

Human Physiology, BS

Requirements

The Bachelor of Science with a major in human physiology requires a minimum of 120 s.h., including 63 s.h. of work for the major. 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 also must complete the College of Liberal Arts and Sciences GE CLAS Core. Transfer students must complete a minimum of 16 s.h. in human physiology coursework at the University of Iowa, including HHP:3550 Human Physiology with Laboratory.

The major in human physiology is designed primarily for individuals who intend to continue their education beyond the BS in the health professions, including medicine, physician assistant, physical therapy, dentistry, occupational therapy, chiropractic, and optometry, and for those who intend to pursue graduate degrees in basic life sciences.

Students may complete the BS with a major in human physiology without an emphasis area or with one of three optional emphasis areas: clinical physiology, neuromuscular physiology and metabolism, or research.

Students may earn a BS in human physiology or a BS in health promotion or exercise science, but not more than one of these.

Students who earn a BS in human physiology may not earn the minor in human physiology.

For policies concerning transfer credit, credit by examination, cumulative grade-point average, general rules relating to regression and duplication, and so forth, see For Undergraduate Students on the College of Liberal Arts and Sciences website.

The BS with a major in human physiology requires the following coursework.

Requirements	Hours
Core Courses	14
Elective Courses	18
Cognate Area Courses	31

Area of Emphasis

Core Courses

Course #	Title	Hours
All of these:		
HHP:1050	Exploring Health and Human Physiology	1
HHP:3115	Anatomy for Human Physiology with Lab	5
HHP:3550	Human Physiology with Laboratory	5
One of these:		
HHP:2200	Physical Activity and Health	3
HHP:2280	Cultural Competency and Health	3
HHP:2310	Nutrition and Health	3

Elective Courses

At least 18 s.h. from these with at least 12 s.h. in health and human physiology courses (prefix HHP).

Course #	Title	Hours
At least 6 s.h. from these (organ system-based courses):		
HHP:3450	Immunology in Health and Disease	3
HHP:4110	Advanced Human Anatomy Laboratory	4
HHP:4130	Skeletal Muscle Physiology	3
HHP:4260	Respiratory Pathophysiology	3
HHP:4300	Sensorimotor Neurophysiology	3
HHP:4460	Cardiovascular Physiology	3
At least 3 s.h. from these (integrative physiology courses):		
HHP:4150	Clinical Exercise Physiology	3
HHP:4250	Human Pathophysiology	3
HHP:4410	Integrative Physiology of Exercise	3
HHP:4470/ASP:4470	Physiology of Aging	3
HHP:4510	Energetics in Health and Disease	3
May include up to 9 s.h. from these:		
HHP:3300	Human Growth and Motor Development	3
HHP:3700	Health Care Communications	1
HHP:3900	Writing for Health and Human Physiology	3
HHP:3994	Undergraduate Research (may be repeated; up to 3 s.h. may be applied toward the degree)	1-3
HHP:4200	Metabolic Exercise Testing and Prescription	4
HHP:4210	Musculoskeletal Exercise Testing and Prescription	4
HHP:4440	Physiology of Nutrition	3
HHP:4450	Human Genetics and Disease	3-4
HHP:4465	Environmental Exercise Physiology	3
HHP:4490	International Health: Experiential Learning (may be repeated; up to 3 s.h. may be applied toward the degree)	3
HHP:4500	Undergraduate Independent Project (may be repeated; up to 3 s.h. may be applied toward the degree)	arr.
HHP:4700	Health and Human Physiology Teaching Internship (may be repeated; up to 3 s.h. may be applied toward the degree)	2-3
HHP:4800	Research Methods and Ethics	3

HHP:4900	Honors Research	3
HHP:4930	Health and Human Physiology Internship (may be repeated; up to 3 s.h. may be applied toward the degree)	arr.
BIOL:2254	Endocrinology	3
BIOL:2723	Cell Biology	3
BMB:3110	Biochemistry	3
MICR:2157	General Microbiology	3
MICR:2158	General Microbiology Laboratory	2
PCOL:4130	Drug Mechanisms and Actions	3
May include one of these:		
PSY:2130	Advanced Psychology for Pre-Medical Track	3
PSY:2930	Abnormal Psychology: Health Professions	3
SOC:3510	Medical Sociology	3

Cognate Area Courses

Students must earn a minimum of 31 s.h. in cognate areas—subjects outside of human physiology—by completing courses from the following lists.

Course #	Title	Hours
Biology		
This sequence:		
BIOL:1411- BIOL:1412	Foundations of Biology - Diversity of Form and Function	8
Chemistry		
This sequence:		
CHEM:1110 & CHEM:1120	Principles of Chemistry I-II	8
Mathematics		
One of these:		
MATH:1460	Calculus for the Biological Sciences	4
MATH:1550	Engineering Mathematics I: Single Variable Calculus	4
MATH:1850	Calculus I	4
Physics		
This sequence:		
PHYS:1511- PHYS:1512	College Physics I-II	8
Statistics		
One of these:		
STAT:2010	Statistical Methods and Computing	3
STAT:3510/ IGPI:3510	Biostatistics	3
STAT:4143/ PSQF:4143	Introduction to Statistical Methods	3

Areas of Emphasis

Students majoring in human physiology may declare an emphasis area but are not required to do so to satisfy major requirements. Declaring an emphasis area does not require completion of elective coursework beyond that already

required for the major. Major elective requirements can be met through emphasis area courses.

Clinical Physiology Area

Course #	Title	Hours
Four of these:		
HHP:3450	Immunology in Health and Disease	3
HHP:3700	Health Care Communications	1
HHP:4150	Clinical Exercise Physiology	3
HHP:4200	Metabolic Exercise Testing and Prescription	4
HHP:4250	Human Pathophysiology	3
HHP:4260	Respiratory Pathophysiology	3
HHP:4490	International Health: Experiential Learning	3

Neuromuscular Physiology and Metabolism Area

Course #	Title	Hours
Four of these:		
HHP:4110	Advanced Human Anatomy Laboratory	4
HHP:4130	Skeletal Muscle Physiology	3
HHP:4300	Sensorimotor Neurophysiology	3
HHP:4410	Integrative Physiology of Exercise	3
HHP:4440	Physiology of Nutrition	3
HHP:4510	Energetics in Health and Disease	3

Research Area

Course #	Title	Hours
All of these:		
HHP:3994	Undergraduate Research	3
HHP:4800	Research Methods and Ethics	3
HHP:4900	Honors Research	3