APPLIED PHYSIOLOGY AND KINESIOLOGY

Course Search
Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings.
More Info
Courses at the University of Florida, with the exception of specific foreign language courses and courses in the online Master of Arts in Mass Communication program, are taught in English.

Courses
APK 2100C Applied Human Anatomy with Laboratory 4 Credits
Study of general anatomy of the human body from a systematic approach. Understanding anatomical terminology, gross structures, and locations of different body structures are primary concerns. Cells, tissues and organs of the integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary and reproductive systems are emphasized. (B)
General Education - Biological Science

APK 2105C Applied Human Physiology with Laboratory 4 Credits
Introduces body functions at the cellular, tissue, organ and systems level with emphasis on the mechanisms of operation. Designed for students interested in pursuing study in the health professions. (B)
General Education - Biological Science

APK 3110C Physiology of Exercise and Training 3 Credits
Survey in exercise physiology which provides an overview of the acute and chronic responses to exercise. Particular attention is placed on understanding muscle bioenergetics and metabolism as well as the cardiopulmonary responses to exercise. Special topics include exercise testing, training technologies and exercise in hot and cold environments.
Prereq: APK 2105C with minimum grade of C

APK 3113 Principles of Strength and Conditioning 3 Credits
For individuals who are interested in becoming certified personal trainers (NSCA-PT) or certified strength and conditioning specialists (CSCS) through the National Strength and Conditioning Association.
Prereq: APK 2100C and APK 2105C with minimum grades of C

APK 3163 Sport Nutrition 3 Credits
Addresses the aspects of nutrition that are related to exercise performance. Emphasis is on bioenergetic systems, nutrient components, nutritional and body composition assessments, ergogenic aids and diet modifications for physically active individuals and athletes.
Prereq: HUN 2201 and APK 2105

APK 3200 Motor Learning 3 Credits
Provides background for understanding, analyzing and teaching skills in sports and dance. Attention to specific aspects of psychomotor developments and theoretical models of skill acquisition.
Prereq: junior standing or above

APK 3220C Biomechanical Basis of Movement 3 Credits
Prereq: junior or senior standing

APK 3400 Introduction to Sport Psychology 3 Credits
Provides an understanding of the science and practice of sport psychology from both a theoretical and applied perspective. The primary emphasis is on the educational and performance enhancement roles of the field with little discussion of clinical issues.
Prereq: junior or senior standing

APK 3405 Exercise Psychology 3 Credits
Introduces exercise psychology. Topics include the effects of exercise on psychological well-being, exercise adherence and intervention from both theoretical and applied perspectives.
Prereq: junior or senior standing

APK 4050 Research Methods 3 Credits
Provides an understanding of basic research methods and techniques used in applied physiology and kinesiology. Students will demonstrate their knowledge of the course materials by analyzing, interpreting and summarizing research writing in professional journals and by planning a research study.
Prereq: APK major with 3, 4, 6 or 7 classification

APK 4103C Kinetic Anatomy 3 Credits
Provides an in-depth coverage of musculoskeletal anatomy as a foundation for learning components of simple and complex motor tasks; emphasizes proper execution and analysis of joint movement and common exercises.
Prereq: APK 2100C and APK 3220C

APK 4110C Advanced Exercise Physiology 3 Credits
Provides an understanding of recent advances in exercise physiology and exercise prescription for clinical populations. Particular attention is placed upon the study of acute and chronic responses to exercise in patients with cardiac, pulmonary, metabolic and musculoskeletal diseases.
Prereq: APK 3110C with minimum grade of C

APK 4111 Neuromuscular Aspects of Exercise 3 Credits
Provides an in-depth analysis of muscle structure and function; how muscles produce movement; adaptation of muscle to resistance training, endurance training and various manipulations used in rehabilitations; adaptation of muscle to disuse; and muscle responses to injury.
Prereq: APK 3110C with minimum grade of C

APK 4112 Clinical Exercise Physiology 3 Credits
Provides an understanding of recent advances in exercise physiology and exercise prescription for clinical populations. Particular attention is placed upon the study of acute and chronic responses to exercise in patients with cardiac, pulmonary, metabolic and musculoskeletal diseases.
Prereq: APK 3110C with minimum grade of C

APK 4125C Physical Fitness Assessment and Exercise Prescription 3 Credits
Techniques of assessing physical fitness using traditional and state of the art processes. Techniques of prescribing exercise programs based upon assessments of physical parameters. Supervised practical lab experiences in assessment and prescription in a clinical setting.
Prereq: APK 3110C with minimum grade of C

APK 4144 Movement Neuroscience 3 Credits
Covers both anatomical and physiological aspects of movement-related components of the nervous system from a functional perspective. Topics include: neuronal signaling; somatosensation; proprioception; nociception; vision and eye movements; audition; lower vs. upper motor neurons; cortical, basal ganglia and cerebellar regulation of movement; and posture.
Prereq: APK 2100C and APK 2105C with minimum grades of C
Prereq: inactivity/immobilization.

competition and the physiological effects of trauma/wound healing and rehabilitation progress, development of criteria for progress and return to selection of therapeutic exercises, methods of evaluating and recording program including determination of therapeutic goals and objectives.

Introduces the concepts and principles of a comprehensive rehabilitation training specialization

Prereq: ATR 4314C Rehabilitation Techniques in Athletic Training

Prereq: ATR 4302C with minimum grade of C

ATR 4315 Functional Sport Conditioning 3 Credits

Enhances knowledge in design and implementation of functional exercise techniques as it relates to injury rehabilitation. Nutritional considerations for the injured athlete and proper design of the pre and post event meal planning for optimal performance and recovery are also covered.

Prereq: ATR 4314C

ATR 4432 Clinical Pathology and Pharmacology 3 Credits

Provides a thorough understanding of injury, illness and/or disease of various body systems; addresses specific understanding of medical diagnostics, interventions (including pharmacology) and participation considerations for the athletic population.

Prereq: ATR 4822 with minimum grade of C

ATR 4512 Athletic Training Administration 3 Credits

In-depth background of the standards, policies and practices of organization, supervision and administration of athletic training programs.

Prereq: ATR 4832 with minimum grade of C

ATR 4812 Athletic Training Clinical Experience 1 4 Credits

Provides the student with the opportunity necessary to grow both clinically and professionally within the field of athletic training through attendance at seminars, and the integration and synthesis of cognitive and psychomotor skills learned in previous semesters.

Prereq: ATR 4812 with minimum grade of C and admission to the athletic training specialization

ATR 4822 Athletic Training Clinical Experience 2 4 Credits

Provides the student with the opportunity necessary to grow both clinically and professionally within the field of athletic training through attendance at seminars, and the integration and synthesis of cognitive and psychomotor skills learned in previous semesters.

Prereq: ATR 4812 with minimum grade of C

ATR 4832 Athletic Training Clinical Experience 3 4 Credits

Provides the student with the opportunity necessary to grow both clinically and professionally within the field of athletic training through attendance at seminars, and the integration and synthesis of cognitive and psychomotor skills learned in previous semesters.

Prereq: ATR 4832 with minimum grade of C

BSC 3096 Human Physiology 3 Credits

The functioning of human tissues, organs and organ systems, emphasizing the physical, chemical and mechanistic bases of normal physiology and the integrated function of the human body. Also introduces pathophysiological changes associated with human diseases.

Prereq: CHM 1031, CHM 2046, or CHM 2047 and BSC 2011

HLP 4933 Variable International Topics 1-6 Credits

Provides the opportunity to study in a wide range of cultural settings.

PET 4905C Variable Topics in Exercise and Sport Sciences 1-5 Credits

Offered upon request to meet students’ special interests that are not adequately provided in other courses.

Prereq: department chair permission
PET 4948C Practicum in Exercise and Sport Sciences 1-5 Credits
Practical experience in such specialty areas as adult fitness programs, health clubs, exercise testing laboratories, clinical laboratories and athletic training rooms. May include senior thesis with oral defense.
Prereq: department chair permission

SPM 4154 Administration of Sport and Physical Activity 3 Credits
Managerial principles and techniques applicable to a variety of sport, physical education and fitness settings.
Prereq: MAN 3025 and SPM 2000 with minimum grades of C