

# BACHELOR OF SCIENCE IN HEALTH AND EXERCISE SCIENCE (HES)

Health status has been shown to be related to many factors including illness and disease, but it is also related to lifestyle, environmental exposures, social status, cultural affiliation, spiritual belief and access to health services. The Bachelor of Science in Health and Exercise Science offers the foundation to use strategies to help others reduce health risks and increase overall health, as well as evaluate and advocate for policies that influence public health for the common good. In Jesuit education it is known as *cura personalis*. To HES students it means looking at all aspects that affect individuals' and communities' health, including social justice issues, along with each individual's unique circumstances, challenges and gifts.

The Bachelor of Science in Health and Exercise Science (HES) combines the following principles to optimize physical, mental and social wellbeing: behavioral health, biomechanics, exercise physiology, health psychology, motor behavior, and nutrition. In addition to the course work included in this degree, students complete a required internship to gain practical experience in such areas as community health, individual fitness, strength and conditioning, physical therapy, nutrition, or health policy settings.

Flexibility of career choice is a hallmark of the HES degree. Diverse career opportunities include employment as an exercise specialist, health and wellness coach, personal trainer, sport performance coach or occupational and community health specialist. In addition, this program prepares graduates for application to professional graduate programs in the professions of physical therapy, occupational therapy, athletic training, sports psychology, nutrition and other health related disciplines, as well as academic graduate programs in areas such as health and behavioral science, public health, exercise physiology and kinesiology.

The HES major provides a strong foundation in the natural and behavioral sciences and encourages students to tailor their course of study specific to their career goals with optional specializations in pre-physical therapy, or pre-occupational therapy.

The four-year, 120 semester hour, Bachelor of Science in HES degree also includes preparation for various American College of Sport Medicine (ACSM) certifications.

## Degree Requirements

The HES Department recommends the following to fulfill the RHCHP Core Studies Requirements.

Code	Title	SHs
<b>Core Studies Requirements</b>		
FYE 200	Writing & Speaking in Our Common Home	3.00
Literature/Humanities/Oral & Written Communication		3.00
Business/Economics/Social Science		3.00
Religious Studies		3.00
BL 258	General Biology I: Organismic	3.00
NS 260	Introduction to Brain and Behavior	3.00
HES 311	Research Design & Statistics	3.00
HCE 445	Ethics and Health	3.00

<b>Lower Division Requirements</b>		
BL 259	Organismic Biology Lab	1.00
BL 260	General Biology II: Mlclr & Cellular	3.00
BL 261	Molecular & Cellular Biology Laboratory	1.00
NS 261	Intro to Brain and Behavior Laboratory	1.00
PSY 250	General Psychology	3.00
PSY 358	Lifespan Human Development	3.00
Philosophy Course		3.00
Sociology Course		3.00
HES 374	Applied Human Anatomy	3.00
HES 375	Applied Human Anatomy Lab	1.00
HES 376	Applied Human Physiology	3.00
HES 377	Applied Human Physiology Lab	1.00
General Electives <sup>1</sup>		27.00
<b>Department Requirements</b>		
HES 210	Intro to Health & Exercise Science	3.00
HES 350	Normal & Therapeutic Nutrition	3.00
HES 418	Health Psychology	3.00
HES 420	Kinesiology	3.00
HES 421	Kinesiology Laboratory	1.00
HES 430	Physiology of Exercise	3.00
HES 431	Physiology of Exercise Lab	1.00
HES 434	Exercise Prescription	3.00
HES 435	Exercise Prescription Lab	1.00
HES 438	Nutrition Across the Lifespan	3.00
HES 440	Concepts of Motor Behavior	3.00
HES 441	Concepts of Motor Behavior Lab	1.00
HES 460	Community Health Assessment	3.00
HES 498E-W	Internship in Health & Exercise Science	3.00
Select two of the following:		6.00
HES 439	Population-Based Exercise Programs	
HES 450	Biomechanics of Exercise	
HES 470	Perspectives on Global Health	
HES 472	Society and Culture in Health	
Upper division elective		3.00
<b>Total SHs</b>		<b>120</b>

<sup>1</sup> General electives can be fulfilled with optional specialization courses, prerequisites for graduate programs, creative expression, language, math, etc..

### Optional Pre-Physical Therapy Specialization

BL 258 General Biology I: Organismic (3 credits)

BL 259 Organismic Biology Lab (1 credit)

MT 260 Pre-Calculus (4 credits)

PH 202A General Physics w/ Trigonometry I (3 credits)

PH 205A General Physics w/ Trigonometry Lab (1 credit)

PH 202B General Physics w/ Trigonometry II (3 credits)

PH 205B General Physics w/ Trigonometry II Lab (1 credit)

CH 210 General Chemistry I (4 credits)

CH 211 General Chemistry I Lab (1 credit)

CH 230 General Chemistry II (4 credits)

CH 231 General Chemistry II Lab (1 credits)

BL 296 Introduction to Biomedical Terminology (1 credit)

HES 450 Biomechanics of Exercise (3 credits)

\*Note that many physical therapy programs stipulate that you cannot have more than 6 credits of pre-requisites outstanding at the time of application, so take these 200-level courses prior to senior year.

\*\*Always check the requirements set forth by the specific physical therapy programs you intend to apply to.

**Optional Pre-Occupational Therapy Specialization**

BL 296 Introduction to Biomedical Terminology (1 credit)

PSY 471 Abnormal Psychology (3 credits)

PSY 468 Developmental Disabilities (3 credits)

BL 258 General Biology I: Organismic (3 credits)

BL 259 Organismic Biology Lab (1 credit)

\*\*Always check the requirements set forth by the specific occupational therapy programs you intend to apply to.