### Kinesiology (KINE)

#### Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
<th>Grading</th>
<th>Field Trips Required</th>
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<tbody>
<tr>
<td>KINE 101A</td>
<td>Individual and Dual Activities: Archery</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101B</td>
<td>Individual and Dual Activities: Badminton</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101C</td>
<td>Individual and Dual Activities: Bicycling</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101D</td>
<td>Individual and Dual Activities: Bowling</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101F</td>
<td>Individual and Dual Activities: Golf</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101G</td>
<td>Individual and Dual Activities: Gymnastics</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101N</td>
<td>Individual and Dual Activities: Racquetball</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101P</td>
<td>Individual and Dual Activities: Skiing-Alpine</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101Q</td>
<td>Individual and Dual Activities: Skiing-Nordic</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 101S</td>
<td>Individual and Dual Activities: Tennis</td>
<td>2</td>
<td>Development of basic skills, techniques, rules and strategies through instruction and practice in a variety of individual and dual type sports and activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 114A</td>
<td>Physical Fitness and Conditioning Activities: Body Conditioning</td>
<td>2</td>
<td>Principles, practices and individual evaluation in a variety of fitness and conditioning activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 114B</td>
<td>Physical Fitness and Conditioning Activities: Circuit Training</td>
<td>2</td>
<td>Principles, practices and individual evaluation in a variety of fitness and conditioning activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 114C</td>
<td>Physical Fitness and Conditioning Activities: Jogging</td>
<td>2</td>
<td>Principles, practices and individual evaluation in a variety of fitness and conditioning activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 114E</td>
<td>Physical Fitness and Conditioning Activities: Weight Training</td>
<td>2</td>
<td>Principles, practices and individual evaluation in a variety of fitness and conditioning activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 114F</td>
<td>Physical Fitness and Conditioning Activities: Yoga</td>
<td>2</td>
<td>Principles, practices and individual evaluation in a variety of fitness and conditioning activities. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 120A</td>
<td>Somatic and Martial Arts Activities: Aikido</td>
<td>2</td>
<td>Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.</td>
<td>(GE=E3)</td>
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<tr>
<td>KINE 120B</td>
<td>Somatic and Martial Arts Activities: Tai Chi</td>
<td>2</td>
<td>Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.</td>
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</table>
KINE 120C. Somatic and Martial Arts Activities: Capoeira. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120D. Somatic and Martial Arts Activities: Judo. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120E. Somatic and Martial Arts Activities: Karate. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120F. Somatic and Martial Arts Activities: Self-Defense. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120G. Somatic and Martial Arts Activities: Cardio-Arts. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120H. Somatic and Martial Arts Activities: Fencing. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120I. Somatic and Martial Arts Activities: Wrestling. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected combative and martial arts movement forms. Graded ABC/no credit.

KINE 120J. Somatic and Martial Arts Activities: Pilates. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected somatic and martial arts movement forms. Graded ABC/no credit.

KINE 120K. Somatic and Martial Arts Activities: Tae Kwon Do. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected somatic and martial arts movement forms. Graded ABC/no credit.

KINE 120L. Somatic and Martial Arts Activities: Sampler. 2 Units.

(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected somatic and martial arts movement forms. Graded ABC/no credit.

KINE 121A. Team Activities: Basketball. 2 Units.

(GE=E3)
Basic skills, techniques, rules and strategies of selected team sports achieved through participation. Graded ABC/no credit.

KINE 121C. Team Activities: Flag Football. 2 Units.

(GE=E3)
Basic skills, techniques, rules and strategies of selected team sports achieved through participation. Graded ABC/no credit.

KINE 121F. Team Activities: Soccer. 2 Units.

(GE=E3)
Basic skills, techniques, rules and strategies of selected team sports achieved through participation. Graded ABC/no credit.

KINE 121G. Team Activities: Softball. 2 Units.

(GE=E3)
Basic skills, techniques, rules and strategies of selected team sports achieved through participation. Graded ABC/no credit.

KINE 121J. Team Activities: Team Handball. 2 Units.

(GE=E3)
Basic skills, techniques, rules and strategies of selected team sports achieved through participation. Graded ABC/no credit.

KINE 121K. Team Activities: Volleyball. 2 Units.

(GE=E3)
Basic skills, techniques, rules and strategies of selected team sports achieved through participation. Graded ABC/no credit.

KINE 137A. Aquatic Activities: Lifeguard Training. 2 Units.

(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit. (Red Cross certification available.).

KINE 137C. Aquatic Activities: Basic and Emergency Water Safety. 2 Units.

(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit. (Red Cross certification available.).

KINE 137D. Aquatic Activities: Boating and Canoeing. 2 Units.

(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit. (Field trips required. Red Cross certification available.).
KINE 137F. Aquatic Activities: Scuba Diving. 2 Units.
Prerequisites: skin diving or consent of instructor
(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit. (Field trips required. NAUI certification available. Doctors physical examination required.).

KINE 137G. Aquatic Activities: Skin Diving. 2 Units.
(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit. (Field trips required. NAUI certification available.).

KINE 137H. Aquatic Activities: Springboard Diving. 2 Units.
(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit.

KINE 137J. Aquatic Activities: Swimming. 2 Units.
(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit.

KINE 137K. Aquatic Activities: Water Polo. 2 Units.
(GE=E3)
Instruction and practice of basic skills and techniques used in aquatic activities. Graded ABC/no credit.

KINE 137L. Advanced Swimming for Fitness. 2 Units.
(GE=E3)
Instruction and practice in the basic skills and techniques utilized in selected somatic and martial arts movement forms. Graded ABC/no credit. Intended for those who have already taken an introductory swim class or who have prior swimming ability. Advanced swimming drill and lap swim workouts.

KINE 146A. Outdoor Skills Activities: Backpacking. 2 Units.
Introduction to and practice of basic skills, equipment and safety techniques common to the spectrum of outdoor/wilderness activities. Field trips required. Graded ABC/no credit.

KINE 146B. Outdoor Skills Activities: Camping. 2 Units.
Introduction to and practice of basic skills, equipment and safety techniques common to the spectrum of outdoor/wilderness activities. Field trips required. Graded ABC/no credit.

KINE 146C. Outdoor Skills Activities: Mountaineering. 2 Units.
Introduction to and practice of basic skills, equipment and safety techniques common to the spectrum of outdoor/wilderness activities. Field trips required. Graded ABC/no credit.

KINE 146D. Outdoor Skills Activities: Orienteering. 2 Units.
Introduction to and practice of basic skills, equipment and safety techniques common to the spectrum of outdoor/wilderness activities. Field trips required. Graded ABC/no credit.

KINE 146E. Outdoor Skills Activities: Survival Skills. 2 Units.
Introduction to and practice of basic skills, equipment and safety techniques common to the spectrum of outdoor/wilderness activities. Field trips required. Graded ABC/no credit.

KINE 147. A Fitness Odyssey. 2 Units.
(GE=E3)
A self-paced exercise program and/or plan of study for the mature adult. Programs designed to fit individual life style needs on a contract basis following examination of past and present activity patterns. Graded ABC/no credit.

KINE 148. Leisure Sports. 2 Units.
Mild to moderately active leisure activities suited to the capabilities and interests of the mature adult. Graded ABC/no credit.

KINE 149. Independent Activity Project. 2 Units.
Prerequisites: consent of department chair
(GE=E3)
Activity project designed to satisfy individual needs of students who cannot meet requirements of a regular activity class due to a medical, physical or other conflict; under the supervision of a faculty member. Graded ABC/no credit.

KINE 150A. Dance Activities: Aerobic. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150B. Dance Activities: Low-Impact Aerobic. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150C. Dance Activities: Step Aerobic. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150D. Dance Activities: Ballet. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150E. Dance Activities: Ethnic. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.
KINE 150F. Dance Activities: Jazz. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150G. Dance Activities: Modern. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150H. Dance Activities: Tap. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150I. Dance Activities: Country and Western. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150J. Dance Activities: Sampler. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150K. Dance Activities: Social. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 150L. Dance Activities: Archery. 2 Units.
(GE=E3)
Development of proficiency and practice in basic dance skills including the exploration, expression and creativity of movement as utilized in a variety of dance forms. Graded ABC/no credit.

KINE 160. Women's Intercollegiate Activities. 2 Units.
Enrollment limited to members of intercollegiate sports teams. The intercollegiate activity units may not be substituted for physical education activity units in the undergraduate degree requirements. Volleyball, cross country, basketball, tennis, softball, water polo, soccer. Graded ABC/no credit. May be repeated.

KINE 190. Men's Intercollegiate Activities. 2 Units.
Enrollment limited to members of intercollegiate sports teams. The intercollegiate activity units may not be substituted for physical education activity units in the undergraduate degree requirements. Soccer, basketball, golf, baseball. Graded ABC/no credit. May be repeated.

KINE 200. First Aid. 2 Units.
Introduction to the emergency care and treatment of illnesses and injuries including training in cardiopulmonary resuscitation (CPR). May lead to certification in Standard First Aid from the American Red Cross and/or CPR from the American Heart Association.

KINE 203. Introduction to Recreation. 4 Units.
Orientation to recreation as a profession. Meaning, content, history, philosophy and scope of the field of recreation. Formerly PE 203.

KINE 205. Foundations for Lifetime Fitness and Wellness. 2 Units.
(GE=E1)
Introduction and discussion of the interrelationship of physical fitness and wellness. Benefits associated with physical activity, and how exercise on a regular basis contributes to the development of healthier lifestyles. Topics include: components of physical fitness (including assessment techniques), weight control, nutrition, stress management, health benefits of active lifestyles, and exercise guidelines for each area of fitness.

KINE 210. Introduction to Kinesiology. 2 Units.
Provides an overview of the discipline of kinesiology. Formerly KINE 210A. Two hours lecture.

KINE 237. Water Safety Instruction. 2 Units.
Prerequisites: KINE 137A or 137C or equivalent
Materials and methods in organizing school, community and camp aquatic programs. Supervised practice in teaching aquatics. Meets standards for Red Cross certification. One hour lecture and three hours laboratory.

KINE 240. Exercise Science Software. 2 Units.
Examination and analysis of computer software utilized in exercise science, physical education and athletics. Content is consistent with skills necessary to prepare students as health fitness instructors by the American College of Sports Medicine. Four hours activity.

KINE 254. Field Experience. 2 Units.
Supervised off-campus observational field experience in a teaching, fitness or recreation setting. One hour lecture and three hours of observation.

KINE 261A. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Archery. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261B. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Badminton. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261C. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Dance. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261E. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Golf. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261F. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Gymnastics. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.
KINE 261G. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Racquetball. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261H. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Swimming. 2 Units.
Prerequisites: one of the following: Prerequisites: KINE 137A, KINE 137C, KINE 137J, KINE 137K or KINE 137L
The development of the fundamental techniques and skills for teaching these activities.

KINE 261J. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Tennis. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261K. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Track and Field. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261L. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Aerobic Exercise. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261M. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Martial Arts. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261N. Professional Activity Prep in Individual and Dual Sports/Movement Forms: Strength and Conditioning. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 261O. Professional Activity Preparation in Individual and Dual Sports/Movement Forms: Yoga. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 263A. Professional Activity Preparation of Team Sports: Basketball. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 263C. Professional Activity Preparation of Team Sports: Soccer. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 263D. Professional Activity Preparation of Team Sports: Softball. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 263E. Professional Activity Preparation of Team Sports: Volleyball. 2 Units.
The development of the fundamental techniques and skills for teaching these activities.

KINE 267. Sports Officiating. 2 Units.
An introduction to contest rules and mechanics of officiating for selected sports. Personal and philosophical bases for successful officiating are examined.

KINE 270. Introduction to Fitness and Testing. 2 Units.
Understanding the scientific basis for assessing physical conditional, fitness, and strength development. Acquisition of the skills and techniques necessary for designing and evaluating fitness programs for specific applications. Four hours activity. Formerly KINE 261D.

KINE 271. Recreation Leadership. 4 Units.
Organization, supervision and administration of recreation programs and practical experience in recreation situations which provide the opportunity to develop leadership skills.

KINE 277. Recreation Programming. 4 Units.
Prerequisites: KINE 203 or 271
Materials and methods used in planning and conducting programs in recreation, such as social recreation, dramatics, arts and sports.

KINE 301. Service Learning in Kinesiology. 2 Units.
Prerequisites: KINE 210
Supervised activities in Kinesiology that provide service to campus or community constituents based on field experiences for students to link their coursework with the discipline of Kinesiology. Graded ABC/no credit. May be repeated for credit.

KINE 305. Prevention and Treatment of Sports Injuries. 4 Units.
Prerequisites: BIOL 223 and BIOL 224
Theories and methods in the prevention, assessment, treatment and rehabilitation of sports injuries. Four hours lecture, laboratory experiences included. KINE 280. Materials fee required.

KINE 310. History and Philosophy of Physical Activity. 4 Units.
The evolution of sport and physical activity including historical and philosophical influences from ancient societies through the present. Formerly PE 310. Four hours lecture.

KINE 311. Introduction to Adapted Physical Education. 4 Units.
Provides an overview of adapted physical education. May not be taken for credit by students who have received credit for KINE 210B. Three hours lecture and two hours field experiences with individuals with disabilities.
KINE 323. Sociology of Physical Activity. 4 Units.
Sociocultural aspects of sport and physical activity, including socialization process, social issues, reflection of social values and interaction with other social institutions. Four hours lecture.

KINE 324. Psychology of Physical Activity. 4 Units.
A behavioral science perspective is used to examine sport and physical activity, including motivation, personality, anxiety, aggression, group cohesion. Includes theoretical foundations and practical application. Four hours lecture.

KINE 325. Motor Development Across the Lifespan. 4 Units.
Concepts of growth and motor development of human beings throughout the lifespan. Major emphasis on the period of birth through adolescence. Four hours lecture with demonstrations.

KINE 326. Analysis of Motor Skills. 4 Units.
Prerequisites: KINE 311
Analysis of motor skills for the purpose of conducting meaningful assessment for individuals with disabilities.

KINE 327. The Nature and Issues Concerning Individuals with Disabilities. 4 Units.
Key initial adapted physical education core competencies about the nature and issues associated with disabling conditions across the lifespan. Course required for the California Adapted Physical Education Specialist Credential.

KINE 328. Applied Behavior Management. 4 Units.
Applied behavior management strategies that have relevance and application to teaching physical education. Strategies to manage, motivate, and teach responsible behaviors in a variety of physical activity settings for individuals with and without disabilities. Emphasis is on single-subject applied research design. Course required for the California Adapted Physical Education Specialist Credential.

KINE 329. Seminar in Adapted Physical Activity. 4 Units.
Selected topics and personalities, both enduring and contemporary and significant to adapted physical activity (APA) and adapted physical education (APE). Course required for the California Adapted Physical Education Specialist Credential.

KINE 330. Movement Skill Assessment for Individuals with Disabilities. 4 Units.
Prerequisites: KINE 311
Application of psychological and neurological level of analysis of the factors that influence the acquisition and retention of gross motor skills with emphasis on the role of the sensory and motor control reflexes. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. Four hours lecture.

KINE 331. Field Experience I. 3 Units.
Supervised leadership experience in a teaching or fitness setting.

KINE 332. The Nature and Issues Concerning Individuals with Disabilities. 4 Units.
Prerequisites: completion of the general education requirement in mathematics
Selection, application and interpretation of evaluative measures used in pedagogical and in exercise science settings. Includes both descriptive and inferential statistics. Specific attention will be given to parametric techniques. Four hours lecture.

KINE 333. Applied Behavior Management. 4 Units.
Analysis of motor skills for the purpose of conducting meaningful assessment for individuals with disabilities.

KINE 334. Seminar in Adapted Physical Activity. 4 Units.
Prerequisites: KINE 311
Selected topics and personalities, both enduring and contemporary and significant to adapted physical activity (APA) and adapted physical education (APE). Course required for the California Adapted Physical Education Specialist Credential.

KINE 335. Methods and Techniques of Coaching. 4 Units.
Strategies, practice organization and planning for coaching of athletic teams. The purpose of school athletics, public relations responsibilities and personal qualities for success are examined.

KINE 336. Physical Activity and Aging. 4 Units.
Examination of the neurological and physiological changes associated with the aging process from post-adolescence through the senior years. Includes information concerning special planning, implementing and evaluation of adult oriented physical activity programs. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. Two hours lecture.

KINE 337. Outdoor Education and Camp Leadership. 4 Units.
Knowledge, concepts and techniques for the administration and organization of camps and for working with people in the out-of-doors. Includes a supervised leadership experience and field trips to observe camp facilities, programs and resources.

KINE 338. Nutrition for Health, Fitness and Sports. 4 Units.
Addresses nutrition needs of active people and athletes. Topics include, but not limited to macro and micro nutrient requirements for fitness and sport, popular nutrition supplements and ergogenic aids. (Offered as HSCI 382 and KINE 382. Students may not receive credit for both.) Four hours lecture. Recommended: BIOL 224.

KINE 339. Seminar in Adapted Physical Activity. 4 Units.
Prerequisites: completion of the general education requirement in mathematics
Selection, application and interpretation of evaluative measures used in pedagogical and in exercise science settings. Includes both descriptive and inferential statistics. Specific attention will be given to parametric techniques. Four hours lecture.

KINE 340. Physical Activity and Aging. 4 Units.
Examination of the neurological and physiological changes associated with the aging process from post-adolescence through the senior years. Includes information concerning special planning, implementing and evaluation of adult oriented physical activity programs. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. Two hours lecture.

KINE 341. Motor Control and Skill Learning. 4 Units.
A psychological and neurological level of analysis of the factors that influence the acquisition and retention of gross motor skills with emphasis on the role of the sensory and motor control reflexes. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. Four hours lecture. Formerly KINE 320.

KINE 342. Field Experience II. 3 Units.
Supervised leadership experience in a teaching or fitness setting.
KINE 471. Exercise Science Program Management. 4 Units.
Management and supervisory philosophies involved in administering fitness facilities. Includes scheduling, budgeting, public relations, legal liability, planning, supervision of personnel, and evaluation of programs and personnel. Four hours lecture.

KINE 472. Program Design in Physical Education. 4 Units.
Prerequisites: KINE 210
Basic skills necessary to design, implement and evaluate effective physical education programs in public schools. Formerly KINE 470. Four hours lecture.

KINE 473. Instructional Strategies in Physical Education. 4 Units.
Prepares future physical educators with skills to translate goals and objectives in the teaching-learning process into effective teaching behaviors. Four hours lecture. Formerly KINE 355.

KINE 479. Qualitative Biomechanics. 5 Units.
Prerequisites: BIOL 223, BIOL 224 and MATH 110
Analysis of movement and application of physical laws to human performance from a qualitative perspective. Four hours lecture and three hours laboratory.

KINE 480. Biomechanics. 5 Units.
Prerequisites: BIOL 223 and BIOL 224 and MATH 110 or MATH 120, OR MATH 192, OR MATH 211. Recommended: MATH 120 and PHYS 100
Application of physical laws to human performance; analytical and quantitative processes emphasized. Four hours lecture and three hours laboratory.

KINE 481. Exercise Physiology. 5 Units.
Prerequisites: BIOL 223 and BIOL 224
Effects of physical activity on the physiological systems of the human body. Four hours lecture and three hours laboratory.

KINE 482. Contemporary Fitness Programs. 4 Units.
Analysis of contemporary methods and technologies used in fitness programs. Critiques made in light of research findings and practical applications. Formerly PE 420 and 482.

KINE 483. Exercise Prescription. 4 Units.
Prerequisites: KINE 481, KINE 485, and KINE 486
Development of assessment skills, exercise prescription modules and training schedules for normal, high level fitness and special populations. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. Three hours lecture and three hours laboratory. Materials fee required.

KINE 485. EKG Interpretation. 2 Units.
Prerequisites: KINE 481
Introduction to electrocardiography. Basic concepts of EKG interpretation including electro-physiology, arrhythmia, electrode placement for both resting and graded exercise testing. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. Materials fee required. Four hours activity. Laboratory included.

KINE 486. Instrumentation in Exercise Science. 2 Units.
Prerequisites: KINE 481
Prepares students to calibrate and operate basic physiological equipment used in fitness assessment. Content is consistent with skills necessary to prepare students as a health and fitness specialist by the American College of Sports Medicine. One hour lecture and three hours laboratory. Materials fee required.

KINE 490. Senior Seminar in Kinesiology. 2 Units.
Prerequisites: senior standing or consent of instructor
Selected topics significant to the discipline of kinesiology. Two hours seminar.

KINE 493. Observational Field Experience in Exercise Science and Allied Health Professions. 2 Units.
Prerequisites: consent of instructor
Observational field experience (on or off-campus) in exercise testing, monitoring, and programming. Observation of professional and standard of care practices is consistent with American College of Sports Medicine practitioners is expected. One hour lecture and three hours of observation.

KINE 499. Methods and Materials in the Teaching of Physical Education. 4 Units.
Prerequisites: ESEC 332, senior or graduate standing and admission to the Single Subject Credential Program or consent of the College of Natural Sciences
Individualized instruction in the methods and materials for the teaching of physical education.

KINE 580. Exercise, Energy and Human Performance. 4 Units.
Prerequisites: KINE 481
Energy demands and dietary adjustments required in physical performance with emphasis on high intensity activities. Consideration of climactic factors, ergogenic aids and synthetic substance ingestion.

KINE 595A. Independent Study. 1 Unit.
Prerequisites: a minimum overall grade point average of 3.0, consent of instructor and departmental approval of a written proposal of a project submitted on a standard application filed in advance of the quarter in which the course is to be taken
Experimental effort, field or library research conducted under the direction of a faculty member. A total of six units may apply toward graduation.

KINE 595B. Independent Study. 2 Units.
Prerequisites: a minimum overall grade point average of 3.0, consent of instructor and departmental approval of a written proposal of a project submitted on a standard application filed in advance of the quarter in which the course is to be taken
Experimental effort, field or library research conducted under the direction of a faculty member. A total of six units may apply toward graduation.
**KINE 595C. Independent Study. 3 Units.**
Prerequisites: a minimum overall grade point average of 3.0, consent of instructor and departmental approval of a written proposal of a project submitted on a standard application filed in advance of the quarter in which the course is to be taken.
Experimental effort, field or library research conducted under the direction of a faculty member. A total of six units may apply toward graduation.

**KINE 595D. Independent Study. 4 Units.**
Prerequisites: a minimum overall grade point average of 3.0, consent of instructor and departmental approval of a written proposal of a project submitted on a standard application filed in advance of the quarter in which the course is to be taken.
Experimental effort, field or library research conducted under the direction of a faculty member. A total of six units may apply toward graduation.

**KINE 600. Graduate Seminar. 2 Units.**
Examination of selected disciplinary and professional issues in physical education through critical analysis of literature and research findings.

**KINE 623. Sport and Social Issues. 4 Units.**
Social aspects of sport including social values, race, gender, ethnicity and social deviance. Formerly PE 623 and 630.

**KINE 624. Sport Psychology. 4 Units.**
The study of underlying psychological factors in sports. To include educational implications, strategies with young athletes, and dynamics of the sport group.

**KINE 630. Physical Education for Special Populations. 4 Units.**
Physical activity assessment, and program development for individuals with disabilities.

**KINE 670. Leadership in Physical Education. 4 Units.**
Theory and analysis of leadership behavior in physical education. Emphasis on developing leadership knowledge, qualities, and skills applicable to diverse physical activity settings.

**KINE 681. Exercise and Sport Science. 4 Units.**
Includes discussion of physical activity and fitness across the lifespan, adaptations in exercise testing protocol and exercise prescription for individuals with disabilities, and epidemiological research of health benefits associated with physical activity and fitness. Emphasis on issues of children's fitness and assessment.

**KINE 685. Analysis of Human Movement. 4 Units.**
Theory and application of techniques used to analyze and describe human movement.

**KINE 999. Comprehensive Examination. 0 Units.**
Prerequisites: advancement to candidacy, approval of department, completion of course work in the masters program, and in good academic standing.
An assessment of the students ability to integrate the knowledge of the area, show critical and independent thinking and demonstrate mastery of the subject matter.