EXSC - Exercise Science | Undergrad

Global Citizenship Program Knowledge Areas **(....)**	
ARTS	Arts Appreciation
GLBL	Global Understanding
PNW	Physical & Natural World
QL	Quantitative Literacy
ROC	Roots of Cultures
SSHB	Social Systems & Human Behavior

Global Citizenship Program Skill Areas (....)	
CRI	Critical Thinking
ETH	Ethical Reasoning
INTC	Intercultural Competence
OCOM	Oral Communication
WCOM	Written Communication
** Course fulfills two skill areas	

EXSC 1400 Foundations of Exercise Science (3)

This entry-level course provides an overview of the human movement sciences, combining basic science principles with applications in exercise science. Topics covered include physiology of exercise, sports medicine prevention and rehabilitation of injuries, biomechanics of the human motion, and the mind and brain in exercise.

EXSC 2100 Coaching Health and Human Performance (2)

Learning universal, functional definitions of health, fitness and human performance, students will discuss and journal individual, personal application of these definitions and set semester goals based on these ideas. Projects in this lecture/lab hybrid class include performing basic physical literacy assessments and program design on themselves and other students, while learning strategies for effectively coaching people toward healthier lifestyles. This class teaches future exercise science professionals and fitness enthusiasts to practice what they preach.

EXSC 2356 Principles of Athletic Training (3)

This course teaches the theory and application of the appropriate techniques and concepts in the day-to-day performance of an athletic trainer. It is a study of the treatment and prevention of specific sports injuries resulting from activities in recreational, intramural, interscholastic, intercollegiate, and professional settings. It will cover the identification of injuries, proper treatment after they occur, and preventative measures. American Red Cross techniques will be covered.

EXSC 3050 Exercise Physiology (3)

This course examines modes of exercise, muscle physiology, and the body's adaptations to specific training regimens to improve muscle strength, power, and endurance. Nutrition will also be evaluated, as it applies to physical performance. **Prerequisites:** BIOL 1610, BIOL 1611, BIOL 1620 and BIOL 1621, or permission of the instructor.

EXSC 3250 Exercise Kinesiology (3)

The analysis of human movement based on anatomical and mechanical principles. Emphasis is given to the application of these principles to the understanding of human movement and athletic performance. **Prerequisites:** BIOL 1610, BIOL 1611, BIOL 1620 and BIOL 1621.

EXSC 3251 Exercise Kinesiology: Lab (1)

The analysis of human movement based on anatomical and mechanical principles. Emphasis is given to the application of these principles to the understanding of human movement and athletic performance. The lab will directly apply the foundational material covered in lectures. **Co-requisite:** EXSC 3250.

EXSC 4680 Exercise Prescription and Testing (3)

The purpose of this course is to provide basic physiological principles in the prescription of exercise and the administration of conditioning programs. The laboratory portion of this course must be taken concurrently. **Prerequisite**: EXSC 3250. **Co-requisite**: EXSC 4681.

EXSC 4681 Exercise Testing and Prescription: Lab (1)

An emphasis on the proper knowledge and skills required to conduct health and fitness testing. A variety of assessment principles and techniques are covered with a focus on both measurement expertise and safe and effective exercise prescription. **Co-requisite:** EXSC 4680.

EXSC 4683 Exercise Prescription for Special Populations (3)

A study of the aerobics concept of conditioning, with special emphasis upon the cardiorespiratory system and the relationship between lifestyle and the risk factors of heart disease. Students will learn to write exercise prescriptions to maintain health and fitness for various populations (normal, young, rehabilitation, geriatric, etc.) **Prerequisites:** EXSC 3050, EXSC 4680 and EXSC 4681.

EXSC 4875 Exercise Science Internship (3)

The course is designed to expand the student's current knowledge in the field of exercise science. Through this course, the student will have an opportunity to work in a professional setting in an exercise science field of their choice. This is a valuable opportunity for students to gain practical work experience, apply concepts and skills learned in the classroom, and develop professional contacts within the health/fitness/clinical community. **Prerequisites:** EXSC 1400, EXSC 3251, EXSC 4680 and EXSC 4681. Must have a cumulative GPA of 2.5 in the exercise science program.