

HPA 2268 - PHYSICAL ACTIVITY AND HEALTH

The purpose of this course is to expose the student to the topics related to the role of physical activity in the prevention and treatment of chronic diseases and additional health-related outcomes according to the most current literature. Students will become aware of all aspects of physical activity epidemiology, including the different methods to measure physical activity, evaluating the strengths and weaknesses of each, and understanding the analysis of physical activity data and research. In addition, this class will cover the physiology and mechanisms through which physical activity and exercise may affect the primary and secondary prevention and/or treatment of various health conditions, and will examine the risks and benefits associated with physical activity participation.

HPA 2320 - PSYCHOSOCIAL ASPECTS OF HEALTH

This course will increase students' understanding of the diverse personal, socio-cultural, and institutional factors that influence health, physical activity, and nutrition-related behaviors, and ultimately intervention design and approach. The course will cover the social determinants of health and health disparities, theoretical models of health behavior change, and intervention/behavior change strategies and tools. Students coming away from this course will have a better understanding of how to apply health behavior change models to promote physical activity and healthy eating in diverse populations through tailored interventions.

HPA 2380 - BEHAVIOR CHANGE AND HEALTH COACHING

This course focuses on applying evidence-based behavioral strategies to interactions with health-fitness participants and patient populations to enhance engagement, adherence, and sustainability of lifestyle behaviors related to health. The course will include interaction strategies with patients, listening skills of health coaches, strategies to enhance compliance, strategies for working with non-compliant patients, and application to specific health-fitness and healthcare setting.

HPA 2381 - CLINICAL EXERCISE AND PHYSICAL ACTIVITY PHYSIOLOGY 1

This is an advanced course in clinical exercise physiology designed to provide knowledge and understanding of the most recent advances in exercise physiology for the healthy adults as well as for special populations across the lifespan. Emphasis will be placed on mechanisms underlying metabolic and cardiorespiratory responses and adaptation to exercise and on the metabolic determinants of human adaptation and performance under normal conditions as well as during various environmental and physiological changes. Additional emphasis will be on taking in depth look at the acute and chronic responses to exercise in children and adolescents, pregnancy, and older adults. Instruction includes both didactic and laboratory experiences.

HPA 2382 - CLINICAL EXERCISE AND PHYSICAL ACTIVITY PHYSIOLOGY 2

This course is an extension of the Clinical Exercise and Physical Activity Physiology 1 course. This is an advanced course in clinical exercise physiology designed to provide knowledge and understanding of the most recent advances in the application of exercise physiology to clinical populations. Particular emphasis is placed on the acute and chronic responses to exercise in patients at risk for or having cardiovascular, endocrine, pulmonary, and metabolic diseases. Additional topics include clinical exercise physiology for cancer, disorders of the bone/joints, and neuromuscular disorders. Instruction includes both didactic and laboratory experiences.

HPA 2384 - MOVEMENT SCIENCE IN HEALTH AND PHYSICAL ACTIVITY

This course examines human movement across the lifespan (youth, adults, older adults), health conditions, and exercise-related activities. Student will learn how to assess movement patterns and how to apply this knowledge to prevention, treatment, and rehabilitation situations. This course will be a combination of classroom and laboratory experiences.

HPA 2385 - PRACTICUM IN HEALTH AND PHYSICAL ACTIVITY

Supervised experience for the master's degree student. Student placement is to a clinical setting, applied health-fitness setting, or health promotion setting that is appropriate to the pursuit of the intended degree. Students are also required to attend didactic and online course-related sessions with the instructor throughout this experience. Students intending to take this course need to coordinate the placement with the supervising faculty instructor at least 1 term in advance of registering for this course to allow for appropriate placement.

HPA 2390 - NUTRITION IN SPORT AND EXERCISE

A lecture and laboratory class in which the principles of nutrition are applied to sports performance and exercise. Topics presented include energy release and substrate utilization, energy metabolism during exercise, fluid intake and athletic performance, body composition, ergogenic aids, vitamins and minerals, the pre-game meal, sports anemia, nutritional considerations for the diabetic individual, lipid metabolism and coronary heart disease.