

# EXERCISE SCIENCE (EXS)

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## **EXS 245 - Introduction to Exercise Science, 2 credits.**

Designed to educate undergraduate students about the important aspects of exercise science including history, areas of study, technology, career opportunities, certifications, professional organizations and future trends.

**Frequency:** 1st or 2nd Half - 1st Semester, 1st or 2nd Half - 2nd Semester

## **EXS 260 / FND 260 - Sport Nutrition, 2 credits.**

This course is an in-depth study of the science behind nutrition as it relates to sport and influence on performance, training, and recovery. Topics covered will include energy expenditure and the role of nutrients during resistance, endurance, and intermittent exercise, hydration recommendations, and use of nutritional supplements for various athletic groups.

**Prerequisites:** FND 160 or FND 321

## **EXS 350 - Physiology of Exercise, 4 credits.**

This course examines physiological principles related to human activity, including acute and chronic adaptations to exercise, the role and functioning of major physiological systems of the body, physiological adaptations at rest and during exercise, and key principles in exercise testing and program design.

**Frequency:** Every Year - First Semester

**Prerequisites:** BIOL 121 and EXS 245

## **EXS 360 - Health Promotion Programming and Evaluation, 4 credits.**

This course provides an introduction to health promotion and the foundational concepts for planning, implementing and evaluating health promotion programs in a variety of settings, including hospitals, clinics, schools, and corporations.

**Frequency:** Every Year - First Semester

**Prerequisites:** EXS 245

## **EXS 365 - Testing and Prescription in Exercise Science, 4 credits.**

This course is designed to provide the student with the knowledge, skills, and abilities to assess health-related physical fitness components and prescribe individual exercise programs for apparently healthy populations based on these objective measures. This course will provide hands-on experience in the laboratory to supplement the classroom discussion. Three lecture sessions and four hours of laboratory per week.

**Frequency:** Every Year - Second Semester

**Prerequisites:** EXS 350 or EXS 272

## **EXS 370 - Strength and Conditioning Programming & Management, 2 credits.**

This course provides an overview of strength and conditioning with an emphasis is placed on testing and evaluation, program design, and organization and administration. Additionally, this course is designed to help prepare students for the nationally accredited Certified Strength and Conditioning Specialist (CSCS) certification exam. This course is open only to Exercise Science majors and minors.

**Frequency:** 1st or 2nd Half - 1st Semester

**Prerequisites:** EXS 365

**Corequisites:** EXS 371

## **EXS 371 - Resistance Training Techniques, 2 credits.**

This course provides instruction on a variety of resistance training techniques, proper progressions when teaching exercises, common movement deficiencies, and ways to correct these deficiencies. Included are hands-on activities to stress the proper techniques and safety considerations in various resistance training exercises. This course is open only to exercise science majors and minors.

**Frequency:** 1st or 2nd Half - 1st Semester

**Prerequisites:** EXS 365

**Corequisites:** EXS 370

## **EXS 380 - Special Topics, 0-4 credits.**

Courses covering various topics of interest in this particular discipline are offered regularly. Contact department or program chair for more information.

**Frequency:** Not offered on a Regular Basis

**Repeatable:** Yes

## **EXS 390 - Academic Internship, 1-8 credits.**

**Frequency:** Every Semester

**Repeatable:** Yes

## **EXS 410 - Exercise Counseling & Behavioral Strategies, 4 credits.**

In this course students will demonstrate methods to facilitate adoption of and optimize adherence to exercise programs and other healthy behaviors by using motivational interviewing, behavior change models and theories, and advanced exercise counseling and education principles.

**Frequency:** Every Year - Second Semester

**Prerequisites:** EXS 365

## **EXS 460 - Exercise and Chronic Disease, 4 credits.**

This course exposes students to underlying pathophysiology of clinical diseases, the effects of clinical diseases on physiological responses during and after exercise, and adaptations to exercise assessment and prescription techniques appropriate to special populations.

**Frequency:** Every Year - Second Semester

**Prerequisites:** EXS 365

## **EXS 465 - Research Methods and Testing in Exercise Science, 4 credits.**

This course provides an overview of research methods, reviews of the evidence on the role of physical activity/exercise in the development and treatment of chronic disease, and expands on exercise research and testing protocols for both healthy and special populations.

**Frequency:** Every Year - Second Semester

**Prerequisites:** PED 365 or EXS 365

## **EXS 467 - Biomechanics of Human Motion, 4 credits.**

This course is a study of the anatomical, kinesiological, and biomechanical aspects of sport and exercise. This course emphasizes the mechanical principles of human movement including muscular and skeletal principles and human movement analysis.

**Frequency:** Every Year - First Semester

**Prerequisites:** BIOL 306 and (EXS 350 or EXS 272)

## **EXS 480 - Independent Study, 1-4 credits.**

This course provides an opportunity for individual students to conduct in-depth study of a particular topic under the supervision of a faculty member. Contact the department or program chair for more information.

**Frequency:** Not offered on a Regular Basis

**Repeatable:** Yes

**EXS 487 - Directed Research, 1-4 credits.**

This course provides an opportunity for individual students to conduct research in a specific area of study, completed under the direction of a faculty mentor. Specific expectations of the research experience to be determined by the faculty. Repeatable for credit. Prerequisite: consent of instructor.

**Frequency:** *Not offered on a Regular Basis*

**Repeatable:** Yes

**EXS 489 - Pre-Practicum Seminar, 0 credits.**

This course is designed for students to learn about the practicum requirements and complete the steps necessary to begin their practicum experience. Students will enroll in this course the semester prior to their practicum course, EXS 490. Must have junior or senior status. This course is open only to exercise science majors.

**Frequency:** *Every Semester*

**Prerequisites:** EXS 365 (may be taken concurrently) or PED 365 (may be taken concurrently)

**EXS 490 - Practicum in Exercise Science, 4 credits.**

The application in a practical work experience of theory and skills learned in the classroom. Under approved supervision, the student will pursue the health-fitness area in an applicable setting.

**Frequency:** *Every Semester, Summer Session*

**Prerequisites:** EXS 489

**Corequisites:** PEAK 400

This course is PEAK Required