Kinesiology

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Academic Programs

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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 is a broad based program offering students training in the multiple sub-disciplines of kinesiology (biomechanics, exercise physiology, health, motor behavior, and sport and exercise psychology/sociology) based on a common curriculum that incorporates the scientific and clinical knowledge of exercise science and health science in preventive, clinical, commercial fitness, public health and educational settings. Students can elect to follow one of two concentrations: Exercise Science or Health Science. 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 health sciences. The BS in Kinesiology prepares students for employment or further education in the following areas:

- Graduate School Programs: Public Health (MPH), Kinesiology, Nursing, Occupational Therapy, Physical Therapy, Physician Assistant, Cardiac Rehabilitation, Exercise Physiology, Chiropractic Medicine, and Counseling. Students may need to complete additional coursework for admission to some graduate and professional degree programs. They should consult with their academic advisor or visit the College of Science and Mathematics Advising Center for more details.

Graduate Program

Master of Science Degree in Kinesiology

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 http://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: F, W, SP
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 104. Badminton. 1 unit
CR/NC
Term Typically Offered: TBD
Basic instruction in skill development, 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.
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 109. Bowling. 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 110. Cycling. 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 111. Fencing. 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 112. Intermediate Bowling. 1 unit  
CR/NC  
Term Typically Offered: F, W, SP  
Prerequisite: KINE 109.  
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 116. Aerobic Exercise. 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 121. Golf. 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 122. Golf, Int.-Adv.. 1 unit  
CR/NC  
Term Typically Offered: TBD  
Prerequisite: KINE 121.  
  
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 125. Jogging, 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 129. Stretch, Flex and Relax. 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 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: TBD  
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 139. Soccer. 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 140. Ultimate Disc. 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 141. 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 142. Softball. 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 143. Tennis, Int. - Adv.. 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 144. Tennis, Beg.. 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 145. Volleyball. 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 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 156. Aqua-Aerobics. 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, SP
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: F, W, SP
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: F, SP
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: F, SP
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: F, W, SP
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: F, W, SP
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: F, W, SP
Beginning to intermediate volleyball skills. Basic fundamentals, rules, regulations, strategies, skill development and games. Leadership activity assigned. 1 activity.

KINE 216. Wrestling. 1 unit
Term Typically Offered: TBD
Beginning to intermediate skills. Basic fundamentals of wrestling, rules and regulations. Leadership activity assigned. 1 activity.

KINE 221. Combatives / Self-Defense. 1 unit
Term Typically Offered: TBD
Beginner skills emphasizing offensive and defensive techniques for self-protection. 1 activity.

KINE 223. Cross Country and Track Events. 1 unit
Term Typically Offered: F, SP
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: SP

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

KINE 228. Cooperative Games and Activities. 1 unit
Term Typically Offered: TBD
Introduction of a variety of cooperative games. Non-traditional movement experiences designed to enhance social, cognitive, and physical development. Leadership activity assigned. 1 activity.
KINE 229. Badminton. 1 unit  
Term Typically Offered: SP  
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: F, W, SP  
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: F, W, SP  
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. 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. 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 community health issues and core functions of public health. Social-ecological, behavioral, and policy influences on community health and health disparities. Health Promotion in community/public health settings. 4 lectures.

KINE 266. Introduction to Psycho/Social Aspects of Physical Activity. 4 units  
Term Typically Offered: F, W, SP  
Recommended: Completion of GE Area A.  
Psychological and sociological effects of physical activity on individuals and groups in American society. 4 lectures.

KINE 277. Coaching Practicum. 2-3 units  
CR/NC  
Term Typically Offered: TBD  
Prerequisite: Consent of instructor.  
Practical experience through the actual coaching of a competitive sports team. 2-3 activities; minimum of 2 hours per week per unit. Total credit limited to 6 units. Credit/No Credit grading only. Learning outcomes must be developmental if more than one practicum is completed.

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: TBD  
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. Trends in Disease and Injury Prevention. 4 units  
Term Typically Offered: F, W, SP  
Prerequisite: BIO 111 or BIO 161; and KINE 250 or KINE 255 or KINE 260.  
Distribution and determinants of significant chronic and communicable diseases and injuries including disparities among population groups in the U.S. Social, environmental, and behavioral factors. Primary, secondary and tertiary prevention strategies that promote health, prevent disease and improve quality of life. 4 lectures.

KINE 300. Planning Techniques in Physical Education. 3 units  
Term Typically Offered: TBD  
Prerequisite: KINE 180. Corequisite: KINE 306.  
Practical skills and techniques of teaching physical education in schools. Unit and lesson planning, class management, implementation and evaluation of a lesson in a laboratory setting. 2 lectures, 1 laboratory.

KINE 301. Applied Functional Muscle Anatomy. 3 units  
Term Typically Offered: F, W, SP  
Prerequisite: BIO 231 or ZOO 331 or BIO 361.  
Functional organization of the human musculoskeletal system. Emphasis on the roles of muscles during activities of daily living, human performance settings, and applications to strength training exercises. 2 lectures, 1 activity.
KINE 303. Physiology of Exercise. 4 units
Term Typically Offered: F, W, SP
Prerequisite: BIO 231 or ZOO 331; and BIO 232 or ZOO 332 or BIO 361.
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, SP
Prerequisite: KINE 250 or KINE 255 or KINE 260 or KINE 443.
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 306. Assessment in K-12 Physical Education. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 180 and STAT 217 or STAT 218.
Measurement and evaluation techniques in physical education, including statistics, computer applications, and measurement theories. Assessment tools in psychomotor, cognitive, and affective domains. 2 lectures, 1 laboratory.

KINE 308. Motor Development. 3 units
Term Typically Offered: F
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 309. Creative and Nontraditional Games. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 300.
Introduction of preparatory teachers to non-traditional and multicultural games and activities which address the State Framework and the National Standards. Students present the activities in a manner which demonstrates effective models of instruction, including maximum participation. 1 lecture, 2 activities.

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: F, W, SP
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 315. Field Sports. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 300.
Introduction and preparation for teaching field sports in accordance with state and national standards for K-12 physical education programs. Students learn to present activities in a manner that reflects effective models of instruction. 1 lecture, 2 activities.

KINE 319. Introduction to Research Methods in Exercise and Health. 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 health and exercise science. Basic and applied research. Quantitative, qualitative, and mixed methods. 3 lectures, 1 laboratory.

KINE 320. Media and Technology in Science and Human Performance. 4 units
Term Typically Offered: F, W, SP
Prerequisite: Completion of GE Area A.
Applications of computers, electronic media and information technology as related to understanding and solving problems in the field of kinesiology and human performance. Projects include white papers, digital video, 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: TBD
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 396. Outdoor Education. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 300, KINE 306, and KINE 384.
Introduction and preparation for teaching Outdoor Education activities in accordance with the Physical Education Content Standards for California. Students learn to present activities in a manner that reflects effective models of instruction. Includes a clinical teaching experience. 1 lecture, 2 activities.

KINE 400. Special Problems for Advanced Undergraduates. 1-3 units
Term Typically Offered: F, W, SP
Prerequisite: Senior standing or consent of instructor.
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, W, 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. Formerly KINE 302.

KINE 406. Neuroanatomy. 4 units
Term Typically Offered: F, W, 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. 4 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 228 or KINE 231 or KINE 330; and KINE 250 or 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. 3 lectures, 1 activity.

KINE 419. Physical Education Program Content in the Elementary School. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 300 and two activity classes.
Cognitive and psychomotor competencies required to design a developmental physical education program for elementary aged school children. 2 lectures, 1 activity.

KINE 421. Strategies for Teaching Physical Education. 3 units
Term Typically Offered: TBD
Prerequisite: KINE 419.
Systematic analysis and refinement of teaching skills within the discipline of physical education. 2 lectures, 1 activity.

KINE 422. Teaching Elementary School Physical Education. 4 units
Term Typically Offered: TBD
Prerequisite: KINE 421.
Implementation of a developmental physical education program for elementary aged children. The program will complement that conducted in the local public schools. 1 lecture, 1 seminar, 2 laboratories.

KINE 423. Teaching Middle School Physical Education. 4 units
Term Typically Offered: TBD
Prerequisite: KINE 422.
Techniques for teaching physical education in middle school. Emphasis on class organization, lesson plan development and evaluation, class management and control, and understanding the middle school setting. For students teaching middle school physical education in the local public schools. 1 lecture, 1 seminar, 2 laboratories.

KINE 425. Teaching High School Physical Education. 4 units
Term Typically Offered: TBD
Prerequisite: KINE 423, and one 300-level activity class.
Techniques for teaching physical education in high schools. Emphasis on teaching strategies, organization, lesson plan development, self-evaluation, class management, and behavior management. 1 seminar, 1 lecture, 2 laboratories.
KINE 426. Senior Seminar. 2 units
Term Typically Offered: TBD
Prerequisite: Senior standing.
Capstone course which engages students in activities that integrate
the sub-disciplines of kinesiology, and facilitates the development of a
personal portfolio. 2 seminars.

KINE 434. Health Behavior Change Programs I. 4 units
Term Typically Offered: F, W, SP
Prerequisite: KINE 250 or KINE 255 or KINE 260; and KINE 265; and
junior standing.
Introduction to theory and methods to facilitate individual and group
behavior change to promote health and prevent disease. Concepts
from behavioral sciences and theories of health behavior change.
Development of needs assessment and health promotion program
design skills. 4 lectures.

KINE 435. Health Behavior Change Programs II. 4 units
Term Typically Offered: TBD
Prerequisite: KINE 298, KINE 319, and KINE 434.
Planning, implementation and evaluation of health promotion programs
in school, community, medical, public health, worksite, and college/
university settings. Planning, intervention design, implementation and
design of 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 or consent of instructor.
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: GE B2 , 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 or consent of instructor.
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 or consent of instructor.
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 330; or KINE 230 and KINE 231; KINE 304; KINE
311; 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 Health Promotion Programs. 3 units
Term Typically Offered: W
Prerequisite: KINE 250 or KINE 255 or KINE 260, and senior standing.
Designed to acquaint students with those events, situations and
relationships leading to healthy lifestyles in fitness and occupational
settings. Design and implementation of workplace health promotion
programs. 3 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.
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. Lifestyle Prescriptions for Wellness. 3 units
Term Typically Offered: F, W, SP
Prerequisite: FSN 210 or FSN 250; KINE 298; and KINE 303.
Understanding weight, physical activity, and dietary recommendations
for diverse patient populations. Effectively communicating with
patients. Promoting health behaviors in multidisciplinary exercise
science and health promotion settings. 3 lectures.
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 4 units.

KINE 467. 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: TBD
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: TBD
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: TBD
Prerequisite: KINE 303 or equivalent, and graduate standing.

Selected human diseases, their etiology, pathophysiology, symptoms, diagnosis, effects on health and physical performance, and as affected by preventive or therapeutic exercise. Not open to students with credit for KINE 304. 3 lectures.

KINE 505. Introduction to Issues, Ethics and Policies in Teaching. 1 unit
CR/NC
Term Typically Offered: F
Prerequisite: Graduate standing.

Knowledge and skills of teaching at the college level. Preparation and support for teaching 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.

KINE 510. Advanced Health Behavior Change Programs. 3 units
Term Typically Offered: TBD
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: KINE 402 or equivalent.
Analysis of control theories, research principles and motor learning variables involved in the acquisition of skilled movement with an emphasis on the behavioral level of learning. 3 seminars.

KINE 526. Sport and Exercise Psychology. 3 units
Term Typically Offered: TBD
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.
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: TBD
Prerequisite: Graduate standing.
Observation and analysis of teaching physical education and coaching sports with special emphasis in pedagogical systems. 2 seminars, 1 laboratory.

KINE 550. 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: TBD
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.