

**KINES 111. The Olympic Games (3)**  
Prerequisites: G.E. Foundation and Breadth Area D. History, development, and significance of the Olympic Games; Olympism as a microcosm of cross-cultural, political, economic, and gender relationships. G.E. Integration ID. FS

**KINES 112C. Officiating Track and Field (1)**  
Analysis and interpretation of rules for track; procedures, mechanics, and practice in officiating. (1-2 hour lecture/lab) S

**KINES 116. Fundamentals of Biomechanics (3)**  
Prerequisites: KINES 20 (may be taken concurrently); BIOL 33 (or BIOL 64 and 65) (or BIOL 64 and PHTH 119). Study of structural and mechanical properties of musculoskeletal system, associated movement function of human body, and applied physics. (2 lecture, 2 lab hours) FS

**KINES 118. Fundamentals of Exercise Physiology (3)**  
Prerequisites/corequisites: KINES 20; KINES 35 (or BIOL 33) (or BIOL 64 and 65). The study and application of physiological bases of movement, work, response, and adaptation to exercise. Environmental conditions, gender, and age considered. FS

**KINES 119. ECG and Clinical Exercise Physiology (3)**  
Prerequisites: BIOL 64 and 65; KINES 118. Foundational principles and concepts of electrocardiography and clinical applications of principles and concepts of exercise physiology. F

**KINES 120. Planning Strategies for Physical Education (3)**  
Prerequisites: KINES 20, 25, 31, 32, 35, 116; KAC Area A and B. Organization, presentation, and evaluation of in-class demonstrations. Philosophy of teacher preparation covered and developed through practice, observation, planning and presentations. (2 lecture, 2 lab hours) FS

**KINES 121. Body Composition: Theory, Principles, and Management (3)**  
Prerequisite: BIOL 1A or BIOL 10. Concepts and models of body composition. Theoretical principles underlying measurement of body composition; practical application of principles to measurement. Behavioral strategies for optimization of body composition. F (Formerly KINES 180T)

**KINES 122. Nontraditional Games and Outdoor Education (3)**  
Prerequisites: KINES 20, 25, 31, 32, 33, 35, 116, 118, 120; KAC Area A and B. Study of a variety of recreational, multicultural, and non-traditional games, as well as outdoor education for lifelong participation. (2 lecture, 2 lab hours) FS

**KINES 123. Analysis and Application: Rhythmic Movement in Physical Education (3)**  
Prerequisites: KINES 20, 25, 31, 32, 33, 35, 116, 118, 120; KAC Area A and B. Practical experience in learning, refinement, and analysis of skills, with focus upon appropriate teaching models and strategies for gymnastics/tumbling and dance. (1 lecture, 4 lab hours)

**KINES 125A. Coaching Football (3)**  
Principles underlying participation in competitive football. S

**KINES 125B. Coaching Basketball (3)**  
Principles underlying participation in competitive basketball. F

**KINES 125C. Coaching Track and Field (3)**  
Principles underlying participation in competitive track and field. S

**KINES 125D. Coaching Baseball (3)**  
Principles underlying participation in competitive baseball. F

**KINES 126. Analysis and Application: Aquatics (3)**  
Prerequisites: KINES 20, 31, 32 (with KAC 103), 33, 35, 110, 116, 118, 120, 122, 123, 131; KAC Area A and B. Overview of aquatics: elementary through advanced skills (infant through adult). Emphasis on sequencing skills and water safety certification. Required to teach physical education in California public schools. (2 lecture, 2 lab hours) FS

**KINES 131. Analysis and Application: Individual, Team, and Fitness Activities (3)**  
Prerequisites: KINES 20, 25, 31, 32, 33, 35, 116, 118, 120; KAC Area A and B. Analysis and application of strategies for teaching individual, team, and fitness activities. Principles, theory, and practice of fitness and teaching in adapted or mainstream settings. (1 lecture, 4 lab hours)

**KINES 136. Psychology in Athletic Training and Rehabilitation (3)**  
An examination of selected concepts in psychology as they relate to athletic training. Psychological applications are studied in the following domains of athletic training: prevention, recognition, immediate care, and rehabilitation.

**KINES 137. Structural Biomechanics (3)**  
Prerequisites: KINES 20 (may be taken concurrently); BIOL 64 or PHTH 119. Human movement: biological and mechanical bases, application of musculoskeletal considerations, and principles of mechanics to human movements. F

**KINES 138A. Injury/Illness Assessment I (3)**  
Prerequisites: KINES 20, 38, 137. Assessment techniques and care for injury/illness to the head, face, and upper extremity. Integration of anatomical structures and evaluative techniques to provide the basis for critical decision-making in injury management. (2 lecture, 2 lab hours) F

**KINES 138B. Injury/Illness Assessment II (3)**  
Prerequisites: KINES 138A. Assessment techniques and care for injury/illness to the trunk and lower extremity. Integration of anatomical structures and evaluative techniques to provide the basis for critical decision-making in injury management. (2 lecture, 2 lab hours) S

**KINES 139. Therapeutic Modalities in Athletic Training (3)**  
Prerequisites: KINES 20, 38; BIOL 64 or PHTH 119. The theory and application of various therapeutic modalities used in the treatment of athletic injuries. (2 lecture, 2 lab hours) F

**KINES 140A. Rehabilitation Techniques in Athletic Training I (3)**  
Prerequisites: KINES 137, 138A, 138B, 139. Clinical applications, parameters, and principles governing rehabilitation techniques prevalent in modern athletic training. (2 lecture, 2 lab hours) F

**KINES 140B. Rehabilitation Techniques in Athletic Training II (3)**  
Prerequisites: KINES 140A. Kinesiological factors for integrative application of rehabilitation techniques to spine and extremities. Explores post-operative and rehabilitation considerations for returning active patients to a variety of settings and athletic venues. (2 lecture, 2 lab hours) S

**KINES 141. Organization and Administration in Athletic Training (3)**  
Prerequisites: KINES 20, 38, and senior status. Current issues in athletic training, organization, administration, and professional preparation. S

**KINES 142. Seminar in Athletic Training (1; max total 4)**  
Taken concurrently with KINES 143. A seminar course designed to focus on and review the athletic training competencies. FS

**KINES 143A-D. Practicum in Athletic Training (2; max total 8)**  
Prerequisites: admission into Athletic Training Education Program. Students are instructed and evaluated while performing athletic training proficiencies on patients under the direct supervision of approved clinical instructors. Involves approximately 250 to 300 hours. CR/NC grading only. 143A&C - F; 143B&D - S