

Exercise Science, BS

Requirements

The Bachelor of Science with a major in exercise science requires a minimum of 120 s.h., including at least 45–47 s.h. of work for the major. A minimum of 16 s.h. in the major must be earned at the University of Iowa. Students must maintain a grade-point average of at least 2.00 in all courses for the major and in all UI courses for the major. They must also complete the College of Liberal Arts and Sciences GE CLAS Core.

In planning coursework, students should be guided by the College of Liberal Arts and Sciences maximum hours rule: students earning a BS may apply a maximum of 56 s.h. earned in one department to the minimum 120 s.h. required for graduation, whether or not the coursework is accepted toward requirements for the major; students who earn more than 56 s.h. from one department may use the additional semester hours to satisfy requirements for the major (if the department accepts them), and the grades they earn become part of their grade-point average, but they cannot apply the additional semester hours to the minimum 120 s.h. required for graduation.

The BS in exercise science is intended for students seeking careers as professionals in fitness and in strength and conditioning. The major provides focused study in physical fitness, physical activity, sport nutrition, and sport conditioning as they pertain to health and performance outcomes. The curriculum has been approved by the American College of Sports Medicine (ACSM) as meeting the academic preparation for certification as an ACSM-certified exercise physiologist and ACSM-certified personal trainer. It also prepares students for certification by the National Strength and Conditioning Association as a certified strength and conditioning specialist and certified special population specialist. The strong physiological science-based curriculum can serve as preparation for professional or graduate study in rehabilitation sciences, performance sciences, or medical fields.

Students who earn the major in exercise science may not earn a major in human physiology, health promotion, or health studies.

Students who earn the major in exercise science may not earn a minor in lifestyle medicine but may earn a minor in human physiology.

The BS with a major in exercise science requires the following coursework.

Requirements	Hours
Science and Math Foundation Courses	10-12
Exercise Science Foundation Courses	12
Exercise Science Core Courses	17
Electives	6

Science and Math Foundation Courses

Students complete three foundation courses (minimum of 10 s.h.): one each in chemistry, biology, and mathematics or statistics. Note that courses may have required prerequisites.

Course #	Title	Hours
Chemistry		
One of these:		
CHEM:1080	General Chemistry II	3
CHEM:1120	Principles of Chemistry II	4
Biology		
One of these:		
BIOL:1140	Human Biology: Nonmajors	4
BIOL:1141	Human Biology: Health Professions	4
BIOL:1411	Foundations of Biology	4
Mathematics or Statistics		
One of these:		
MATH:1020	Elementary Functions	4
MATH:1350	Quantitative Reasoning for Business	4
MATH:1440	Mathematics for the Biological Sciences	4
MATH:1460	Calculus for the Biological Sciences	4
MATH:1850	Calculus I	4
PSQF:4143/ STAT:4143	Introduction to Statistical Methods	3
STAT:1020/ PSQF:1020	Elementary Statistics and Inference	3
STAT:1030	Statistics for Business	4
STAT:3510/ IGPI:3510	Biostatistics	3

Exercise Science Foundation Courses

Students must complete the four-course departmental core (12 s.h.).

Course #	Title	Hours
All of these:		
HHP:2100	Human Anatomy	3
HHP:2200	Physical Activity and Health	3
HHP:2310	Nutrition and Health	3
HHP:2400	Fundamentals of Human Physiology	3

Exercise Science Core Courses

Course #	Title	Hours
All of these:		
HHP:2350	Biomechanics of Sport and Physical Activity	3
HHP:3045	Physical Activity Psychology	3
HHP:3410	Applied Exercise Physiology With Lab	4
HHP:4240	Exercise Testing and Prescription With Lab	4
HHP:4310	Sport and Exercise Nutrition	3

Electives

Students must complete at least 6 s.h. of additional health, sport, and human physiology courses (prefix HHP) numbered 1050 or above.