

# BS in Nutrition and Exercise Physiology with Emphasis in Physical Activity, Nutrition and Human Performance

## Degree Program Description

This program is for students with a passion for health and wellness, evidence-based science, helping people, and using physical activity and nutrition to positively impact human health and performance. Students earning this degree are well-prepared for employment opportunities that include fitness assessment, lifestyle intervention education, exercise supervision and program administration in schools, businesses and hospitals, health education and promotion, and entry-level positions in cardiac and pulmonary or spine rehab. This is a rapidly expanding area with opportunities in corporate and commercial industries, government, and non-profit sectors.

In addition to the job opportunities listed above, past graduates of this area have continued their studies in a variety of areas such as graduate school for Exercise Science/Physiology, Kinesiology, Athletic Training, Physical Therapy, Occupational Therapy, Physician's Assistant, Chiropractic, Nursing, Public Health.

Graduates of this program are qualified to sit for the following certifications without any additional courses or education beyond our core requirements: ACSM Certified Exercise Physiologist (ACSM EP-C), ACSM Certified Personal Trainer (ACSM CPT), ACSM Certified Group Exercise Instructor (ACSM GEI), NSCA Certified Personal Trainer, NSCA Certified Strength & Conditioning Coach, ACE Certified Personal Trainer.

## Major Program Requirements

Nutrition and Exercise Physiology with emphasis in Physical Activity, Nutrition, and Human Performance does not require an application or have a pre-program status. Students may declare the major and emphasis area by indicating it when they apply to MU and transition directly into the program. After the first semester at MU, students must have a minimum of a 2.0 GPA (term and CUM) to declare the program. Current MU students will need to complete a transfer of division form. A current student in another program within the college should notify their advisor of their wishes. There are specific grade requirements for most courses within the emphasis, these are outlined on the degree requirement sheet and noted on the degree audit.

### Grade Requirements:

C- or higher: BIO\_SC 1010/BIO\_SC 1020 or BIO\_SC 1500, MPP 3202 or BIO\_SC 3700, PTH\_AS 2201 (or the equivalent). All NEP courses.

C- or higher: CHEM 1400 and CHEM 1401

Students must complete all university requirements (<http://catalog.missouri.edu/academicdegree/requirements/universityrequirements/>), including general education (<http://catalog.missouri.edu/academicdegree/requirements/generaleducationrequirements/>), in addition to the degree requirements below.

### Science Foundation

BIO_SC 1010 & BIO_SC 1020 or BIO_SC 1500	General Principles and Concepts of Biology and General Biology Laboratory Introduction to Biological Systems with Laboratory	5
BIOCHM 3630 or BIOCHM 4270	General Biochemistry Biochemistry	3
CHEM 1400	College Chemistry I	3
CHEM 1401	College Chemistry I Laboratory	1
CHEM 2030 or CHEM 2100	Survey of Organic Chemistry Organic Chemistry I	3
CHEM 2130	Organic Laboratory I (recommended)	2
MPP 3202 or BIO_SC 3700	Elements of Physiology Human Physiology	5
PTH_AS 2201	Human Anatomy Lecture	3
PTH_AS 2203	Human Anatomy Laboratory (recommended)	2

### Math and Statistics

MATH 1100 or MATH 1160	College Algebra (C- or better required) Precalculus Mathematics	3
STAT 1200 or ESC_PS 4170 or ABM 2225	Introductory Statistical Reasoning Introduction to Applied Statistics Statistical Analysis	3

### Communication

COMMUN 1200 or AGSC_COM 2220	Public Speaking Verbal Communication in Agriculture, Food and Natural Resources	3
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## Emphasis Core Requirements

### Nutritional Sciences

NEP 2340	Human Nutrition I	3
NEP 2380	Diet Therapy for Health Professionals	3
NEP 2450	Nutrition Throughout the Life Span	3
NEP 4970	PANHP Capstone: Sports Nutrition	3

### Exercise Physiology

HTH_PR 4250	Human Kinesiology	3
NEP 1330	Introduction to Exercise and Fitness Laboratory	2
NEP 1340	Introduction to Exercise and Fitness	3
NEP 1485	Career Exploration in Exercise Science	1
NEP 2140	Exercise Practicum I	3
NEP 3450	Activity Throughout the Lifespan	3
NEP 3550	Corporate, Community, and Personal Fitness	3
NEP 3850	Physiology of Exercise	3
NEP 4200	Sports Performance and Conditioning	3
NEP 4860	Exercise Prescription	3

### Supporting Electives

15 credit hours. A minimum of 9 hours must be taken from the NEP area in the list below.

### NEP:

AFNR 2191	International Agriculture, Food and Natural Resources - Humanities (Program-approved experiences only.)	1-6
NEP 2460	Eating Disorders	3
NEP 3001 or NEP 4001	Topics in Nutritional Science Topics in Nutrition and Exercise Physiology	1-3

NEP 3390	Teaching and Counseling Techniques in Nutrition	2
NEP 3420	Role of Inactivity in Chronic Diseases	3
NEP 4340	Human Nutrition II Lecture	3
NEP 4360	Nutritional Assessment	3
NEP 4370	Medical Nutrition Therapy I	3
NEP 4400	Pathophysiology of Diseases Affecting Metabolic Health	3
NEP 4480	Pediatric Exercise Physiology	3
NEP 4550	Exercise is Medicine	2
NEP 4590	Community Nutrition	3
NEP 4750	Cardiopulmonary Rehabilitation - A Multifactorial Process	3
NEP 4870	Exercise for Special Populations	3
NEP 4940	Internship in Nutritional Science and Exercise Physiology	1-6

#### Other Areas:

BIO_SC 2200	General Genetics	4
CDS 2190	Medical Terminology	3
ESC_PS 4200	Positive Psychology	3
H_D_FS 2400	Principles of Human Development	3
or H_D_FS 2400W	Principles of Human Development - Writing Intensive	
H_D_FS 3430	Adolescence and Young Adulthood	3
H_D_FS 3440	Adulthood and Aging	3
MICROB 3200	Medical Microbiology and Immunology	4
PHYSICS 1210	College Physics I	4
or PHYSICS 1220	College Physics II	
PRST 4150	Contemporary Issues in Sport	3
PRST 4333	Park and Sport Facility Operations	3
PSYCH 2210	Mind, Brain, and Behavior	3
PSYCH 3830	Health Psychology	3
SOCIOL 3310	Social Psychology	3
SOCIOL 3430	The Sociology of Sport	3

#### Electives to equal 120 credit minimum

Organic chem lab, anatomy lab and internships are available and highly recommended.

## Semester Plan

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices where options are available.

First Year			
Fall	CR	Spring	CR
BIO_SC 1500 or 1010 <i>and</i> 1020		5 ENGLISH 1000	3
MATH 1100		3 NEP 1485	1
NEP 1340		3 CHEM 1400	3
NEP 1330		2 CHEM 1401	1
PSYCH 1000		3 Hist or Pol Sc	3
		Humanities	3
	16		14

Second Year			
Fall	CR	Spring	CR
CHEM 2030 or 2100		3 BIOCHM 3630 or 4270	3
CHEM 2130 (recommended)		2 MPP 3202	5
COMMUN 1200 or AGSC_COM 2220		3 NEP 2140	3

NEP 2380	3 NEP 2340	3
PTH_AS 2203 (recommended)	2 STAT 1200 or ABM 2225	3
PTH_AS 2201	3	
	16	17

Third Year			
Fall	CR	Spring	CR
NEP 3450		3 NEP 2450	3
NEP 3850W		3 NEP 3550	3
NEP Supporting Area		3 2000+ social/behavioral science	3
Humanities		3 Supporting Area	3
		General Elective/Writing Intensive	3
	12		15

Fourth Year			
Fall	CR	Spring	CR
HTH_PR 4250		3 NEP 4200	3
NEP 4970		3 NEP 4860	3
NEP Supporting Area		3 NEP Supporting Area	3
Supporting Area		3 General Elective	6
Electives		3	
	15		15

Total Credits: 120