

EXSC 130

Introduction to Exercise Science

3 Credit Hours

Students will be introduced to a broad array of topics related to the field of exercise science through an introductory review of body systems and physiological concepts. Students will gain an understanding and appreciation for the processes of response and adaptation which enhance both health and fitness through regular exercise. Career options, history and philosophy, professional organizations, research methods, and professional issues will be examined. Offered fall.

EXSC 135

Introduction to Health Science

1 Credit Hour

Students will be introduced to a broad array of topics related to the field of health science through an introduction of the body and its systems. Students will gain an understanding and appreciation for the processes of response and adaptation which enhance both health and fitness through regular exercise. Career options, history and philosophy, professional organizations, research methods, and professional issues will be examined.

EXSC 203

Nutrition for Sport

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130

This course will focus on the physiological use of nutrients on the body. This course will investigate the use of proper nutrition as it applies to human performance, activities for daily living and prevention of injury and illness. Other topics will include supplementation to nutrition, eating disorder and body composition. Offered fall.

EXSC 210

Motor Behavior

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130

This course investigates how motor development affects motor learning through the lifespan of human beings. This course explains how motor development and learning creates a framework in which skill acquisition is obtained for various sport skills and activities for daily living. Offered spring.

EXSC 275

Exercise Physiology for Sport

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130 and C (RQ) EXSCL-275

This course builds upon the introduction to the body systems and physiological concepts. An in-depth look into how the body responds to acute and chronic exercise emphasizes the bioenergetics of the cardiovascular, respiratory, and neuromuscular system responses to physical stress. This didactic course has a laboratory component. Offered fall.

EXSCL 275

Exercise Physiology for Sport Lab

1 Credit Hour

Pre/Corequisite: P (RQ) EXSC-130 and C (RQ) EXSC-275

This is a laboratory course that builds upon the didactic lectures of how the body responds to acute and chronic exercise emphasized the bioenergetics of the cardiovascular, respiratory, and neuromuscular system responses to physical stress. Emphasis is placed on practical application of learned theories within the lectures. Offered fall.

EXSC 295

Research Methods for Allied Health

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130

This course introduces research terminology and various methods used in evidence-based research. Students will become proficient in critical appraisal of research studies. Identify and use critical appraisal tools. The goal is to be proficient in reading and critiquing select research studies. Offered fall and spring.

EXSC 319

Kinesiology

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130 EXSC-210

This course focuses on structural kinesiology and the study of both skeletal and muscular structures as they are involved in the science of movement. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sport, and the physiological and social factors that influence an individual's participation in physical activity and sport. Students will review the anatomy of the skeletal and muscle systems, understand the terminology used to describe joint movements and body part locations, gain knowledge in the planes of motion in relation to human movement, and describe and understand the various types of joints in the human body and their characteristics. Offered spring.

EXSC 327

Measurement and Evaluation

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130

This course introduces students to proper measurement and evaluations in exercise. Students will measure performance in the areas of health, fitness and sports. This course will investigate the use of evidence-based practice in coming to valid and reliable conclusions based on evaluations. Offered fall.

EXSC 335

Sport Psychology

3 Credit Hours

Sport Psychology examines the interaction between psychological variables and performance in athletic and physical activities. The American Psychological Association, Division 47 - Society for Sport, Exercise and Performance Psychology-contributes to the standards of this course. The objective of this course is to survey theories and practical

skills that contribute to performance in sports. Offered fall and spring.

EXSC 366

Strength and Conditioning Theory

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130

This course is a culmination of the study of program and design and its application of exercise science. This course is designed to prepare students to program and design based off of proper assessments, evidence-based research and needs analysis. This course also serves as a preparation course to take the CSCS exam. Offered fall.

EXSC 380

Field Experience

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130 EXSC-203 EXSC-210 EXSC-366 EXSC-390

The Internship Program for Exercise Science at Saint Xavier University provides the opportunity for students to develop and apply exercise science knowledge, skills, and abilities in a supervised University approved setting. The course is intended for student to observe and gain practical experience in a professional environment. Prerequisites: All core courses 130, 203, 210, 366, and 390. Offered spring and summer.

EXSC 385

Program and Design for Sport

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130

This course will focus on advanced theories of program and design for sport. This course will investigate different program methodologies based on sport, individual and team sports. Further investigation will look at factors that affect the sport and the athlete's performance on and off the field. Offered spring.

EXSC 390

Exercise Science Senior Seminar

3 Credit Hours

Pre/Corequisite: P (RQ) EXSC-130 BUSP-101 EXSC-319

Students are provided an overview of contemporary issues, trends, theories, and research related to exercise science. This course is a capstone course designed to integrate the student's prior academic experience in exercise science. Students will bridge the foundational curricular experience with professional preparedness and/or professional certification. The course is delivered in a seminar format to encourage student participation and interaction with peers and faculty. Offered fall and summer.