

# Health and Human Physiology, PhD

## Requirements

The Doctor of Philosophy program in health and human physiology requires a minimum of 72 s.h. of graduate credit.

Doctoral students should have a strong background in the natural sciences and/or health promotion, and a working knowledge of statistics and research methodology. Students may acquire additional knowledge of statistics and research methodology after entering the program.

All PhD students complete a common core of courses, elective courses, 10 s.h. of independent research in HHP:6000 Research, and a 12 s.h. dissertation requirement in HHP:7900 Thesis: PhD They must complete a dissertation in their specialization area.

Some courses in the program are offered by other departments. Faculty members from those departments frequently serve on comprehensive examination committees and on dissertation committees for the initial presentation of a candidate's prospectus. They also participate in the final examination.

The PhD with a major in health and human physiology requires the following coursework.

## Core Courses

Course #	Title	Hours
All of these:		
HHP:6000	Research	arr.
HHP:6020	Advanced Research Methods and Ethics	3
HHP:7000	Practicum in College Teaching (only for students without a teaching assistantship)	arr.
HHP:7900	Thesis: PhD	arr.

## Introductory Statistics Course

Course #	Title	Hours
One of these:		
BIOS:4120	Introduction to Biostatistics	3
PSQF:6242	Selected Applications of Statistics	3
STAT:3510/ IGPI:3510	Biostatistics	3
STAT:4143/ PSQF:4143	Introduction to Statistical Methods	3

## Advanced Statistics Courses

Course #	Title	Hours
Two advanced statistics courses, such as the following (consult advisor):		
BIOS:5120/ IGPI:5120/ STAT:5610	Regression Modeling and ANOVA in the Health Sciences	3

STAT:6513/ PSQF:6243	Intermediate Statistical Methods	3
-------------------------	----------------------------------	---

## Seminar Courses

Course #	Title	Hours
Four enrollments (1 s.h. each) from the following:		
HHP:6300	Motor Control Seminar	1
HHP:6400	Integrative Physiology Seminar	1
HHP:6500	Seminar in Health Promotion	1

## General Electives

Students are expected to obtain broad-based knowledge in their specialization area. This normally entails approximately 30 s.h. of coursework. Students choose specialization electives with guidance from their advisor/mentor. Electives may include any of the following.

Course #	Title	Hours
HHP:4020	Health Coaching	3
HHP:4320	Nutrition Interventions	3
HHP:4365	Internship in Health Coaching	3
HHP:4420	Planning and Evaluating Health Interventions	3
HHP:5200	Physical Activity Epidemiology	3
HHP:6030	Physical Activity and Dietary Behavior Change	3
HHP:6130	Advanced Skeletal Muscle Physiology	1,3
HHP:6150	Advanced Clinical Exercise Physiology	1,3
HHP:6200	Advanced Metabolic Exercise Testing and Prescription	1,4
HHP:6260	Advanced Respiratory Pathophysiology	1,3
HHP:6310	Advanced Sport and Exercise Nutrition	3
HHP:6410	Advanced Integrative Physiology of Exercise	1,3
HHP:6460	Advanced Cardiovascular Physiology	1,3
HHP:6470	Advanced Physiology of Aging	1,3
HHP:6510	Advanced Energetics in Health and Disease	1,3
HHP:7300	Advanced Sensorimotor Neurophysiology	1,3
ACB:5203	Gross Human Anatomy for Graduate Students	5-6
BMB:3110	Biochemistry	3
BMB:3120	Biochemistry and Molecular Biology I	3
BMB:3130	Biochemistry and Molecular Biology II	3
EPID:4400	Epidemiology I: Principles	3
EPID:5241	Statistical Methods in Epidemiology	4
EPID:6100	Writing a Grant Proposal	3

EPID:6350	Nutritional Epidemiology	2
EPID:6400	Epidemiology II: Advanced Methods	4
EPID:6600	Epidemiology of Chronic Diseases	3
FRRB:7000	Redox Biology and Medicine	4
MMED:6230	Pathogenesis of Metabolic and Cardiovascular Disorders	3
MPB:5153	Graduate Physiology	4
NSCI:7235/ NEUR:7235	Neurobiology of Disease	3
OEH:4310	Occupational Ergonomics: Principles	3
PCOL:3101	Pharmacology I: A Drug's Fantastic Journey	3
PCOL:3102	Pharmacology II: Mechanisms of Drug Action	3
PCOL:4130	Drug Mechanisms and Actions	3
PTRS:5210	Kinesiology and Pathomechanics	4
PTRS:6224	Activity-Based Neural and Musculoskeletal Plasticity in Health Care	4
PTRS:7812	Biomedical Instrumentation and Measurement	3
PTRS:7875	Analysis of Activity-Based Neural and Musculoskeletal Plasticity	3

## Independent Research

Students must enroll in the independent research course.

Course #	Title	Hours
This course:		
HHP:6000	Research	10

## Dissertation

Students working on a dissertation register for the following course.

Course #	Title	Hours
HHP:7900	Thesis: PhD	12