Health and Human Physiology, MS

Requirements

The Master of Science in health and human physiology requires 30–36 s.h. of graduate credit. Required credit varies by subprogram: the child life subprogram requires a minimum of 36 s.h. and is offered without a thesis; the clinical exercise physiology subprogram requires a minimum of 33 s.h. and is offered without a thesis; the MS program in health and human physiology without a subprogram requires a minimum of 30 s.h. and is offered with a thesis.

Students interested in pursuing a PhD after earning a master's degree should choose the MS in health and physiology program with a thesis.

Child Life Subprogram

The MS in health and human physiology with the child life subprogram requires the following coursework. All courses except PSQF:4143/STAT:4143 are required to be taken on an A–F graded basis.

Requirements	Hours
Child Life Core Courses	27
Child Life Internship	9
Comprehensive Exam	

Child Life Core Courses

Course #	Title	Hours
All of these:		
TR:5165	Child Life: Child Development and Healthcare Interventions	3
TR:5166	Child Life: Seminar	3
TR:5167	Child Life Practicum	3
TR:5211	Professional Ethics and Practice in Pediatrics	3
TR:5260	Play and Childhood	3
TR:5261	Family Systems	3
CSED:4131	Loss, Death, and Bereavement	3
PSQF:4143/ STAT:4143	Introduction to Statistical Methods	3
One of these:		
HHP:6020	Advanced Research Methods	3
TR:5205	Research Methods and Play Behavior	3

Child Life Internship

Students take TR:5270 Child Life Internship for 9 s.h. The supervised internship requires 600 contact hours with a certified child life specialist.

Child Life Comprehensive Exam

Students who pursue the child life subprogram must successfully pass a comprehensive exam in the last semester prior to their child life internship. The comprehensive exam committee works with each student to develop exam questions.

Clinical Exercise Physiology Subprogram

The Master of Science with the clinical exercise physiology subprogram requires the following coursework. All courses except HHP:5935 Clinical Exercise Physiology Internship must be taken on an A–F graded basis.

Requirements	Hours
Clinical Exercise Physiology Core Courses	14-25
Statistics Course	3
Clinical Exercise Physiology Internship	3-6
Electives	0-13

Clinical Exercise Physiology Core Courses

Course #	Title	Hours
Both of these:		
HHP:6020	Advanced Research Methods	3
PCOL:3101	Pharmacology I: A Drug's Fantastic Journey	3
One of these:		
HHP:4020	Health Coaching	3
HHP:6030	Physical Activity and Dietary Behavior Change	3

With the permission of an advisor, students who have a prior undergraduate equivalent to any of these courses enroll in the 1 s.h. option.

Course #	Title	Hours
All of these:		
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:6410	Advanced Integrative Physiology of Exercise	1,3
HHP:6460	Advanced Cardiovascular Physiology	1,3

Statistics Course

Course #	Title	Hours
One of these introductory courses (or equivalent with department approval):		
BIOS:4120	Introduction to Biostatistics	3
PSQF:4143/ STAT:4143	Introduction to Statistical Methods	3
PSQF:6242	Selected Applications of Statistics	3
STAT:3510/ IGPI:3510	Biostatistics	3

Clinical Exercise Physiology Internship

Students complete an individually arranged internship, usually during their second year. They are required to enroll in HHP:5935 Clinical Exercise Physiology Internship for a

minimum of 3 s.h. and are permitted to enroll in a maximum of 6 s.h.

Electives

Elective courses must bring the total credit for the degree to a minimum of 33 s.h.

Though any health, sport, and human physiology (prefix HHP) course numbered 3000 or above is approved as an elective option, students are strongly encouraged to select from the following courses, as it enhances their concentration in human and exercise physiology, clinical exercise physiology, prescriptive exercise and training for health and fitness, health maintenance, and understanding human disease.

Course #	Title	Hours
HHP:4420	Planning and Evaluating Health Interventions	3
HHP:5200	Physical Activity Epidemiology	3
HHP:6130	Advanced Skeletal Muscle 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

The following courses outside the Department of Health, Sport, and Human Physiology are also approved elective options. Additional elective options not listed here may be possible with the permission of the student's advisor.

Course #	Title	Hours
ACB:5203	Gross Human Anatomy for Graduate Students	5-6
EPID:6350	Nutritional Epidemiology	2
EPID:6360	Nutrition Intervention in Clinical Trials Research	2
EPID:6600	Epidemiology of Chronic Diseases	3
PSY:3340	Behavior Modification	3
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

MS in Health and Human Physiology With Thesis

Students who intend to earn a PhD after completing the master's degree should choose the health and human physiology program with a thesis. In order to be admitted, students must hold a BS or BA degree with a GPA of at least 3.00. All courses are required to be taken on an A–F graded basis.

The MS in health and human physiology with thesis requires the following coursework.

Requirements	Hours
Required Courses	15
General Elective Courses	15

Required Courses

Course #	Title	Hours
One of these (or equivalent with department approval):		
BIOS:4120	Introduction to Biostatistics	3
PSQF:4143/ STAT:4143	Introduction to Statistical Methods	3
PSQF:6242	Selected Applications of Statistics	3
STAT:3510/ IGPI:3510	Biostatistics	3
One of these:		
BIOS:5120/ IGPI:5120/ STAT:5610	Regression Modeling and ANOVA in the Health Sciences	3
PSQF:6243/ STAT:6513	Intermediate Statistical Methods	3
All of these:		
HHP:6020	Advanced Research Methods	3
HHP:6600	Professional Skills for Graduate Students Seminar (taken twice for 1 s.h. each)	2
HHP:7500	Thesis: MS	4

General Elective Courses

With guidance from an advisor, students choose 15 s.h. in elective courses that broaden their knowledge in health and human physiology and related disciplines and enhance their knowledge in their specific areas of interest.

Though any health, sport, and human physiology (prefix HHP) course numbered 3000 or above is approved as an elective option, students are strongly encouraged to select from the following.

Course #	Title	Hours
HHP:3050	Obesity	3
HHP:3450	Immunology in Health and Disease	3
HHP:4020	Health Coaching	3
HHP:4320	Nutrition Interventions	3
HHP:4365	Internship in Health Coaching	3
HHP:4390	Understanding Human Disease	3
HHP:4420	Planning and Evaluating Health Interventions	3
HHP:4450	Human Genetics and Disease	3-4
HHP:5200	Physical Activity Epidemiology	3
HHP:6000	Research	arr.
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: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

The following courses outside the Department of Health, Sport, and Human Physiology are also approved elective options. Additional elective options not listed here may be possible with the permission of the student's advisor.

Course #	Title	Hours
ACB:5203	Gross Human Anatomy for Graduate Students	5-6
BMB:3110	Biochemistry	3
EPID:4400	Epidemiology I: Principles	3
EPID:6350	Nutritional Epidemiology	2
EPID:6400	Epidemiology II: Advanced Methods	4
EPID:6600	Epidemiology of Chronic Diseases	3
MPB:5153	Graduate Physiology	4
PTRS:7812	Biomedical Instrumentation and Measurement	3
PTRS:7875	Analysis of Activity-Based Neural and Musculoskeletal Plasticity	3