# **B.S. Exercise Science (120 credits)**

### **Overall Degree Requirements (min. 120 credits)**

#### 1. Required Core Courses (59 credits minimum)

- EXS 195 Introduction to Exercise Science (3 credits)
- EXS 209 Research Methods in Exercise and Health Sciences (3 credits)
- EXS 220 Exercise Instruction and Leadership (3 credits)
- EXS 320 Exercise Testing and Prescription (3 credits)
- EXS 321 Exercise Testing Lab (2 credits)
- EXS 470 Exercise for Special Populations (3 credits)
- EXS 490 Internship in Exercise Science (6,9, or 12 credits)
- EXS 495 Professionalism in Exercise Science (SWS) (3 credits)
- BIO 120 General Biology I (Gen Ed) (4 credits)
- BMS 105 Basic Nutrition (3 credits)
- BMS 250 Anatomy and Physiology I (4 credits)
- BMS 251 Anatomy and Physiology II (4 credits)
- CHM 109 Introductory Chemistry (Gen Ed) (4 credits)
- ATH 217 Modern Principles of Athletic Training (2 credits)
- MOV 300 Kinesiology (3 credits)
- MOV 304 Introduction to Exercise Physiology (3 credits)
- PSY 101 Introductory Psychology (Gen Ed) (3 credits)
- STA 215 Introductory Applied Statistics (Gen Ed) (3 credits)

#### 2. Emphasis Courses

Students must choose between Exercise Physiology and Sports Performance, Physical Activity and Health, or Health Professions Preparation as an emphasis within their Exercise Science degree program:

## **Exercise Physiology and Sports Performance (26 credits)**

This emphasis deepens and expands content in human athletic performance and the physiology of training, thus preparing students for careers in strength and conditioning, sports science, biomechanics, and graduate school/academia.

- EXS 355 Human Performance Enhancement (3 credits)
- EXS 360 Strength and Conditioning for Athletic Performance (3 credits)
- EXS 400 Biomechanics (3 credits)
- EXS 404 Advanced Exercise Physiology (3 credits)
- EXS 440 Environmental Exercise Physiology (3 credits)
- Electives Credits: 11

Students must complete eleven credits of approved electives within this emphasis:

BMS 305: Clinical Nutrition (3 credits)

EXS 200: Psychosocial Aspects of Exercise and Physical Activity (3 credits)

EXS 330: Physical Activity and Public Health (3 credits)

EXS 390: Fieldwork in Exercise Science (2 credits)

MOV 201: Psychosocial Aspects of Physical Education and Sport (3 credits)

MOV 310: Motor Skill Development (3 credits)

PH 222: Public Health Concepts (3 credits)

PHY 216: Physics of Sport (3 credits)

STA 345: Statistics in Sports (3 credits)

### **Physical Activity and Health (26 credits)**

This emphasis deepens content knowledge in health, wellness, and public health, thus preparing students for careers in community wellness, corporate/employee wellness, cardiac rehabilitation, personal training, and graduate school/academia.

- EXS 200 Psychosocial Aspects of Physical Activity and Exercise (3 credits)
- EXS 330 Physical Activity and Public Health (3 credits)
- EXS 370 Exercise Across the Lifespan (3 credits)
- EXS 465 Cardiopulmonary Rehabilitation for the Clinical Exercise Physiologist (3 credits)
- MOV 310 Motor Skill Development (3 credits)
- PH 222 Public Health Concepts (3 credits)
- Electives Credits: 8

Students must complete eight credits of approved electives within this emphasis:

EXS 360: Strength and Conditioning for Athletic Performance (3 credits)

EXS 390: Fieldwork in Exercise Science (2 credits)

EXS 404: Advanced Exercise Physiology (3 credits)

PSY 310: Behavior Modification (3 credits)

PSY 364: Life Span Developmental Psychology (3 credits)

PSY 367: Health Psychology (3 credits)

#### **Exercise Science in Health Care (26-35 Credits)**

This emphasis provides a logical gateway for graduate health profession-seeking students (athletic training, physical therapy, occupational therapy, and physician assistant) by broadening their basic

biological and physical science background. This emphasis is intentionally diverse in electives to accommodate the wide range of graduate health profession pre-requisite coursework not already offered within the Exercise Science core curriculum.

- BIO 328 Biomedical Ethics (3 credits)
- BMS 223 Infectious Human Diseases (3 credits)
- CHM 230 Introduction to Organic and Biochemistry (4 credits) (or CHM 231 and CHM 232 8 credits)
- PHY 200 Physics for Life Sciences (4 credits) (or PHY 220 and PHY 221 10 credits)
- Electives Credits: 12

Students must complete twelve credits of approved electives within this emphasis:

ATH 210: Directed Observation in AT (1 credit)

BIO 355: Human Genetics (3 credits)

BMS 212: Introductory Microbiology (3 credits)

BMS 213: Laboratory in Microbiology (1 credit)

BMS 305: Clinical Nutrition (3 credits)

BMS 309: Laboratory in Human Anatomy (1 credit)

BMS 310: Basic Pathophysiology (3 credits)

BMS 355: Anatomy of Joints (2 credits)

BMS 427: Neuroanatomy (1 credit)

CHM 231: Introductory Organic Chemistry (4 credits)

CHM 232: Biological Chemistry (4 credits)

EXS 360: Strength and Conditioning for Athletic Performance (3 credits)

EXS 400: Biomechanics (3 credits)

EXS 440: Environmental Exercise Physiology (3 credits)

MOV 102: First Aid, CPR, and AED (2 credits)

MOV 218: Modern Principles of Athletic Training Lab (1 credit)

MOV 310: Motor Skill Development (3 credits)

PHY 216: Physics of Sport (4 credits)

PHY 220: General Physics I (5 credits)

PHY 221: General Physics II (5 credits)

PSY 303: Psychopathology (3 credits)

PSY 330: Foundations of Behavioral Neuroscience (3 credits)

PSY 364: Life Span Developmental Psychology (3 credits)

PSY 431: Introduction to Neuropsychology (3 credits)

### **Program Costs**

Students will be responsible for the costs associated with the required pre-internship health compliance check (immunizations, background check, and drug screening), travel to and from fieldwork or internship sites, and all textbooks and supplemental materials required for each course.