## Exercise Science for Clinicians, Graduate Certificate

The Department of Health Sciences offers a Graduate Certificate in Exercise Science for Clinicians. Exercise training has been shown to be of therapeutic benefit to patients who have chronic diseases, including but not limited to cardiovascular disease, pulmonary disease, and metabolic disorders. Supervised exercises are commonly performed in a variety of settings including hospitals, outpatient clinics, physician's offices, university laboratories, or hospital-based research facilities. Exercise physiologists work in the above settings to create, implement, and evaluate exercise programs. Clinicians, such as physicians and nurses, work with exercise physiologists to prescribe individualized exercise to meet the specific clinical needs of their patients. Understanding the benefits of exercise, and how exercise plays a role in health promotion and disease prevention/intervention, is only a small part of traditional training of physicians and nurses. This Graduate Certificate in Exercise Science for Clinicians bridges the knowledge gap between the medical field and the exercise field. Additionally, the program helps clinicians understand the role of exercise as a proven, powerful medicine and a readily available therapy that has demonstrated a high therapeutic effect in a number of chronic disease states, with little to no side effects.

Experiential learning opportunities are an important feature of this program, providing students with opportunities to develop well-rounded knowledge of the role of physical activity and exercise on health and disease prevention/intervention. The curriculum covers knowledge of exercise physiology and exercise testing, assessment, and prescription, all of which are major domains of job tasks for a clinical exercise physiologist required by the American College of Sports Medicine (ACSM).

## **Program Requirements**

Complete all courses and requirements listed below unless otherwise indicated.

## **Core Requirements**

Code	Title	Hours
Advanced Physiology		
EXSC 5200	Cardiopulmonary Physiology	3
EXSC 5220	Advanced Exercise Physiology	3
Assessment and Prescription		
EXSC 5210	Physical Activity and Exercise: Prescription, Measurement, and Testing	3
EXSC 6202	Electrocardiography, Clinical Assessment, and Prescription	3
Internship		
Complete the following repeatable course twice <sup>1</sup>		6
EXSC 6300	Internship in Exercise Science	
Electives		
Complete 3 SH of electives in the BNSC, CHEM, COMM, EXSC, PHMD, PHTH, or PT subject areas. Please see your adviser for additional approved courses.		3

Students who choose not to continue in the Physician's Assistant or Physical Therapy programs may be approved to take an additional elective in place of the second EXSC6300 course.

## **Program Credit/GPA Requirements**

21 total semester hours required Minimum 3.000 GPA required