KINESIOLOGY (KIN)

KIN 100 Aerobics: Low Impact (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Introduction to aerobic fitness via cardio-vascular training. Includes warm-ups, stretching, various aerobic activities, light strength training and cool down. Aimed at improving cardiovascular endurance, strength, flexibility, weight control, stress management, energy level, and overall well-being. Basic physiological principles of exercise and exercise safety are highly stressed. A physical activity course for all levels of fitness and no previous experience is required. Activity. May be repeated for a total of 3 units.

KIN 103 Aerobics: Steps (Unit: 1)
Prerequisite: Priority enrollment for Kinesiology majors. Students in other majors admitted on a space-available basis.

A physical activity course designed to introduce students to cardio-vascular training using a hard plastic 4-inch "step" and additional risers to perform various exercises. Includes warm-ups, stretching, various stepping patterns, light strength training and cool down. Modifications allow everyone to participate at their own intensity. Activity. May be repeated for a total 3 units.

KIN 124 Fitness and Conditioning (Units: 2)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Learn and apply theories of fitness through practice with a focus on improving the individual's overall physical conditioning. Experience an improvement in cardiovascular endurance, strength, flexibility, weight control, stress management, energy level, and overall well-being. Physical activity course. Lecture, 1 unit; activity, 1 unit. May be repeated for a total of 6 units.

KIN 127 Personalized Fitness Programs (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Individualized training programs ranging from cardiovascular (endurance) to strength or resistance (weight) training. Instructors will design a program to meet the enrolled students' needs. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 136 Hatha Yoga (Unit: 1)
The word hatha literally means "force" and thus alludes to a system of physical techniques. In the 20th century, hatha yoga, particularly asanas (the physical postures), became popular throughout the world as a form of physical exercise, and is now colloquially termed as simply "yoga". Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 139 Jogging (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Learn proper jogging/running technique. Beginning with a slower pace and shorter distance and evolving to allow the student to complete a goal set by the student. An example of a common goal has been to successfully complete the Bay-to-Breakers seven mile run without needing to walk. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 142 Elementary Judo (Unit: 1)
Judo (meaning "gentle way") was created as a physical, mental and moral pedagogy in Japan in 1882. Categorized as a modern martial art that later evolved into a combat and Olympic sport. Its most prominent feature is its competitive element where the objective is to either throw or takedown an opponent to the ground, immobilize or otherwise subdue an opponent with a pin, or force an opponent to submit with a joint lock or choke. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 145 Elementary Karate (Unit: 1)
Predominantly a striking art, Karate uses punching, kicking, knee strikes, elbow strikes and open-hand techniques such as knife-hands, spear-hands, and palm-heel strikes. The basic techniques and philosophy behind the practice are taught in this elementary class. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 148 Elementary Kung Fu (Unit: 1)
Introduction to this Chinese Martial Art involving special hand movements, body positions, and breathing exercises. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 151 Tae Kwon Do (Unit: 1)
The Korean martial art form of Tae Kwon Do. Focus on learning the movement forms, the historical and cultural significance of this art form, and the modern evolution of Taekwondo. Activity. May be repeated for a total of 3 units.

KIN 158 Personal Defense (Units: 2)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Approximately one-third of the class will be discussion and the other two thirds a physical workout. Encourages students to think in terms of options and choices, develop awareness and assertiveness skills and provide practice for physical self-defense techniques. It should expand the way they think about violence prevention, help them deal with their fears and enable them to feel more empowered in their life. Physical activity course. Lecture, 1 unit; activity, 1 unit. May be repeated for a total of 6 units.

KIN 161 Shaolin Chuan: Tan-Tui (Unit: 1)
A Chinese exercise form that focuses on strength, flexibility and speed by mastering lines of quick movements, kicks and leaps. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 164 Elementary Soccer (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Introduction to understanding the rules of soccer, develop fundamental skills, and enjoy playing the world's most popular sport. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 171 Beginning Swimming: Non-Swimmers (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Introduction to the basic knowledge and skills of the beginning swimmer. Skills include breath holding, prone float, back float, and floating with kicking, and basic swim strokes. Physical activity course. Activity. May be repeated for a total of 3 units.
KIN 172 Elementary Swimming (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Instruction in the basic knowledge and skills of a beginning swimmer. Skills include breath holding, rhythmic breathing, prone float, floating with kicking, leading up to full standard swimming strokes. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 175 Elementary Tai-Chi Chuan (Unit: 1)
Ten basic exercises and 32 movements of the traditional form of Tai-Chi Chuan. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 176 Elementary Tennis (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Instruction in the basic strokes (forehand, backhand, serve and volley) used in playing tennis. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 177 Intermediate/Advanced Tai-Chi Chuan (Unit: 1)
Prerequisite: KIN 175 or consent of the instructor. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 178 Intermediate/Advanced Hatha Yoga (Units: 2)
Prerequisite: KIN 136 or consent of the instructor. Physical activity course. Activity. May be repeated for a total of 6 units.

KIN 236 Intermediate/Advanced Hatha Yoga (Units: 2)
Prerequisite: KIN 136 or consent of the instructor. Physical activity course. Activity. May be repeated for a total of 6 units.

KIN 242 Intermediate/Advanced Judo (Unit: 1)
Prerequisite: KIN 142 or consent of the instructor. Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Continued development of physical prowess and athletic ability with added importance placed on the psychological training associated with Judo. Learn to control feelings, emotions, impulses, values of perseverance, respect, loyalty, and discipline. Develop an outstanding work ethic, as well as important social manners and etiquette.克服 fears and show courage under pressure. Physical activity course. Activity. May be repeated for a total of 3 units.

KIN 250 Introduction to Kinesiology (Units: 3)
Prerequisites: Completion of GE Areas A and B4 with grades of C or better; priority enrollment for undeclared with interest in KIN or declared KIN major.

Introduction to and examination of Kinesiology and its various subfields; exploration of career opportunities. Lecture, 2 units; laboratory, 1 unit.

KIN 251 Success in the Kinesiology Major (Units: 2)
Prerequisites: Restricted to Kinesiology majors; concurrent enrollment in KIN 384GW.

A quality advising experience in a learning-centered environment that will prepare students to be active learners engaged in their educational and life goals while teaching them to become self-sufficient, lifelong learners. (Plus-minus ABC/NC)

KIN 255 Health-Related Fitness and Wellness (Units: 3)
Prerequisite: Completion of GE Areas A and B4 with grades of C or better; enrollment in an activity course is recommended.

Exploration of the roles of regular exercise, healthy eating habits, and stress management in the maintenance of health-related fitness and wellness over the lifespan.

Course Attributes:
- E1: Lifelong Learning Develop
- D1: Social Sciences
- Environmental Sustainability
- Global Perspectives
- Social Justice

KIN 257 Wellness, Fitness and the Global Perspective (Units: 3)
Introduction to human anatomy, physiology, the basic principles of exercise and wellness, and to the benefits and limitations of wellness practices around the world; blending physical movement and fitness training with academic skills including critical reading, research, and scholarly presentations. Lecture, 2 units; activity, 1 unit. (Plus-minus ABC/NC, CR/NC)

Course Attributes:
- E1: Lifelong Learning Develop
- Global Perspectives

KIN 272 Intermediate/Advanced Swimming (Unit: 1)
Prerequisite: KIN 172 or consent of the instructor. Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.

Development of form and fine-tuning of all swim strokes. Attention to distance swimming and swim speed. Physical activity course. Activity. May be repeated for a total of 3 units.
KIN 275 Intermediate/Advanced Tai-Chi Chuan (Units: 2)
Prerequisite: KIN 175 or consent of the instructor.
Learn the basic exercises and all 64 movements of the traditional form of Tai-Chi Chuan. Physical activity course. Lecture, 1 unit; activity, 1 unit. May be repeated for a total of 6 units.

KIN 294 CPR (Unit: 1)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.
General instructions and specific procedures for providing cardiopulmonary resuscitation and basic life-saving techniques. Certification in CPR for adults, children, and infants. May be repeated for a total of 3 units.

KIN 295 First Aid and Cardiopulmonary Resuscitation (CPR) (Units: 2)
Prerequisite: Priority enrollment given to Kinesiology majors. Students in other majors admitted on a space-available basis.
Instruction and specific procedures for providing immediate care to a person who has been injured or is experiencing a medical emergency. Certification in CPR of adults, children, and infants and Standard First Aid are provided. May be repeated for a total of 6 units.

KIN 298 Practicum in Kinesiology (Unit: 1)
Prerequisites: Consent of instructor and associate chair.
Individually directed experiences as leadership assistants in movement activities.

KIN 299 Practicum in Kinesiology (Unit: 1)
Prerequisites: Consent of instructor and associate chair.
Individually directed experiences as leadership assistants in movement activities.

KIN 305 Instructional Analysis: Track, Field and Gymnastics Floor Activities (Units: 2)
Prerequisites: KIN 340 or consent of the instructor. Sufficient experience to demonstrate basic proficiency in performing the fundamental skills of the activities in this course; otherwise, it is recommended that the student take the corresponding activity course(s) before enrolling in this course.
Analysis of fundamental skills and strategies in track and field and gymnastics floor activities, for teaching and coaching beginning and intermediate learners. Progressions, feedback, structuring effective learning environments in various teaching situations, individual differences. Lecture, 1 unit; activity, 1 unit.

KIN 306 Instructional Analysis: Racquet Sports (Units: 2)
Prerequisites: KIN 340 or consent of the instructor. Sufficient experience to demonstrate basic proficiency in performing the fundamental skills of the activities in this course; otherwise, it is recommended that the student take the corresponding activity course(s) before enrolling in this course.
Analysis of fundamental skills and strategies in badminton and tennis for teaching and coaching beginning and intermediate learners. Skill progressions, feedback, structuring effective learning environments, individual differences. Lecture, 1 unit, activity, 1 unit.

KIN 307 Instructional Analysis: Basketball and Volleyball (Units: 2)
Prerequisites: KIN 340 or consent of the instructor. Sufficient experience to demonstrate basic proficiency in performing the fundamental skills of the activities in this course; otherwise, it is recommended that the student take the corresponding activity course(s) before enrolling in this course.
Analysis of fundamental skills and strategies in basketball and volleyball for teaching and coaching beginning and intermediate learners. Skill progressions, feedback, structuring effective learning environments, individual differences. Lecture, 1 unit; activity, 1 unit.

KIN 308 Instructional Analysis: Fitness Activities (Units: 2)
Prerequisites: KIN 255 (may be taken concurrently); fitness assessment; or consent of the instructor.
Analysis of fundamental skills and strategies in teaching a variety of fitness activities. Lecture, 1 unit; activity, 1 unit.

KIN 309 Instructional Analysis: Soccer and Softball (Units: 2)
Prerequisites: KIN 340 or consent of the instructor. Sufficient experience to demonstrate basic proficiency in performing the fundamental skills of the activities in this course; otherwise, it is recommended that the student take the corresponding activity course(s) before enrolling in this course.
Analysis of fundamental skills and strategies in soccer and softball for teaching and coaching beginning and intermediate learners. Skill progressions, feedback, structuring effective learning environments, addressing individual differences. Lecture, 1 unit; activity, 1 unit.

KIN 310 Youth Development Instructional Analysis I (Units: 3)
Prerequisites: KIN 250 and KIN 384GW or consent of the instructor.
Introduction to the theoretical and practical applications of the Teaching Personal and Social Responsibility Model (TPSR), a youth development physical activity-based curriculum model. Focus on TPSR goals, strategies and a developmental progression for using the model. Learn how to teach, plan and assess fundamental movement skills, and facilitate the California Physical Education Standards through the context of softball and tennis. (Plus-minus letter grade only)

KIN 312 Youth Development Instructional Analysis II (Units: 3)
Prerequisites: Restricted to Kinesiology majors; upper-division standing; KIN 310 and KIN 384GW; or consent of the instructor.
Extended implementation of TPSR to the broader field of youth development including research conducted, assessment tools, unit plan development, and specifically how TPSR and Youth Development facilitate the California Physical Education Standards. Students will also continue learning how to teach, plan and assess fundamental movement skills through the context of basketball and volleyball. (Plus-minus letter grade only)
KIN 314 Theory and Application of Fitness Training (Units: 3)
Prerequisite: KIN 250 or consent of the instructor.

Science and methods of instruction related to resistance training and muscular strength activities. Hands-on course designed to teach students to safely and properly perform a variety of muscular strengthening exercises. Introduces and reviews fundamental principles of physiology and kinesiology underlying the ability to properly perform and instruct individuals of varying ages and physical abilities in the safe and effective performance of a wide variety of muscular strength and conditioning exercises. Includes exercises using a variety of resistance equipment including free weights and machines. (Plus-minus letter grade only)

KIN 322 Sport in America (Units: 3)
Prerequisites: Upper-division standing; KIN 250 with a grade of C or better; or consent of the instructor.

Interpretation of contemporary issues in sport from the perspective of American society. Professional sport, women in sport, and youth sport using a multimedia approach that includes film, print media, literature and historical texts.

KIN 325 Computer Applications in Kinesiology (Units: 3)
Prerequisites: Restricted to upper-division standing; KIN 250 with a grade of C or better; or consent of the instructor.

Information management for Kinesiology applications using computerized word processing, spreadsheets, graphics, outlining, and databases. Lecture, 2 units; activity, 1 unit.

KIN 331 Peak Performance (Units: 3)
Prerequisites: Restricted to students with upper-division standing; successful completion of GE Areas A1, A2, A3, and B4; ENG 214 or equivalent; or consent of the instructor.

Examination and understanding of the stress process, assessments of stress and the application of psychological intervention strategies to help bring about optimum performance in human movement as well as other endeavors. Practical application for maximizing human potential.

Course Attributes:
- E1: Lifelong Learning Develop
- UD-D: Social Sciences
- Global Perspectives
- Social Justice

KIN 340 Orientation to Teaching Physical Education (Units: 3)
Prerequisites: Upper-division standing; KIN 250 with a grade of C or better; or consent of the instructor.

Professionalism in school-based physical education. Contemporary view of physical education, guided observation in K-12 schools, self-assessment, and plan for professional development as a prospective teacher. Physical education as a career choice. (Plus-minus letter grade only)

KIN 355 Science, Sport, and Fitness (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4; ENG 214 or equivalent; or consent of the instructor.

Physiological and mechanical principles of sport and fitness. Evaluation of myths and truths about sport science, nutrition, injury prevention, physiology of exercise, sport, and individualized training programs.

Course Attributes:
- E1: Lifelong Learning Develop
- UD-B: Physical Life Science

KIN 384GW Research Methods in Kinesiology - GWAR (Units: 3)
Prerequisites: Restricted to upper division Kinesiology major; ENG 214 or equivalent with a grade of C- or better; KIN 250 and MATH 124 or equivalent all with grades of C or better; must be taken concurrently with KIN 251.

Understanding and applying research methods and statistics relevant for studying kinesiology. Topics include sampling, validity, reliability, experimental design, qualitative approaches, and statistical analyses. Development of students’ critical thinking and writing abilities specific to the discipline of kinesiology. (Plus-minus ABC/NC)

Course Attributes:
- Graduation Writing Assessment

KIN 401 Elementary School Physical Education, K-5 (Units: 3)
Prerequisites: Restricted to upper-division standing; ENG 214 or equivalent; two additional in GE Areas A and B4; KIN 250 or equivalent; or consent of the instructor. Physical Education majors must concurrently enroll in KIN 402.

Movement, fitness, and skill programs for children. Objectives, organization, and conduct of successful physical education programs. Lecture, 2 units; activity, 1 unit.

KIN 402 Practicum in Physical Education, N-5 (Unit: 1)
Prerequisites: Restricted to upper-division standing; ENG 214 or equivalent; two courses in GE Areas A and B4; KIN 250 or equivalent; or consent of the instructor. Physical Education majors must concurrently enroll in KIN 401.

Directed experiences as teaching assistants of physical education in preschool and elementary school programs.

KIN 437 Physical Dimensions of Aging (Units: 3)
Prerequisite for KIN 737: Graduate Kinesiology students or consent of the instructor.

Prerequisites for KIN 437: Restricted to upper-division Kinesiology majors; BIOL 212*; BIOL 220* or BIOL 328*, and Kin 384GW* or equivalents with grades of C or better; GPA of 3.0 or higher; or consent of the instructor.

Study of the physical aspects of aging from a developmental perspective in the adult years. The role of exercise and activity in the maintenance of functionality. Hypotheses of physical decline and the implications of age-related physical changes for daily living and activity patterns.

(KIN 737/KIN 437 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)
KIN 457 Culture, Gender and Movement (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW.*

Transmission of culture, values, and gender roles through a variety of movement forms. Interpretation of the cultural dimension of movement.
Course Attributes:
- Global Perspectives

KIN 480 Anatomical Kinesiology (Units: 4)
Prerequisites: Restricted to upper-division Kinesiology majors; BIOL 220 or BIOL 328 or equivalent with a grade of C or better; KIN 384GW* (may be taken concurrently).

Structure and function of the musculoskeletal system in movement; relation to external forces; principles of aggregate muscle function. Application to exercise, skill, activities of daily living. Lecture, 3 units; laboratory, 1 unit. (Plus-minus letter grade only)

KIN 482 Exercise Physiology (Units: 3)
Prerequisites: Restricted to upper division Kinesiology majors; completion of KIN 250, BIOL 212 and BIOL 213, or equivalent, all with grades of C or better. Must be taken concurrently with KIN 483.

Examination of the acute physiological responses to exercise and the adaptations that occur with systematic exercise training.

KIN 483 Exercise Physiology Laboratory (Unit: 1)
Prerequisites: Upper division standing or consent of instructor; completion of KIN 250, BIOL 212 and BIOL 213, or equivalent, all with grades of C or better; must be taken concurrently with KIN 482.

Effects of various types of exercise on the body’s physiological systems. Laboratory. (Plus-minus letter grade only)

KIN 485 Biomechanics (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; PHYS 101 and PHYS 102 or PHYS 111 and PHYS 112; KIN 384GW or equivalent; KIN 480*; all with grades of C or better.

Mechanical principles applied to analyzing human movement. Interaction of mover and physical environment; efficiency in tasks of daily living, work settings, sport, and exercise. Lecture, 2 units; laboratory, 1 unit. (Plus-minus letter grade only)

KIN 486 Motor Learning (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW* (may be taken concurrently).

Acquisition and development of motor skill with application to teaching and therapeutic intervention. Coordination, perception, task analysis, learning, and the facilitation of skill acquisition.

KIN 487 Motor Development (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 250 with a grade of C or better.

A developmental perspective on the physical, psychological, and social factors which contribute to the acquisition of motor control and movement performance from the prenatal stage through old age.

KIN 488 Assessment in Physical Education (Units: 3)
Prerequisite: GE Area B4 with a grade of C or better or consent of the instructor.

Testing and measuring performance; history of test construction and use; selected statistical methods; test administration and evaluation. Lecture, 2 units; activity, 1 unit.

KIN 489 History and Philosophy of Sport and Physical Activity (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW.

History and philosophy of physical activity from ancient times to the early 20th century. Evolution of attitudes towards exercise and physical fitness.

KIN 490 Introduction to Sport and Fitness Program Management (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors.

Introduction to the academic and professional field of sport and fitness administration and management by grounding students in the history, socio-cultural context, and structure of community and private fitness clubs and university, elite amateur, and professional sports organizations.

KIN 502 Sport and Social Issues (Units: 3)
Prerequisites: Restricted to students with upper-division standing; successful completion of GE Areas A1, A2, A3, and B4; ENG 214 or equivalent; or consent of the instructor.

This course examines contemporary issues in sport from the perspectives of sociology and cultural studies. Course material focuses on the intersections between sport and education, media, and politics, as well as on gender, race, ethnicity, and class dynamics in sport. The application of social justice concepts to sport is emphasized.
Course Attributes:
- UD-D: Social Sciences
- UD-E: Ethnicity
- Social Justice

KIN 504 Sport and Exercise Psychology (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW (may be taken concurrently).

Psychological factors influencing the performance of physical activity in sport, exercise, educational, and rehabilitative settings, including social implications, theoretical perspectives, and application of research findings in the areas of sport and exercise psychology. (Plus-minus letter grade only)

KIN 510 Sport, Movement and Screen Culture (Units: 3)
Prerequisites: Restricted to students with upper-division standing; successful completion of GE Areas A1, A2, A3, and B4; ENG 214 or equivalent; or consent of the instructor.

Examination of how the cultural, political, psychological, and historical dimensions of sport and other forms of movement are portrayed in feature films and documentaries. Presentations of identity, power, performance, social justice, and the body are also analyzed.
Course Attributes:
- UD-C: Arts and/or Humanities
- Global Perspectives
- Social Justice
KIN 536 Movement for Individuals with Mild Disabilities (Units: 4)
Prerequisites: Restricted to upper-division standing; KIN 250 with a grade of C or better; 6 units of upper-division KIN courses; or consent of the instructor.

Severe and profound disabling conditions throughout the lifespan as they relate to the development and efficiency of movement. Implications for design and conduct of movement programs, inclusion, and evaluation of individual needs.

**KIN 537 Movement for Individuals with Severe Disabilities (Units: 3)**
Prerequisites: Restricted to upper-division standing; KIN 250 with a grade of C or better; 6 units of upper-division KIN courses; or consent of the instructor.

KIN 538 Therapeutic Exercise (Units: 3)
Prerequisites: Restricted to upper-division standing Kinesiology majors; KIN 480; KIN 482 or KIN 355.

Fitness programming, conditioning, and stress reduction for individuals who are disabled. Factors that influence exercise and the disabled include positioning, use of assistive devices, specifically designed equipment, wheelchairs, and utilization of personal aids.

**KIN 539 Motor Assessment of Individuals with Disabilities (Units: 3)**
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW; KIN 536 and KIN 537 recommended.

Evaluation and diagnosis of motor ability problems for individuals with disabilities. Evaluation methods and the development of individual education plans.

**KIN 555 Exercise Testing and Prescription (Units: 3)**
Prerequisites: KIN 189 or equivalent, KIN 480, KIN 482, and KIN 483; or consent of the instructor.

Principles and practices of prescribing exercise to healthy individuals and individuals with conditions such as cardiac problems, asthma, diabetes, pregnancy, and physical disabilities. Assists in preparation for ACSM certification. Lecture, 2 units; activity, 1 unit. (Plus-minus letter grade only)

KIN 570 Directed Coaching Experience (Unit: 1)
Prerequisites: Restricted to upper-division standing; KIN 250; 6 units in the coaching sequence; or consent of the instructor.

Assistant coaching experience, recreation leagues, youth, interscholastic or intercollegiate athletics. The coaching site must be approved in advance. (CR/NC grading only)

**KIN 580 Instructional Strategies for Middle and High School Physical Education, Grades 6-12 (Units: 3)**
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW; KIN 486 or KIN 487; concurrent enrollment in KIN 581.

Strategies and teaching styles to establish the environment for learning motor skills. Long- and short-term planning, class management and communication techniques, evaluation procedures, and basic legal considerations.

KIN 581 Practicum in Middle and High School Physical Education (Unit: 1)
Prerequisites: Restricted to upper-division Kinesiology majors; enrollment in a teaching credential program; KIN 384GW; concurrent enrollment in KIN 580.

Directed experiences in teaching and coaching youth and adolescents in activities common to middle and high school physical education programs. (Plus-minus letter grade only)

**KIN 620 Advanced Practicum in Kinesiology (Units: 2)**
Prerequisites: Restricted to upper-division standing or consent of the instructor and associate chair; KIN 250 with a grade of C or better; and successful completion of GE Areas A and B4.

Individually directed experiences as student trainers, varsity sport managers, or special leadership assistants in kinesiology. [CSL may be available]

**KIN 621 Advanced Practicum in Kinesiology (Units: 2)**
Prerequisites: Restricted to upper-division standing or consent of instructor and associate chair; KIN 250 with a grade of C or better; and GE completion of Area A and GE Area B4

Individually directed experiences as student trainers, varsity sport managers, or special leadership assistants in kinesiology.

**KIN 630 Internship in Adapted Physical Education (Units: 3)**
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 384GW; KIN 536, KIN 537, and KIN 538 (may be taken concurrently); or consent of the instructor.

Directed experiences with exceptional individuals participating in PE programs in schools or other agencies; supervised development of individual plans. Includes weekly seminars.

**KIN 636 Neuromotor Control Processes (Units: 3)**
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 486 with a grade of C or better; or consent of the instructor.

Neuromuscular processes underlying coordination and control of movement in the context of skill. (Plus-minus letter grade only)

**KIN 680 Quantitative Analysis of Human Movement (Units: 3)**
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 485 with a grade of C or better; or consent of the instructor.

Quantitative analytic tools and techniques applied to movement. Identification and measurement of biomechanical correlates as means of understanding coordination and movement strategies in the context of development, learning, performance, and rehabilitation. Lecture, 2 units; laboratory, 1 unit. (Plus-minus letter grade only)

**KIN 681 Muscle Mechanics (Units: 3)**
Prerequisites for KIN 781: Graduate standing; KIN 480 and KIN 482 or equivalents; or consent of the instructor.

Prerequisites for KIN 681: Restricted to upper-division Kinesiology majors; KIN 482, KIN 483, and KIN 485; GPA of 3.0 or higher; or consent of the instructor.

Basic and applied physiological properties of skeletal muscles, tendons, and ligaments, in the context of the physiological adaptations from disuse, injury, and training. (Plus-minus letter grade only)

(KIN 781/KIN 681 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)
KIN 683 Applied Exercise Physiology (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 482 and KIN 483 with grades of C or better; or consent of the instructor.
Application of basic exercise physiology principles to the enhancement of energy capacity, work tolerance under environmental stress, the metabolic basis for weight and body composition control, and aging/health-related aspects of exercise. Lecture, 2 units; activity, 1 unit.

KIN 685 Projects in the Teaching of Kinesiology (Units: 1-3)
Prerequisites: Restricted to upper-division Kinesiology majors; consent of the associate chair and supervising instructor; grade of B or better in the course in which the student will be an instructional aide.
Teaching experiences in Kinesiology through assigned instructional projects in a classroom or laboratory, and under the guidance of a faculty member. Training in pedagogical principles, including supervised classroom teaching activities. Units may not be applied towards fulfilling major requirements. (Students may earn a maximum of 4 units toward the baccalaureate degree for any course(s) numbered 685 regardless of discipline.)

KIN 690 Internship in Fitness/Wellness (Units: 3)
Prerequisites: Restricted to upper-division Kinesiology majors; KIN 482, KIN 483, and KIN 490; or consent of the instructor. KIN 555 is strongly recommended. Attendance at MANDATORY meeting at the end of the semester PRIOR to enrollment is required. Dates and times will be posted in the gymnasium.
Work as a trainee with professionals in the field of fitness/wellness and extend learning experiences beyond those acquired on campus.

KIN 696 Kinesiology Community-Based Internship (Units: 3)
Prerequisites: Upper-division Kinesiology majors; KIN 482, KIN 483, KIN 485, KIN 486, and KIN 504; or consent of the instructor. Enrollment priority given to graduating seniors.
Kinesiology community-based internship with youth in underserved communities coupled with a theory-practice project. (Plus-minus letter grade only) [CSL may be available]

KIN 697 Integrative Research Seminar (Units: 2)
Prerequisites: Restricted to upper-division Kinesiology majors; Concurrent enrollment in KIN 698; or consent of the instructor. Enrollment priority given to graduating seniors.
Critical analysis and research design to explore a topic in exercise and movement science from a multidisciplinary perspective. (Plus-minus letter grade only)

KIN 698 Senior Research Project (Unit: 1)
Prerequisites: Restricted to upper-division Kinesiology majors; concurrent enrollment in KIN 697; or consent of the instructor. Enrollment priority given to graduating seniors.
Conduct an appropriate research study in the student’s area of concentration. Laboratory. (Plus-minus letter grade only)

KIN 699 Independent Study (Units: 1-3)
Prerequisites: Restricted to upper-division standing; overall GPA of 3.0 or above; consent of the associate chair and supervising instructor.
Intensive study of a particular problem under the direction of an instructor in the department. May be repeated for a total of 6 units. [CSL may be available]

KIN 710 Research in Kinesiology (Units: 3)
Prerequisites: Graduate standing in kinesiology; a computer and a statistics course; or consent of instructor.
Descriptive, quasi-experimental, experimental, and qualitative research in kinesiology. (Plus-minus letter grade only)

KIN 715 Research Designs and Analysis (Units: 3)
Prerequisite: KIN 710 or consent of instructor.
Designs and statistics in descriptive, experimental, quasi-experimental, and qualitative research. (Plus-minus letter grade only)

KIN 730 Advanced Biomechanics (Units: 3)
Prerequisites: Graduate standing; undergraduate course in biomechanics or kinesiology; or consent of instructor.
Techniques for qualitative and quantitative analysis of movement as a mean of understanding movement processes.

KIN 733 Motor Learning (Units: 3)
Prerequisites: Graduate standing; KIN 486 or equivalent, or consent of instructor.
Factors influencing the development and acquisition of motor skill from a multidisciplinary perspective. Current theory and research in motor skill is discussed with implications for practice. (Plus-minus letter grade only)

KIN 734 Physical Activity Programs for Underserved Youth (Units: 3)
Prerequisite: Graduate standing or consent of instructor.
A survey of the theory and practice of physical activity-based programs for underserved youth that emphasize life skills and active learning. Understanding the theoretical dynamics of physical activity on youth development and its potential for practical application. (Plus-minus letter grade only)

KIN 736 Advanced Neuromotor Control (Units: 3)
Prerequisite: Graduate standing or consent of instructor.
Advanced neuromotor control will cover the current theories and underlying neuropsychology of motor control and learning. (Plus-minus letter grade only)

KIN 737 Physical Dimensions of Aging (Units: 3)
Prerequisite for KIN 737: Graduate Kinesiology students or consent of the instructor.
Prerequisites for KIN 437: Restricted to upper-division Kinesiology majors; BIOL 212*, BIOL 220* or BIOL 328*, and Kin 384GW* or equivalents with grades of C or better; GPA of 3.0 or higher; or consent of the instructor.
Study of the physical aspects of aging from a developmental perspective in the adult years. The role of exercise and activity in the maintenance of functionality. Hypotheses of physical decline and the implications of age-related physical changes for daily living and activity patterns. (KIN 737/KIN 437 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

KIN 740 Advanced Exercise Metabolism (Units: 3)
Prerequisites: Graduate standing; KIN 482 or equivalent; or consent of instructor.
Historical and contemporary evaluation of energy metabolism, nutrition, and neuromuscular functions.
KIN 742 Exercise and Cardiovascular Dynamics (Units: 3)
Prerequisites: Graduate standing; KIN 482 or equivalent; or consent of instructor.
Understanding the regulation of the cardiovascular system as it relates to regulatory mechanisms for acute and chronic exercise. (Plus-minus letter grade only)

KIN 746 Clinical Exercise Physiology (Units: 3)
Prerequisites: Graduate Standing; KIN 482 or equivalent; or consent of instructor.
Examination of acute and chronic responses to exercise in patients with various cardiac, pulmonary, metabolic, and musculoskeletal diseases. Emphasis is placed on physical activity epidemiology, the pathophysiology of the disease process, assessment of disease severity, and current literature examining the effectiveness of physical activity/exercise training as a treatment strategy. (Plus-minus letter grade only)

KIN 750 Curriculum and Instruction I: Physical Education (Units: 3)
Prerequisite: Admission to credential program or consent of instructor.
Principles and practices for teaching physical education, including planning of content and instruction with consideration of student learning and state standards. (Plus-minus letter grade only)
Course Attributes:
• Teacher Credential Program Crs

KIN 755 Exercise Electrocardiography, Testing, and Prescription (Units: 3)
Prerequisites: Graduate Standing; KIN 482 or equivalent; or consent of instructor.
In-depth theoretical background for exercise, electrocardiography, testing, and prescription for individuals and groups in clinical, corporate, community and occupational settings. (Plus-minus letter grade only)

KIN 763 Motivation and Performance (Units: 3)
Prerequisite: Graduate standing; KIN 504 or equivalent; or consent of instructor.
Psychological perspectives of human performance and research findings in the areas of sport and exercise psychology; awareness of literature focused on the psychological dimension. (Not open to students who have completed KIN 663.) (Plus-minus letter grade only)

KIN 766 Sociocultural Bases of Physical Activity (Units: 3)
Prerequisite: Graduate standing or consent of instructor.
Sociocultural factors underlying participation in physical activity, sport, and exercise. Implications for the practitioner.

KIN 781 Muscle Mechanics (Units: 3)
Prerequisites for KIN 781: Graduate standing; KIN 480 and KIN 482 or equivalents; or consent of the instructor.
Prerequisites for KIN 681: Restricted to upper-division Kinesiology majors; KIN 482, KIN 483, and KIN 485; GPA of 3.0 or higher; or consent of the instructor.
Basic and applied physiological properties of skeletal muscles, tendons, and ligaments, in the context of the physiological adaptations from disuse, injury, and training. (Plus-minus letter grade only)
(KIN 781/KIN 681 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

KIN 795 Seminar in Kinesiology (Units: 3)
Prerequisites: Completion of 15 advancement to candidacy (ATC) units; and completion of KIN 710 and KIN 715.
Interdisciplinary seminar on relevant kinesiology issues, areas of interest, problems, and future directions. Involves extensive analysis of recent and significant research. (Plus-minus letter grade only)

KIN 895 Master's Project in Kinesiology (Units: 3)
Prerequisite: Completion of core and concentration requirements; consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies.
Development of a research question on a topic approved by faculty with literature review, methodology and statistical analysis. Includes proposal and oral presentation. Advancement to Candidacy and Proposal for Culminating Experience Requirement must be approved by Graduate Studies before registration. (CR/NC grading only)

KIN 896 Directed Reading in Kinesiology (Units: 3)
Prerequisites: Completion of 21 units on the ATC; consent of adviser and instructor.
Integrating information in movement and exercise science or a significant issue. May be repeated once for a total of 6 units.

KIN 897 Independent Research in Kinesiology (Units: 3)
Prerequisites: Classified graduate status for the Master of Arts; KIN 710, KIN 715 or equivalent; twelve graduate units completed in M.A. program; and consent of graduate adviser.
Independent, original research investigation supervised by a graduate adviser. For students who selected the thesis culminating experience. (CR/NC grading only)

KIN 898 Master's Thesis (Units: 3)
Prerequisites: Classified graduate status for the Master of Arts; KIN 897; and consent of graduate major adviser and instructor; and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies. Advancement to Candidacy and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration. (CR/NC grading only)

KIN 899 Independent Study (Units: 1-3)
Prerequisites: Completion of 15 advancement to candidacy (ATC) units; and consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies.
Consent of instructor. For students who selected the thesis culminating experience. (CR/NC grading only)