**Nebraska Wesleyan University**

# Exercise Science (B.S.)

## Catalog

2023-2024

## Program Description

As the most popular Health and Human Performance major, nearly 50% of our Exercise Science students apply to graduate schools to study physical therapy, physicianâ??s assistant, chiropractic or occupational therapy. An internship and a full-year of research and statistics are required.

Students interested in health-related professions such as physical therapy, occupational therapy and chiropractics may elect to major in Exercise Science. Students should consult with their advisor regarding pre professional requirements and suggested program of study.

***Learning Outcomes***
Majors will be able to:

1. Possess understanding of human anatomy, physiology, and biomechanics of movement and performance.
2. Demonstrate proficiency in assessing health, fitness, and well-being and prescribing programs to achieve goals in a safe and effective environment.
3. Demonstrate practical application of knowledge and ethical decision making in an appropriately supervised organizational setting.
4. Analyze and effectively communicate (oral and written) scholarly work in health and human performance.

## Departments

1. Health and Human Performance (Undergraduate)

### Exercise Science Major (55 hours)

| Required Courses | 21 hours |
|---|---|
| HHP 1270 Advanced Emergency Care | 1 hour |
| HHP 1320 Introduction to Allied Health | 1 hour |
| HHP 1910 Medical Terminology | 1 hour |
| HHP 2500 Basic Human Nutrition | 2 hours |
| HHP 2850 Structural Kinesiology | 1 hour |
| HHP 3850 Biomechanics | 3 hours |
| HHP 4150 Physiology of Exercise | 4 hours |
| HHP 4250 Exercise Testing and Programming | 3 hours |
| HHP 4800 Research and Statistical Methods | 3 hours |
| HHP 4970 Internship | 2 hours |
| **Select 8 hours from the following courses:** | **8 hours** |

- ATTR 2400 Physical Exam of the Lower Extremity
- ATTR 2410 Physical Exam of the Upper Extremity
- ATTR 3330 Health Assessment
- HHP 1300 Prevention and Care of Athletic Injuries
- HHP 2720 Introduction to Massage Therapy
- HHP 2760 Sport and Exercise Psychology
- HHP 2800 Clinical Exercise Physiology
- HHP 3100 Worksite Health Promotion
- HHP 3120 Motor Learning and Control
- HHP 3150 Principles Of Sport Performance
- HHP 3330 Health Assessment
- HHP 3400 Advanced Human Nutrition
- HHP 4810 Senior Research

| Supporting Program | 24 hours |
|---|---|
| Anatomy and Physiology | |
| • BIO 1090 Introduction to Human Anatomy and Physiology I/BIO 1090L and BIO 1100 Introduction to Human Anatomy and Physiology II/BIO 1100L or<br>• BIO 3200 Advanced Human Anatomy and Physiology I/BIO 3200L and BIO 3210 Advanced Human Anatomy and Physiology II/BIO 3210L | 8 hours |
| Select four additional science courses with labs. Must be from at least two departments. Check with your intended graduate school and your advisor. | 16 hours |

- BIO 1010 Perspectives in Biological Science
- BIO 1080 Microbiology
- BIO 1300 Introduction to Environmental Science
- BIO 1400FYW Introduction to Biological Inquiry
- BIO 2200 Genetics and Cell Biology
- BIO 2300 Ecology and Evolution
- CHEM 1110 Chemical Principles I and CHEM 1110L Chemical Principles I Laboratory
- CHEM 1120 Chemical Principles II and CHEM 1120L Chemical Principles II Laboratory
- CHEM 2100 Organic Chemistry I and CHEM 2100L Organic Chemistry I Laboratory
- CHEM 2110 Organic Chemistry II: Synthesis and Mechanisms and CHEM 2110L Organic Chemistry II Laboratory
- CHEM 3410 Biochemistry
- PHYS 1100 Introduction to Geology
- PHYS 1200 Energy and the Global Environment
- PHYS 1300 Astronomy
- PHYS 1400 Introduction to Meteorology
- PHYS 1600 Principles of Physics I
- PHYS 1700 Principles of Physics II

| Capstone Courses | 2 hours |
|---|---|
| HHP 3990 Professional Engagement | 1 hour |
| HHP 4990 Senior Capstone | 1 hour |