

2009-11 Cal Poly Catalog

Kinesiology Department

KINE–KINESIOLOGY

BASIC INSTRUCTIONAL PROGRAM

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 100 Adaptive Activity
 KINE 101 Gymnastics
 KINE 102 Tumbling and Vaulting
 KINE 103 Archery
 KINE 104 Badminton, Beg.
 KINE 105 Badminton, Int.–Adv.
 KINE 107 Billiards
 KINE 108 Basketball
 KINE 109 Bowling
 KINE 110 Cycling
 KINE 111 Fencing
 KINE 112 Bowling, Int.
 KINE 113 Intermediate Billiards
 KINE 116 Aerobic Exercise
 KINE 121 Golf, Beg.
 KINE 122 Golf, Int.–Adv.
 KINE 125 Jogging
 KINE 126 Judo
 KINE 129 Stretch, Flex and Relax
 KINE 131 Physical Conditioning
 KINE 132 Racquetball, Beg.
 KINE 133 Racquetball, Int.–Adv.
 KINE 135 Skin Diving
 KINE 136 Scuba Diving
 KINE 137 Self-Defense
 KINE 138 Karate
 KINE 139 Soccer
 KINE 140 Ultimate Disc
 KINE 142 Softball
 KINE 143 Swimming for Non-Swimmers
 KINE 144 Swimming, Advanced Beginner
 KINE 145 Swimming, Int.
 KINE 146 Swimming, Adv.
 KINE 147 Swim Conditioning
 KINE 148 Tennis, Beg.
 KINE 149 Tennis, Int.–Adv.
 KINE 150 Intermediate Karate
 KINE 151 Volleyball, Beg.
 KINE 152 Volleyball, Int.–Adv.
 KINE 154 Weight Training
 KINE 156 Aqua-Aerobics
 KINE 159 Wrestling
 KINE 174 Intramurals
 KINE 176 Fitness Walking

PROFESSIONAL ACTIVITIES

Priority for enrollment given to those students pursuing a major in Kinesiology. Kinesiology majors may apply a maximum of 12 units of credit earned in KINE 101-199 or KINE 208-229 toward the bachelor's degree. When applicable, course selection should be determined by students after consultation with their

advisor. All courses are one or two units and meet for two or four hours per week. The primary purpose of all professional activities is for students to attain intermediate skills in performance and analysis and knowledge of rules and strategy. Secondary purposes may include leadership and teaching experiences. In some classes a beginning level activity class (see Physical Education) will be recommended for individuals who have little or no previous experience.

KINE 208 Golf (1)

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)

Beginning to intermediate tennis skills, etiquette, rules, and equipment. Singles and doubles play. Leadership activity assigned. 1 activity.

KINE 211 Softball-Baseball (1)

Basic fundamentals of baseball and softball, including but not limited to throwing, catching, and hitting. Rules and strategies discussed and practiced. Leadership activity assigned. 1 activity.

KINE 212 Racquetball (1)

Beginning to intermediate racquetball skills. Rules, regulations, basic strokes and shots, strategies and tournament play. Leadership activity assigned. 1 activity.

KINE 213 Basketball (1)

Beginning to intermediate basketball skills. Skill development, knowledge of rules, advanced strategies for playing basketball. Leadership activity assigned. 1 activity.

KINE 214 Volleyball (1)

Beginning to intermediate volleyball skills. Basic fundamentals, rules, regulations, strategies, skill development and games. Leadership activity assigned. 1 activity.

KINE 216 Wrestling (1)

Beginning to intermediate skills. Basic fundamentals of wrestling, rules and regulations. Leadership activity assigned. 1 activity.

KINE 217 Flag Football/Football (1)

Beginning to intermediate skills. Basic skills, strategies, rules and regulations for flag football. Leadership activity assigned. 1 activity.

KINE 218 Aquatics (2)

Intermediate skill level in stroke technique including front crawl, backstroke, breaststroke, butterfly, elementary backstroke and sidestroke. Other aquatic skill activities introduced. Must be able to swim 25 yards non-stop in order to participate. Leadership activity assigned. 2 activities.

KINE 219 Progressive Resistive Strength Training (1)

Biomechanical principles for performing various exercises, and the muscle groups associated with those exercises. Training considerations involving load, repetitions, sets, regimens, training frequency, and rest/recovery intervals. Leadership activity assigned. 1 activity.

KINE 220 Group Fitness Activities (2)

Aerobic fitness activities appropriate for large and small group exercise sessions, and leadership skills associated with the delivery of these activities. Combative aerobic, water-based, flexibility, and muscular strength and endurance activities. Leadership activity assigned. 2 activities.

KINE 221 Combatives/Self Defense (1)

Beginner skills emphasizing offensive and defensive techniques for self-protection. 1 activity.

KINE 223 Cross Country and Track Events (1)

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)

Intermediate skills in performance and analysis. Knowledge of rules and strategies. Development of skills relating to performance, training, and scoring track field events. Leadership activity assigned. 1 activity.

¹ KINE 138 meets 3 hours per week.

KINE 226 Soccer (1)

Development of beginning and intermediate skills. Rules, regulations and game play. Leadership activity assigned. 1 activity.

KINE 227 Aerobic Dance and Activities (2)

Development of instructional competency in the basic components of aerobic exercise, specifically relating to aerobic dance. Emphasis on warm-up, cardiovascular fitness, heart-rate monitoring, dance choreography, elements of higher risk stretching, relaxation protocols and equipment. 2 activities.

KINE 228 Cooperative Games and Activities (1)

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)

Beginning and intermediate skills. Rules, regulations and strategies for competition. Leadership activity assigned. 1 activity.

ACADEMIC COURSES

Professional courses designed primarily for the student majoring in kinesiology.

KINE 241 Understanding Fitness and Training (1)

Introduction to physiological principles and factors which provide the basis for the development and maintenance of optimal physical fitness. 1 lecture.

Prerequisite: Concurrent enrollment in one course in the PE 101-199 series, or consent of instructor.

KINE 250 Healthy Living (4)**GE D4**

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. Fulfills GE D4.

KINE 255 Personal Health: A Multicultural Approach (4)**GE D4 USCP**

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)**GE D4 USCP**

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**. *Changed effective Summer 2009.*

KINE 270 Orientation to Kinesiology (4)

Designed to acquaint the student with disciplinary and professional perspectives in kinesiology, computer applications, and the Kinesiology program at Cal Poly. 4 lectures.

KINE 275 Sports Officiating (2)

Designed to provide knowledge, understanding, appreciation of officiating in general, and the development of skills in officiating. 1 lecture, 1 activity.

KINE 276 Athletic Coaching Theory (3)

Basic concepts, methods, practices, strategies and philosophies as they apply to competitive athletics. 3 lectures.

KINE 277 Coaching Practicum (2-3) (CR/NC)

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. Prerequisite: Consent of instructor.

KINE 280 First Aid/CPR (1) (CR/NC)

An American Red Cross certification course in Standard First Aid Adult/Child/Infant CPR. Skills and knowledge necessary in the treatment of life-threatening emergencies and other injuries and sudden illnesses. Red Cross First Aid/CPR certifications issued upon successful completion of certification requirements. Credit/No Credit grading only. 1 activity.

KINE 290 Selected Topics (1-4)

Directed group study of selected topics. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1 to 4 lectures. Prerequisite: Open to undergraduate students and consent of instructor.

KINE 300 Planning Techniques in Physical Education (3)

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. Prerequisite: KINE 270 and 2 courses from KINE 208-KINE 229 or equivalent. Concurrent: KINE 306.

KINE 301 Functional Muscle Anatomy (1)

Functional organization of the human muscular system. All major muscle groups, with emphasis on segmental motion. 1 laboratory. Prerequisite: KINE 270, ZOO 331 or concurrent enrollment.

KINE 302 Biomechanics (4)

Fundamental biomechanical concepts and their application to human movement activities, and analyses of exercise mechanics and skill performance. 3 lectures, 1 laboratory. Prerequisite: ZOO 331, KINE 301, KINE 270.

KINE 303 Physiology of Exercise (4)

Application of human physiology to exercise situations. 3 lectures, 1 laboratory. Prerequisite: KINE 270, ZOO 331, 332 (or transfer equivalent).

KINE 304 Pathophysiology and Exercise (3)

Selected human diseases, their etiology, pathophysiology, symptoms, diagnosis, effects on health and physical performance, and as affected by preventive or therapeutic exercise. 3 lectures. Prerequisite: KINE 303.

KINE 305 Drug Education (2)

Instruction on the nature and effect of the use of tobacco, alcohol, narcotics and restricted dangerous drugs. 2 lectures. Prerequisite: GE Area D4.

KINE 306 Assessment in K-12 Physical Education (3)

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. Prerequisite: KINE 270 and STAT 217/STAT 218. Concurrent: KINE 300.

KINE 308 Motor Development (3)

Motor development of individuals from birth to maturity. Emphasis on interrelationship between motor and cognitive characteristics and affective needs and interests. 3 lectures. Prerequisite: KINE 270, GE D4 or consent of instructor.

KINE 309 Creative and Nontraditional Games (3)

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. Prerequisite: KINE 300.

KINE 310 Concepts and Applications in Elementary Physical Education (3)

Movement as it relates to physical motor skill development, fitness, wellness, social development, cross-cultural understanding, and self-image. 2 lectures, 1 activity. Prerequisite: GE D4. Recommended: Junior standing.

KINE 315 Field Sports (3)

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. Prerequisite: KINE 300.

KINE 316 Net and Wall Games (3)

Introduction and preparation for teaching net and wall games 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 laboratories. Prerequisite: KINE 300, KINE 306.

KINE 317 Computer Applications in Kinesiology (2)

Applications of computers, data processing and information technology as related to understanding and solving problems in the field of kinesiology. Total credit limited to 4 units. 2 activities. Prerequisite: Basic computer literacy.

KINE 319 Measurement and Evaluation in Kinesiology (4)

Principles of test selection and administration, measurement and evaluation of data characteristics, and data analysis related to motor behavior and the performance of physical skills. 3 lectures, 1 activity. Prerequisite: KINE 270, STAT 217 or STAT 218.

KINE 323 Sport and Gender (4)**GE D5 USCP**

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. 4 lectures. Prerequisite:

Junior standing; completion of GE Areas A, D1 and either D3 or D4. Kinesiology majors will not receive GE Area D5 credit. Fulfills GE D5 and USCP.

KINE 324 Sport, Media and American Popular Culture (4) GE D5 USCP

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. Prerequisite: Junior standing; completion of GE Areas A, D1 and D3. Fulfills GE D5 and USCP.

KINE 354 Health Education Strategies (2)

Introduction to health promotion services, environment, and instruction within public and private settings. Strategies, methods, technology and resources used in the design and delivery of health education about infectious and non-infectious diseases. 2 activities. Prerequisite: BIO 111/BIO 115, KINE 250 or KINE 255.

KINE 384 Water Safety Instructor (4)

Analysis of swimming strokes and techniques with emphasis on teaching methods for beginners through advanced swimmers. Those students who complete the course requirements are eligible for American Red Cross Water Safety Instructor certification. 2 lectures, 2 activities. Prerequisite: Demonstrate proficiency in swimming or instructor permission.

KINE 396 Outdoor Education (3)

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. Prerequisite: KINE 300, KINE 306, and KINE 384.

KINE 400 Special Problems for Advanced Undergraduates (1-3)

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 6 units, with a maximum of 3 units per quarter. Prerequisite: Senior standing or consent of instructor.

KINE 401 Managing Kinesiology Programs (3)

Planning, organizing and controlling programs in public, commercial, private and clinical physical activity settings. Emphasis on legal, ethical and budgetary considerations. 3 lectures. Prerequisite: KINE major and senior standing or consent of instructor.

KINE 402 Motor Learning and Control (4)

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. Prerequisite: STAT 217 or STAT 218 or STAT 221 or equivalent coursework.

KINE 405 Community Health Promotion (4)

Practices to educate and empower communities toward actions that resolve health issues and problems. Sociological, historical, educational, environmental and biological influences on health status. 3 lectures, 1 activity. Prerequisite: KINE 250 or KINE 255 and GE Areas A and D3, junior standing.

KINE 406 Neuroanatomy (4)

Structure and function of the human nervous system. Afferent and efferent pathways involved in perception and action. Behavioral aspects of motor control and related neurological dysfunction and pathologies. Designed for allied health professions students. 4 lectures. Prerequisite: ZOO 331 and ZOO 332.

KINE 407 Adapted Physical Activity (4)

Major categories of disabling conditions with implications for the development of physical activity programs for specific disabilities. 3 lectures, 1 laboratory. Prerequisite: KINE 270, GE Area B2 and B3, sophomore standing. Recommended: ZOO 331, 332. *Formerly KINE 307.*

KINE 408 Exercise and Health Gerontology (4)

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. Prerequisite: KINE 250 or KINE 255, and one of the following: KINE 220, KINE 227, KINE 228, or KINE 219, senior standing or consent of instructor.

KINE 410 Psychology of Coaching (3)

Psychological considerations of the coach-athlete relationship and mental preparation of teams and individuals for competition and practice. Special

emphasis on the male and female adolescent with regard to the psychological implications of sports participation. 3 lectures. Prerequisite: Junior standing. Recommended: PSY 201 or PSY 202.

KINE 411 Psycho/Social Aspects of Physical Activity (4)

Psychological and sociological effects of physical activity on individuals and groups in American society. 4 lectures. Prerequisite: KINE 270 and junior standing. Recommended: Completion of GE Areas A and D3; PSY 201 or PSY 202.

KINE 416 Physical Education/Recreation Facilities (3)

Management, clientele considerations, facilities and outdoor areas planning and operations, personnel, finance and equipment as related to physical education and recreation areas and facilities. Consideration of architectural and environmental barriers. Field visits required. 3 lectures. Prerequisite: Upper division standing and consent of instructor for non-KINE/REC majors.

KINE 419 Physical Education Program Content in the Elementary School (3)

Cognitive and psychomotor competencies required to design a developmental physical education program for elementary aged school children. 2 lectures, 1 activity. Prerequisite: KINE 300 and two activity classes.

KINE 421 Strategies for Teaching Physical Education (3)

Systematic analysis and refinement of teaching skills within the discipline of physical education. 2 lectures, 1 activity. Prerequisite: KINE 419.

KINE 422 Teaching Elementary School Physical Education (4)

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. Prerequisite: KINE 421.

KINE 423 Teaching Middle School Physical Education (4)

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. Prerequisite: KINE 422.

KINE 424 Organization and Implementation of a K-12 Physical Education Program (4)

Methods of teaching K-12 physical education, with emphasis on alignment with the California Physical Education Challenge Standards, English language learners, special students, and educational technologies. 4 lectures. Prerequisite: KINE 425 or consent of instructor.

KINE 425 Teaching High School Physical Education (4)

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. Prerequisite: KINE 423, and one 300-level activity class.

KINE 426 Senior Seminar (2)

Capstone course which engages students in activities that integrate the sub-disciplines of kinesiology, and facilitates the development of a personal portfolio. 2 seminars. Prerequisite: Senior standing.

KINE 434 Health Promotion Program Planning: Theory and Practice (4)

Theory and methods to facilitate individual and group behavior change to promote health and prevent disease. Concepts from behavioral sciences, health behavior theory, motivation, and decision making. Development of planning and evaluation skills. 3 lectures, 1 laboratory. Prerequisite: KINE 250 or KINE 255, completion of GE Areas A and D3, and junior standing.

KINE 437 Directed Fieldwork (1-3) (CR/NC)

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. Prerequisite: Senior standing or consent of instructor.

KINE 438 Adapted Physical Activity Fieldwork (1-3) (CR/NC)

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. Prerequisite: KINE 407, and consent of instructor.

KINE 440 Physical Education Practicum (1)

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. Prerequisite: Consent of instructor.

KINE 443 Health Education for Teachers (4)

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. Prerequisite: GE B2, D4 and junior standing.

KINE 445 Electrocardiography (4)

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. Prerequisite: KINE 303 or consent of instructor.

KINE 446 Echocardiography (4)

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. Prerequisite: KINE 445 or consent of instructor.

KINE 450 Worksite Health Promotion Programs (3)

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. Prerequisite: KINE 250 or KINE 255, and senior standing.

KINE 451 Nutrition for Fitness and Sport (5)

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. 5 lectures. Prerequisite: KINE 250 or KINE 255, KINE 303. Recommended: CHEM 313.

KINE 452 Testing and Exercise Prescription for Fitness Specialists (4)

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. 2 lectures, 2 laboratories. Prerequisite: KINE 303, KINE 445 (or concurrent enrollment in KINE 445) or consent of instructor.

KINE 461 Senior Project (1)

Comprehensive report, or a field experience, or a synthesis of professional literature that integrates content from kinesiology courses. Topic must be approved by the instructor. 1 laboratory. Prerequisite: KINE 319 and completion of GE Area A.

KINE 462 Research Honors Senior Project (2-4)

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. 2-4 laboratories (minimum 60 hours). Prerequisite: KINE 319, completion of GE Area A, and consent of instructor.

KINE 463 Exercise Science and Health Promotion Fieldwork (3) (CR/NC)

200 hours of concentration specific practical experience over a ten-week period 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. Prerequisite: Senior standing, minimum GPA of 2.0, successful completion of all concentration coursework requirements and consent of fieldwork coordinator.

KINE 470 Selected Advanced Topics (1-4)

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. Prerequisite: Consent of instructor.

KINE 471 Selected Advanced Laboratory (1-4)

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. Prerequisite: Consent of instructor.

KINE 485 Cooperative Education Experience (6) (CR/NC)

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. Prerequisite: Sophomore standing and consent of instructor.

KINE 495 Cooperative Education Experience (12) (CR/NC)

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. Prerequisite: Sophomore standing and consent of instructor.

KINE 500 Individual Study (1-3)

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. Prerequisite: KINE 517 and consent of department head, graduate advisor, and supervising faculty member.

KINE 501 Evaluation of Literature and Current Trends in Kinesiology (3)

Analysis and evaluation of published studies and current trends in kinesiology. 3 seminars. Prerequisite: Graduate standing.

KINE 502 Current Trends and Issues in Physical Education and Sport (3)

Practical problems in physical education and sport and their solution in terms of desired objectives in these fields. 3 seminars. Prerequisite: Graduate standing.

KINE 503 Current Health Issues (3)

Advanced seminar investigating current health issues. Factors that influence health status, current and historical trends in health and disease, and the healthcare system in the U.S. 3 seminars. Prerequisite: KINE 250 or KINE 255 and graduate standing or consent of instructor.

KINE 504 Advanced Pathophysiology and Exercise (3)

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

KINE 505 Introduction to Issues, Ethics and Policies in Teaching (1) (CR/NC)

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. Prerequisite: Graduate standing.

KINE 510 Health Behavior Change (3)

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. Prerequisite: KINE 250 or KINE 255, KINE 503 or KINE 504.

KINE 511 Administration and Leadership in Kinesiology (3)

Principles and techniques of administration in health, activity and academic settings including budget, personnel supervision, resource acquisition, leadership techniques, and facility management. 3 seminars. Prerequisite: Graduate standing.

KINE 517 Research Methods in Kinesiology (3)

Experimental, descriptive, historical, philosophical, survey, and action research in kinesiology. Selection of adequate problems for investigation; various sampling techniques and analyses; use of library facilities; manuscript requirements for the thesis. 3 seminars. Prerequisite: KINE 501 or consent of instructor.

KINE 518 Research Prospectus and Proposal Writing (2) (CR/NC)

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. Prerequisite: KINE 517.

KINE 522 Advanced Biomechanics (4)

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.
Prerequisite: KINE 302 or equivalent.

KINE 525 Advanced Motor Learning and Control (3)

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. Prerequisite: KINE 402 or equivalent.

KINE 526 Sport and Exercise Psychology (3)

Theoretical and professional issues in the psychological foundations of sport and exercise. 3 seminars. Prerequisite: Graduate standing or consent of instructor.

KINE 530 Advanced Physiology of Exercise (4)

Physiological determinants of physical work capacity and sports performance. 3 seminars, 1 laboratory. Prerequisite: KINE 303 and graduate standing.

KINE 534 Advanced Health Promotion Program Planning: Theory and Practice (4)

Theory and methods to facilitate individual and group behavior change to promote health and prevent disease. Concepts from behavioral sciences, health behavior theory, motivation, and decision making. Development of planning and evaluation skills. Not open to students with credit in KINE 434. 3 lectures, 1 laboratory. Prerequisite: KINE 250 or KINE 255, KINE 503 or KINE 504, and graduate standing.

KINE 536 Advanced Electrocardiography (4)

Theory and application of electrocardiography and other techniques for cardiovascular assessment and treatment of cardiac disease and other abnormalities. 3 seminars, 1 laboratory. Prerequisite: KINE 445 or equivalent and graduate standing.

KINE 537 Internship (3–12) (CR/NC)

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. Prerequisite: Graduate standing and consent of instructor. Student must be advanced to candidacy.

KINE 539 Effective Practice in Teaching and Coaching (3)

Observation and analysis of teaching physical education and coaching sports with special emphasis in pedagogical systems. 2 seminars, 1 laboratory. Prerequisite: Graduate standing.

KINE 570 Selected Advanced Topics (4)

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. Prerequisite: Graduate standing or consent of instructor.

KINE 581 Graduate Seminar in Kinesiology (1–3)

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. Prerequisite: Graduate standing or consent of instructor.

KINE 585 Cooperative Education Experience (6) (CR/NC)

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. Prerequisite: Graduate standing and consent of instructor.

KINE 599 Thesis or Project (1-6)

Completion of a thesis or project pertinent to the field of kinesiology. Independent research under the guidance of the faculty. Prerequisite: KINE 517, KINE 518, consent of graduate committee and supervising faculty member.