Physical Education Health & Recreation (PEHR)

Courses

**PEHR 1003. Sport and Performance Psychology. 1 Hour.**
For students interested in psychological skills training. This course is designed to help students maximize their performance through mental skills training. In particular, this course will help students understand the building blocks for success, know what it means to be ready to play, and learn strategies to more effectively prepare for performance. This course is recommended for student-athletes, performing artists, musicians, and all other students looking to improve their performance.

**PEHR 1340. Lifeguarding. 2 Hours.**
Activity course for students interested in furthering their knowledge and skills in swimming and getting their lifeguard training. Instruction is given in water rescue, water safety and skills. This course includes the Red Cross Exam, and successful students will be Red Cross certified. Students must demonstrate proficiency in two basic strokes (American Crawl and breaststroke). Course fee required. FA, SP.

**PEHR 1543. First Aid / Resp Emergencies. 3 Hours.**
Designed for students desiring to learn about first aid, including instruction in the principles and practices in emergency care and first aid procedures for injuries and safety precautions. Successful completers will be certified through the American Red Cross in CPR and First Aid. FA, SP.

**PEHR 2020. Introduction to Exercise Science. 3 Hours.**
For students interested in exercise science. Course surveys the anatomical, physiological, nutritional, psychological, biomechanical, and developmental foundations of exercise science as an academic discipline. Careers and professional responsibilities within the exercise science field are also a focus of this course. FA, SP.

**PEHR 2060. Sport and Exercise Psychology. 3 Hours.**
For students interested in sport and exercise psychology. A study of the effects of psychological factors on performance in sport and exercise settings, including, but not limited to motivation, stress, leadership, group/team dynamics, imagery, and concentration. Course also covers the effects of sport/exercise participation on psychological well-being. FA, SP.

**PEHR 2080. Management in Exercise & Health Promotion. 3 Hours.**
Course provides knowledge essential to the operation of fitness centers. Practical skills related to the management of commercial and corporate fitness/wellness centers will be the primary focus of this course.

**PEHR 2120. Principles of Fitness and Lifestyle Management. 3 Hours.**
Emphasize issues relative to fitness in youth/adult fitness, aging, physical activity program design and implementation, attrition, behavior modification, and the role of exercise in disease prevention and/or management. The goal is to promote fitness across an entire lifespan. SP.

**PEHR 2200. Nutrition for Sport and Exercise. 3 Hours.**
This course provides an overview of the scientific foundations of sports nutrition. Areas of emphasis include basic nutritional concepts, energy expenditure during different types of exercise, optimal diets for various training and activities, timing and composition of pre and post competition meals, the use of nutritional supplements and ergogenic aids, and the specific needs of different athletic populations. The course can provide beneficial information to the recreational or competitive athlete, and to any individual wishing to incorporate nutrition in their active lifestyle. SP.

**PEHR 2992. Seminar in Physical Education. 0.5-3 Hours.**
For students wishing instruction that is not available through other regularly scheduled courses in this discipline. Occasionally, either students request some type of non-traditional instruction, or an unanticipated opportunity for instruction presents itself. This seminar course provides a variable credit context for these purposes. As requirements, this seminar course must first be pre-approved by the department chair; second, it must provide at least nine contact hours of lab or lecture for each credit offered; and third, it must include some academic project or paper (i.e., credit is not given for attendance alone). This course may include standard lectures, travel and field trips, guest speakers, laboratory exercises, or other nontraditional instruction methods. Note that this course in an elective and does not fulfill general education or program requirements. Fees may be required for some seminar courses and instructor permission will be optional at the request of the instructor.

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PEHR 2994. Seminar in Physical Education. 0.5-3 Hours.
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PEHR 3000. Psychophysiology of Fitness and Nutrition. 3 Hours.
Provides students with an understanding of the interaction between psychological processes, nutritional practices and physiological adaptations associated with physical activity and nutritional practices.

PEHR 3052. Psychophysiology of Motor Control. 3 Hours.
Surveys the basic principles of control of human movement, including neuro-mechanics of human movement. These principles will be taught through application to sport, joint movement, and activities of daily living. Course fee required.

PEHR 3350. Motor Learning and Development. 3 Hours.
A study of how the development of physiological, perceptual, neurological, intellectual, and emotional factors affect motor learning. Knowledge from this course provides a framework for the establishment of programs that facilitate skill acquisition for all learners with a focus on children and adolescents. This course is required on most Exercise Science and/or Kinesiology degree plans. It is also a prerequisite for many graduate programs in Exercise Science, or physical/occupational therapy. FA.

PEHR 3370. Exercise Testing and Prescription. 3 Hours.
Teaches key concepts related to exercise testing and program design for healthy and diseased populations. Furthermore, usage of teams, groups, and individualized assessment and programming based activities will be used to explore principles in anatomy, exercise physiology, behavior modification, motivation, health promotion, fitness assessment and prescription. Prerequisites: PEHR 3700 and PEHR 3705 (Grade C- or higher). SP.

PEHR 3400. Activity Programming for Special Populations. 3 Hours.
A comprehensive look at providing high-quality fitness, physical education, sport, and outdoor adventure experiences for individuals with disabilities. Students will learn best practices and applications for inclusion in classroom settings, as well as discover how to develop individualized fitness, competitive sport, and outdoor adventure experiences for individuals with special needs. This course is required on most Exercise Science and/or Kinesiology degree plans. It is also pre-requisite for many graduate programs in Exercise Science. FA.

PEHR 3500. Theories and Techniques for Teaching Fitness and Motor Skills. 3 Hours.
Content in this course will prepare students to design and implement quality physical education programs for elementary and secondary school students. In addition to developing the knowledge and skills to select and implement developmentally appropriate activities for children/adolescents, students enrolled in the course will also develop an understanding of curriculum design, public school policy and procedures (as related to P.E.), as well as national standards and guidelines affecting physical education programming. The curriculum is designed to meet the academic needs of Fitness trainers, community recreation directors, and physical education teachers in the public and private sector will benefit from the curriculum. In addition, the knowledge and skills developed in this course will address material covered in the Praxis exam. FA.

PEHR 3510. Applied Exercise Physiology. 3 Hours.
Focuses on an applied perspective of exercise physiology, designed to provide physical educators, coaches, and exercise professionals with the scientific foundations of exercise pertaining to areas such as energy metabolism, cardiovascular and neuromuscular physiology, nutrition, etc. with direct application in schools, health clubs and sport settings. SP (even).

PEHR 3700. Physiology of Exercise. 3 Hours.
This course provides a further overview of the physiology of exercise. It builds on the students' knowledge of human anatomy and physiology, and further focuses on the acute and chronic physiological adaptations of exercise on the human body. Various responses of functional systems, different populations, ergogenic aids, chronic diseases, physical activity, health and wellness, and environmental conditions will also be described from a physiological perspective. Prerequisite: BIOL 2320 and BIOL 2325 (Grade C- or higher); and BIOL 2420 and BIOL 2425 (Grade C- or higher). Corequisite: PEHR 3705. FA, SP.

PEHR 3705. Physiology of Exercise Lab. 1 Hour.
A supplemental course to PEHR 3700, Physiology of Exercise. Emphasizes the demonstration of lecture concepts through hands on experiences. Assessments include maximal oxygen consumption, aerobic and anaerobic fitness assessment, body composition analysis, and pulmonary function testing in regards to chronic and acute exercise. Lab fee required. Prerequisites: BIOL 2320 and BIOL 2325 (Grade C- or higher); BIOL 2420 and BIOL 2425 (Grade C- or higher). Corequisite: PEHR 3700. FA, SP.

PEHR 3730. Biomechanics. 3 Hours.
Focuses on the investigation and application of the mechanical principles of movement relative to exercise and sport. Course includes an overview of the relationship of musculoskeletal anatomy to the mechanics of human movement. Methods of optimizing exercise and sport performance from a biomechanical perspective will also be addressed. FA (odd), SP.
PEHR 3740. Clinical Biomechanics. 3 Hours.
Provides an introduction to the mechanical principles relevant to the understanding of human motion in the context of clinical populations, movement pathologies, and therapy. The focus will be on the mechanics and anatomical geometry of human movement, as well as muscular control and mechanics. SU.

PEHR 3800. Measurement & Evaluation in Physical Exercise & Sports. 3 Hours.
Provides students with the foundation of knowledge needed for administering and interpreting results from popular health and skill-related physical fitness tests. Test selection, administration, and interpretation will be emphasized. Students will use popular assessment instruments for data collection and computer analysis. FA, SP.

PEHR 3820. Sport Science and Technology. 3 Hours.
This course explores the current state of science and technology in sport, both for performance and safety. Materials and design of equipment will be covered, as well as new technologies and instrumentation for tracking performance and risk factors. Additionally, the use of common technology such as "smartphones" and video will be explored. Basic computer software and methods for analyzing everyday sporting data with excel and other computing tools will be introduced. Students will be exposed to data collection and analysis using tools that are available to consumers, sport enthusiasts, and researchers.

PEHR 4100. Physiology and Techniques of Strength and Power. 3 Hours.
Covers physiological principles and training techniques used in strength and conditioning. A large emphasis is placed on the guidelines from the National Strength and Conditioning Association (NSCA) with an aim for preparing students to ultimately take the NSCA Certified Personal Trainer or NSCA Certified Strength and Conditioning Specialist exam. Prerequisites: PEHR 3700 and PEHR 3705 (Grade C- or higher). SP.

PEHR 4200. Healthy Aging. 3 Hours.
Emphasizes the basic physiological changes in older adults. Methods to improve the quality of life among older adults will be stressed. Additional content will include elements of health promotion, wellness programming, behavior change, lifelong learning and development, and relevant research findings pertaining to older adults. FA.

PEHR 4230. Applied Fitness Development for Aging and At-Risk Populations. 3 Hours.
This course provides students with the knowledge and skills to develop and provide fitness programs for at-risk populations and older adults. Course objectives include health related fitness assessments, interpretation and counseling based on results of fitness assessments, and the construction of individually tailored exercise prescriptions to meet the clients' unique needs and goals. SP.

PEHR 4300. Clinical Exercise Physiology. 3 Hours.
Emphasizes information and skills related to exercise testing and prescription in healthy and clinical populations. Teaches American College of Sports Medicine (ACSM) exercise testing guidelines. Prerequisites: PEHR 3700 and PEHR 3705 (Grade C- or higher). FA.

PEHR 4400. Pediatric and Adolescent Fitness & Nutrition. 3 Hours.
Provides future exercise science professionals with the knowledge, skills, and abilities to provide appropriate fitness and nutritional guidelines for the physiological responses and demands unique to children and adolescents. Appropriate measurement techniques to evaluate this population will also be covered. SP.

PEHR 4500. Theories of Behavioral Change. 3 Hours.
Focuses on behavior change theory, principles, and predictive models, with their application to health behavior change programs and interventions.

PEHR 4600R. Exercise Science Internship. 1-3 Hours.
Designed to provide students with hands-on professional experience in the field of exercise science. May be repeated for a maximum of 6 credits toward graduation. Prerequisite: Instructor permission.

PEHR 4700. Motivation and Coaching. 3 Hours.
Course covers knowledge and theory related to coaching principles relative to sport psychology, sport pedagogy, and sport management. Also covers the integration of basic coaching skills into the work of health-care/fitness professionals to help clients achieve self-determined goals related to health and wellness.