EXERCISE SCIENCE (EXSC)

EXSC 301. INTRODUCTION TO EXERCISE SCIENCE. 1 Credit.
Pre-requisites: must be declared exercise science major.
This course covers the basic skills necessary for success in the Exercise Science Program and prepares students for a career or graduate school. Students are exposed to professionals from multiple career fields related to Exercise Science. Presentations include the development of a resume and cover letter, how to use the library effectively and various professional development tools. The goal of this course is to help you gain a clear understanding of your career aspirations and to help direct your studies towards those goals.

EXSC 388. EXERCISE SCIENCE PRACTICUM. 1-8 Credits.
Pre-requisites: permission of the instructor.
This course is designed to assist Pre-Physical Therapy (PT) and Pre-Occupational Therapy (OT) students prepare for their application to graduate school. The Pre-PT and Pre-OT Exercise Science majors are required to observe and/or work under a licensed PT or OT in different settings. They will spend a minimum of 50 hours at any one location and can observe in 2-4 different locations.

EXSC 395. INTERNSHIP. 1-8 Credits.
Pre-requisites: permission of the instructor.

EXSC 455. RESEARCH AND ANALYSIS. 3 Credits.
Pre-requisites: CSBS 320 or MATH 380.
This course is designed to teach the students to critically analyze the literature in the field. In addition, they will be exposed to the criteria for good research and to evaluate how well articles in the field follow that criteria.

EXSC 460. PHYSIOLOGY OF EXERCISE. 4 Credits.
Pre-requisites: EXSC 301, PHED 349 and PHED 350 or permission of the instructor.
The application of physiological principles to exercise. Special attention is given to energy sources, work, power, pulmonary system, cardiorespiratory neural control systems, sex differences, hypo- and hyperbaric pressure, heat balance, body composition, and the endocrine system in exercise.

EXSC 480. CLINICAL EXERCISE PHYSIOLOGY. 3 Credits.
Pre-requisites: PHED 350 or permission of the instructor.
This course presents a detailed understanding of the latest advances in the emerging field of clinical exercise physiology. The focus is on diseases, where exercise can impact onset, treatment or outcomes, i.e., diseases of the cardiovascular, endocrine and musculoskeletal systems.

EXSC 481. ELECTROCARDIOLOGY INTERPRET. 3 Credits.
Pre-requisites: BIOL 232, BIOL 233.
This course teaches the interpretation of electrocardiograms (ECGs). It will cover normal and pathological changes both at rest and during exercise.

EXSC 488. PROFESSIONAL INTERNSHIP. 5-15 Credits.
Pre-requisites: permission of the instructor.
This course is designed to assist Exercise Science students prepare for a job in their chosen field. The internship experience is hands-on under the supervision of a professional, monitored by the faculty advisor. Students will have completed the majority of their course work to prepare for the experience. The requirement is 400 hours and may be divided into up to three locations. The experience will be documented through record of hours and regular reflections of the experience as a potential career location, as well as evaluations by the site supervisor.

EXSC 490. SENIOR CAPSTONE IN EXERCISE SCIENCE. 4 Credits.
Pre-requisites: senior standing and EXSC 460.
Satisfies: a university graduation requirement—senior capstone.
This course is designated as a departmental capstone for Exercise Science majors. They will study the process of assessment and prescription of apparently healthy adults. There will be end-of-program assessment, both written and practical. Students will also study a current issue in the field through research, group projects and written and oral presentations. The course is designed to help students prepare for the ACSM's Certified Health Fitness Specialist, the benchmark exam in the field.

EXSC 495. INTERNSHIP. 1-15 Credits.
Pre-requisites: permission of the instructor, department chair and college dean.

EXSC 496. EXPERIMENTAL COURSE. 1-15 Credits.

EXSC 499. DIR STUDY. 1-15 Credits.