

# EXERCISE AND SPORT SCIENCE (PES)

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**PES-6123: Nutrition for Human Performance (3 hours)**

Presentation and application of appropriate foundational nutrition relative to exercise, the reduction of disease, body composition and weight control with emphasis on developing a comprehensive literature review.

Prerequisite: B or higher in PES-3400, PES-4101, or instructor consent.

**PES-6210: Fitness Testing and Exercise Prescription (3 hours)**

Techniques for conducting fitness assessments and developing exercise prescriptions. Prepares the practitioner to develop personal fitness programs based on the results of fitness assessments and other relevant information and apply those techniques to clients during the course of the semester. Computer applications. Prerequisite: B or higher in PES-3400 or equivalent.

**PES-6410: Biomechanics (3 hours)**

Function of the skeletal, articular and neuromuscular systems in producing efficient movement. Application of mechanical principles in performing sport skills, dance and adaptive activities with an emphasis on developing a comprehensive literature review. Prerequisite: B or higher in PES-3400 or instructor consent.

**PES-6420: Physiology of Exercise (3 hours)**

Scientific basis for the development of physical fitness and conditioning programs. Bioenergetics of human movement; physiological adaptations during and following exercise with emphasis on developing a comprehensive literature review. Prerequisite: B or higher in PES-3400 or instructor consent.

**PES-6431: Physical Growth and Motor Development (3 hours)**

Physical growth, motor skill acquisition and learning and motor performance primarily from infancy through adolescence with emphasis on developing a comprehensive literature review on the principles of motor development.

**PES-6605: Instructional Strategies for Human Performance (3 hours)**

Learning theories, instructional styles and strategies for directing motor learning experiences with an emphasis on developing a comprehensive literature review of instructional strategies for physical education. This course satisfies the K-12, middle and secondary school methods requirement in Human Performance. Prerequisite: B or higher in PES-4640 or instructor consent or Acceptance to the College of Education.

**PES-6660: Curriculum Design (2 hours)**

Theories and processes of curriculum development, implementation and assessment for the middle and secondary school setting with an emphasis on developing a comprehensive review of current health curricula.

**PES-6740: Measurement and Evaluation in Human Performance (3 hours)**

Theory, practice and analysis of tests and evaluation procedures related to the study of human performance with emphasis on developing a comprehensive literature review.

**PES-6950: Independent Study in Exercise and Sport Science (1-6 hours)**