Topics. 1-4 units
Term Typically Offered: TBD
Prerequisite: Consent of instructor.

Directed group study of selected topics. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1 to 4 lectures.

KINE 297. Medical Terminology. 3 units
CR/NC
Term Typically Offered: W, SP
Prerequisite: Completion of GE Area B2.

Development of medical vocabulary used in health care occupations, through the study of root words, prefixes, suffixes, and case studies. Pronunciation, spelling, and use of medical terms and abbreviations related to diagnosis, clinical procedures, surgery, and anatomical and physiological systems. Course offered online only. Credit/No Credit grading only. 3 lectures.

KINE 298. Disease Epidemiology. 4 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 250 or KINE 255 or KINE 260. Recommended: STAT 217 or STAT 218.

Introduction to epidemiological principles and methods for studying chronic and communicable diseases in the United States. Upstream determinants of health and disease. Chronic disease continuum and epidemiologic triangle. Evidence-based recommendations for public health interventions. 3 lectures, 1 laboratory.

KINE 301. Functional Anatomy. 3 units
Term Typically Offered: F, W, SP
Prerequisite: BIO 231 or BIO 409.


KINE 303. Physiology of Exercise. 4 units
Term Typically Offered: F, W, SP
Prerequisite: BIO 231; and BIO 232 or BIO 361. Recommended: CHEM 128.

Application of human physiology to exercise situations. 3 lectures, 1 laboratory.

KINE 304. Pathophysiology and Exercise. 3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 303.

Selected human diseases, their etiology, pathophysiology, symptoms, diagnosis, effects on health and physical performance, and as affected by preventive or therapeutic exercise. 3 lectures.

KINE 305. Drugs in Society. 4 units
Term Typically Offered: F, W
Prerequisite: BIO 231; KINE 250 or KINE 255 or KINE 260 or KINE 443. Recommended: BIO 232.

Social, biological, and psychological factors of the major drugs associated with therapeutic and recreational use and abuse in society. Topics include drug use as a social problem, theories and treatment of addiction, how drugs work, and the detrimental health effects of drug use. Includes both illegal and legal drugs. 4 lectures.
KINE 308. Motor Development. 3 units
Term Typically Offered: F, W, SP
Prerequisite: GE D4.

Motor development of individuals from birth to maturity. Emphasis on interrelationship between motor and cognitive characteristics and affective needs and interests. Course may be offered in classroom-based or online format. 3 lectures.

KINE 310. Concepts and Applications in Elementary Physical Education. 3 units
Term Typically Offered: F, W, SP
Prerequisite: Junior standing.

Movement as it relates to physical motor skill development, fitness, wellness, social development, cross-cultural understanding, and self-image. 2 lectures, 1 activity.

KINE 311. Strength Training Instruction. 1 unit
Term Typically Offered: TBD
Prerequisite: KINE 231, KINE 301.

Proper use of weight room resistance modalities including free weights and machine based exercises. Emphasis on effective and safe methods for leading individuals through an exercise session. 1 activity.

KINE 319. Introduction to Research Methods in Kinesiology. 4 units
Term Typically Offered: F, W, SP
Prerequisite: STAT 217 or STAT 218.

Principles of reading and conducting research including contemporary research perspectives in kinesiology. Basic and applied research. Quantitative, qualitative, and mixed methods. 3 lectures, 1 laboratory.

KINE 320. Media and Technology in Health Promotion. 4 units
Term Typically Offered: F, W, SP
Prerequisite: Completion of GE Area A; KINE 180 or KINE 265; and one of the following: KINE 250, KINE 255, or KINE 260.

Applications of computers, electronic media and information technology as related to promoting health. Projects include digital videos, professional websites, ePortfolios, and blogs. 3 lectures, 1 laboratory.

KINE 323. Sport and Gender. 4 units
GE Area D5; USCP
Term Typically Offered: F, W, SP
Prerequisite: Junior standing; completion of GE Areas A, D1 and either D3 or D4.

Intersections between sport and gender in American society. Identification and discussion of the historical, sociological and psychological issues that affect the sport experiences of males and females, especially as they relate to class, race/ethnicity, sexuality, and political movements. Course may be offered in classroom-based or online format. 4 lectures. Fulfills GE D5 except for Kinesiology majors. Fulfills USCP.

KINE 324. Sports, Media and American Popular Culture. 4 units
GE Area D5; USCP
Term Typically Offered: F, W, SP
Prerequisite: Junior standing; completion of GE Areas A, D1 and D3.

Issues of class, race/ethnicity, gender, various forms of deviance, and other aspects of social life. Exploration of sociological manifestations and implications of how the aforementioned social issues are embedded in mediated forms of sports. Kinesiology majors will not receive GE Area D5 credit. 3 lectures, 1 activity. Fulfills GE D5 and USCP.

KINE 330. Group Fitness Instruction. 2 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 301.

Overview of basic components of group fitness classes in school, corporate and commercial fitness settings. Development of instructional competencies in the primary components of a group fitness class. Instructional techniques, professionalism, leadership styles conducive to promoting exercise adherence. Application of basic theory related to human anatomy, biomechanics, exercise physiology, training principles and use of relevant ACSM guidelines. 2 activities.

KINE 366. Applied Sport Psychology. 3 units
Term Typically Offered: F
Prerequisite: KINE 266.

Psychological considerations of the coach-athlete relationship and mental preparation of teams and individuals for competition and practice. Application of sport psychology principles to develop a psychological skills training program appropriate to enhance performance and well-being in sport or exercise contexts. 3 lectures.

KINE 400. Special Problems for Advanced Undergraduates. 1-3 units
Term Typically Offered: F, W, SP
Prerequisite: Senior standing.

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 6 units, with a maximum of 3 units per quarter.

KINE 401. Managing Exercise and Health Programs. 3 units
Term Typically Offered: F, SP
Prerequisite: KINE major and senior standing.

Planning, organizing and controlling programs in public, commercial, private and clinical exercise and health program settings. Emphasis on legal, ethical and budgetary considerations. 3 lectures.

KINE 402. Motor Learning and Control. 4 units
Term Typically Offered: F, W, SP
Prerequisite: STAT 217 or STAT 218 or equivalent coursework.

Variables which control sensory-motor integration. Analysis of factors which affect the acquisition of motor skills as related to the learning process and the learning environment. 3 lectures, 1 activity.

KINE 403. Biomechanics. 4 units
Term Typically Offered: F, W, SP
Prerequisite: PHYS 121; KINE 301.

Fundamental biomechanical concepts and their application to human systems including examination of activities of daily living and performance settings. Examination of the effects of chronic and acute loading on the body. 3 lectures, 1 laboratory.
KINE 406. Neuroanatomy. 4 units
Term Typically Offered: SP
Prerequisite: BIO 231 and BIO 232; or ZOO 331 and ZOO 332, or BIO 361.

KINE 407. Adapted Physical Activity. 4 units
Term Typically Offered: F, W, SP
Prerequisite: Sophomore standing and completion of GE Areas B2 and B3.
Major categories of disabling conditions with implications for the development of physical activity programs for specific disabilities. 3 lectures, 1 laboratory.

KINE 408. Exercise and Health Gerontology. 3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 330 or KINE 459; and one of the following: KINE 250, KINE 255, or KINE 260.
Special fitness, exercise, and health needs of elder adults. Theories of aging and age-related changes. Health and physical activity programs for elder adults. 2 lectures, 1 activity.

KINE 434. Health Promotion Program Planning. 4 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 265 and KINE 298.
Application of methods to facilitate behavior change to promote health and prevent morbidity and mortality. Concepts affecting health behavior, motivation, and decision making. Development of program planning skills in health education and promotion. 3 lectures, 1 laboratory.

KINE 435. Health Promotion Program Implementation and Evaluation. 4 units
Term Typically Offered: SP
Prerequisite: KINE 320; and KINE 434.
Implementation and evaluation of health promotion programs in school, community, medical public health, worksite, and college/university settings. Planning the intervention design, implementation and evaluation protocols including process, impact and outcome assessments. 3 lectures, 1 laboratory.

KINE 437. Directed Fieldwork. 1-3 units
CR/NC
Term Typically Offered: F, W, SP
Prerequisite: Senior standing.
Practical work experience in related activities of kinesiology under qualified supervision. Total credit limited to 9 units. Credit/No Credit grading only. Minimum of 2 laboratory hours per week per unit.

KINE 438. Adapted Physical Activity Fieldwork. 1-3 units
CR/NC
Term Typically Offered: F, W, SP
Prerequisite: KINE 407.
Practical experience in adapted physical activity programming. Students plan and conduct physical activity programs for people who are disabled. Total credit limited to 6 units. Credit/No Credit grading only.

KINE 440. Physical Education Practicum. 1 unit
Term Typically Offered: F, W, SP
Prerequisite: Consent of instructor.
Supervised experience involving organizational and instructional responsibilities in activity, lecture and/or laboratory classes as determined by curricular concentration or certificate program. Total credit limited to 3 units.

KINE 443. Health Education for Teachers. 4 units
Term Typically Offered: F, W
Prerequisite: Completion of GE Areas B2 and D4; and junior standing.
The health status, special concerns and national health objectives for school aged children. Coordinated school health programs and California Health Framework. Health, nutrition, safety, alcohol, tobacco and other drugs, reproductive health, and chronic disease prevention. Satisfies CCTC requirement for credential. 4 lectures.

KINE 445. Electrocardiography. 4 units
Term Typically Offered: F, W
Prerequisite: KINE 303.
Basic principles of electrocardiography, including practical skills of the ECG technician. Recognition of normal ECG patterns and abnormal changes related to rhythm disturbances, conduction defects, myocardial ischemia/infarction, and exercise. 3 lectures, 1 laboratory.

KINE 446. Echocardiography. 4 units
Term Typically Offered: SP
Prerequisite: KINE 445.
Basic principles of echocardiography, including practical skills of the echocardiographer. Recognition of normal echocardiographic patterns and abnormalities, including those caused by pathology and exercise conditioning. 2 lectures, 2 laboratories.

KINE 449. Exercise Prescription and Leadership. 3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 304; KINE 330 or KINE 459; and KINE 445.
Use of medical history, physical examination, laboratory and exercise testing data for establishment of appropriate exercise programs for healthy adults and those with chronic and acute disease. Exercise leadership for normal and clinical populations. 2 lectures, 1 laboratory.

KINE 450. Worksite and University Health Promotion Programs. 4 units
Term Typically Offered: SP
Prerequisite: KINE 250 or KINE 255 or KINE 260; and KINE 266. Recommended: KINE 320.
Planning, implementing, and evaluating comprehensive worksite/university health promotion (WHP) and campus wellbeing programs. Benefits of WHP for employers and employees. Educational, organizational, economic, and environmental supports for behaviors conducive to health. 4 lectures.
KINE 451. Nutrition for Fitness and Sport. 3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 250, KINE 255 or KINE 260; KINE 303. Recommended: FSN 210.

Application of nutritional and metabolic facts to selected aspects of physical training, degenerative disease, obesity and weight control, diet manipulation and modification in sport, nutritional supplementation and special dietary considerations for the young and old, male and female athletes. 3 lectures.

KINE 452. Exercise Testing and Prescription for Fitness Specialists. 4 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 303. Recommended: KINE 445.

Selected areas of health/fitness screening and evaluation. Application of components relevant to the development and administration of exercise programs for persons regardless of sex, age, functional capacity and presence or absence of CHD or CHD risk factors. 3 lectures, 1 laboratory.

KINE 453. Obesity Prevention and Treatment. 4 units
Term Typically Offered: F, SP
Prerequisite: FSN 210 or KINE 451; KINE 303; and KINE 434.

Overview of research on the causes and consequences of obesity. Evidence-based prevention and treatment interventions. Emphasis on skills for promoting weight control in multidisciplinary health promotion and public health settings. 3 lectures, 1 activity.

KINE 454. Exercise Metabolism. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 303; CHEM 216 or CHEM 312. Recommended: CHEM 313.

Advanced understanding of endocrine, metabolic, and physiological responses to physical activity, exercise and nutrition. How physical activity impacts human storage, delivery, and use of fuel required for energy conversion. 3 lectures.

KINE 455. Personal and Group Fitness Instruction. 3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 301; KINE 303; and KINE 402.

Instructional competencies in the primary components of a group fitness class and individually tailored personal fitness programs. Instructional techniques, professionalism, leadership styles conducive to promoting exercise adherence. Application of basic theory related to human anatomy, motor learning, exercise physiology, training principles and relevant ACSM guidelines. 1 lecture, 2 activities.

KINE 460. Experiential Senior Project. 1 unit
CR/NC
Term Typically Offered: F, W, SP
Prerequisite: KINE 319, completion of GE Area A, and senior standing.

A comprehensive applied capstone experience that integrates content from Kinesiology courses under faculty supervision. Projects must be approved by the supervising faculty member. Minimum 30 hours. Credit/No Credit grading only.

KINE 461. Senior Project Report. 1 unit
Term Typically Offered: F, W, SP
Prerequisite: KINE 319 and completion of GE Area A.

A comprehensive synthesis of professional literature that integrates content from kinesiology courses resulting in a report. Topic must be approved by the instructor. Minimum 30 hours.

KINE 462. Research Honors Senior Project. 1-2 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 319, completion of GE Area A, and consent of instructor.

Completion of an advanced research, or creative project. Intended for students taking a significant or leadership role in a professional area. Results may be submitted for poster presentation or other public/professional forum. Total credit limited to 4 units.

KINE 463. Exercise Science and Health Promotion Fieldwork. 1-3 units
CR/NC
Term Typically Offered: F, W, SP
Prerequisite: Junior or senior standing and minimum GPA of 2.0.

Practical experience at an approved agency that provides exercise/fitness/health promotion programs. Students participate in program administration under the direct supervision of an approved on-site coordinator. Credit/No Credit grading only. Total credit limited to 3 units.

KINE 470. Selected Advanced Topics. 1-4 units
Term Typically Offered: TBD
Prerequisite: Consent of instructor.

Directed group study of selected topics for advanced students. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1-4 lectures.

KINE 471. Selected Advanced Laboratory. 1-4 units
Term Typically Offered: TBD
Prerequisite: Consent of instructor.

Directed group laboratory study of selected topics for advanced students. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1-4 laboratories.

KINE 485. Cooperative Education Experience. 6 units
CR/NC
Term Typically Offered: TBD
Prerequisite: Sophomore standing and consent of instructor.

Part-time work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Major credit limited to 6 units; total credit limited to 12 units. Credit/No Credit grading only.

KINE 495. Cooperative Education Experience. 12 units
CR/NC
Term Typically Offered: TBD
Prerequisite: Sophomore standing and consent of instructor.

Full-time work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Major credit limited to 12 units; total credit limited to 24 units. Credit/No Credit grading only.
KINE 500. Individual Study. 1-3 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 517, graduate standing, and consent of instructor.

Advanced study planned and completed under the direction of a member of the department faculty. Open only to graduate students who have demonstrated ability to do independent work. Enrollment by petition. Only 6 units may be applied to degree requirements.

KINE 501. Evaluation of Literature and Current Trends in Kinesiology. 3 units
Term Typically Offered: F
Prerequisite: Graduate standing.

Analysis and evaluation of published studies and current trends in kinesiology. 3 seminars.

KINE 503. Current Health Issues. 4 units
Term Typically Offered: W
Prerequisite: Graduate standing.

Current issues and trends in health, disease prevention, and the healthcare system. Socioeconomic, biologic, environmental, institutional and policy factors that influence health status, disparities in health, and positive health outcomes. 4 seminars.

KINE 504. Advanced Pathophysiology and Exercise. 3 units
Term Typically Offered: W
Prerequisite: graduate standing. Recommended: KINE 303 or equivalent.

Selected human diseases, their etiology, pathophysiology, symptoms, diagnosis, effects on health and physical performance, and as affected by preventive or therapeutic exercise. 3 lectures.

KINE 505. Introduction to Issues, Ethics and Policies in Teaching Kinesiology. 2 units
CR/NC
Term Typically Offered: F
Prerequisite: Graduate standing.

Knowledge, skills, preparation and support for teaching Kinesiology activity and laboratory classes in the department. Prepares students to be supervisors and teachers in their current or future employment. Credit/No Credit grading only. 1 seminar, 1 activity.

KINE 510. Advanced Health Behavior Change Programs. 3 units
Term Typically Offered: SP
Prerequisite: KINE 503 or KINE 504 and graduate standing.

Examination of contemporary research, theory and practice related to facilitating healthy behavior change. Analysis of health problems from biological, ecological, and psycho-social perspectives with emphasis on understanding the acquisition and maintenance of healthy behavior. 3 seminars.

KINE 511. Administration in Exercise and Health Settings. 4 units
Term Typically Offered: F
Prerequisite: Graduate standing.

Principles and techniques of administration in health, physical activity, and academic settings including budget, personnel supervision, risk management, leadership techniques, and facility management. 4 seminars.

KINE 517. Research Methods in Kinesiology. 4 units
Term Typically Offered: W
Prerequisite: KINE 501. Recommended: STAT 512 or STAT 513.

Quantitative, qualitative and mixed methods approaches to research in kinesiology. Selection of adequate problems for investigation; various sampling techniques and analyses; use of library facilities; manuscript requirements for the thesis. 4 seminars.

KINE 518. Research Prospectus and Proposal Writing. 2 units
CR/NC
Term Typically Offered: SP
Prerequisite: KINE 517.

Strategies for identifying academically valid research topics. Planning considerations for qualitative and quantitative research including grant writing, human subjects review, personnel, equipment, and timelines. Design and composition of effective research proposals. Credit/No Credit grading only. 2 seminars.

KINE 522. Advanced Biomechanics. 4 units
Term Typically Offered: W
Prerequisite: KINE 403.

Advanced biomechanical concepts applied to human movement, examination of research, and biomechanical analyses of movement activities. Performance, occupational, and clinical settings. Laboratory techniques including motion analysis, force platform, and electromyography. 3 seminars, 1 laboratory.

KINE 525. Advanced Motor Learning and Control. 3 units
Term Typically Offered: SP
Prerequisite: Graduate standing.

Theoretical and professional issues in the psychological foundations of sport and exercise. 3 seminars.

KINE 530. Advanced Physiology of Exercise. 4 units
Term Typically Offered: SP
Prerequisite: KINE 303 and graduate standing.

Physiological determinants of physical work capacity and sports performance. 3 seminars, 1 laboratory.

KINE 536. Advanced Electrocardiography. 4 units
Term Typically Offered: W
Prerequisite: KINE 445.

Theory and application of electrocardiography and other techniques for cardiovascular assessment and treatment of cardiac disease and other abnormalities. 3 seminars, 1 laboratory.
KINE 537. Internship. 3-12 units  
CR/NC  
Term Typically Offered: F, W, SP  
Prerequisite: Graduate standing; consent of instructor.  
Supervised work experience in an approved wellness/fitness clinical facility, school, or other faculty approved setting. Total credit limited to 12 units. Maximum of 6 units may be applied toward Master of Science in Kinesiology. Credit/No Credit grading only.

KINE 539. Effective Practice in Teaching and Coaching. 3 units  
Term Typically Offered: W  
Prerequisite: Graduate standing.  
Observation and analysis of teaching physical education and coaching sports with special emphasis in pedagogical systems. 2 seminars, 1 laboratory.

KINE 570. Selected Advanced Topics. 4 units  
Term Typically Offered: TBD  
Prerequisite: Graduate standing.  
Directed group study of selected topics for graduate students. Open to undergraduate and graduate students. The Schedule of Classes will list title selected. Total credit limited to 8 units. 4 lectures.

KINE 581. Graduate Seminar in Kinesiology. 1-3 units  
Term Typically Offered: F, W, SP  
Prerequisite: Graduate standing.  
Directed group study of selected topics for advanced students. The Schedule of Classes will list topic selected. Total credit limited to 6 units. 1-3 seminars.

KINE 585. Cooperative Education Experience. 6 units  
CR/NC  
Term Typically Offered: TBD  
Prerequisite: Graduate standing.  
Advanced study analysis and part-time work experience in student's career field; current innovations, practices, and problems in administration, supervision, and organization of business, industry, and government. Must have demonstrated ability to do independent work and research in career field. Total credit limited to 9 units. Credit/No Credit grading only.

KINE 599. Thesis or Project. 1-6 units  
Term Typically Offered: F, W, SP  
Prerequisite: KINE 517, KINE 518 and consent of instructor.  
Completion of a thesis or project pertinent to the field of kinesiology. Independent research under the guidance of the faculty.