



Nutrition & Exercise Physiology

University of Missouri

Degree Requirements for:

Human Physiology and Translational Sciences Pre-Med Program

Human Physiology and Translational Sciences Professional Program

To enter the Human Physiology and Translational Sciences program, students are required to have a minimum GPA of 2.65 and be enrolled in at least one required biology, chemistry, physics, or biochemistry course OR one required NEP course per semester to be eligible. Degree Program Requirements include General Education courses, HES College requirements, and Professional Program courses. Electives or supportive courses complete the 120 hours required for the degree.

There are specific grade requirements for most courses within the emphasis, these are outlined below.

Science Foundation (29 - 31 hours)

- _____ BIO SC 1500 Introduction to Biological Systems (5)
- _____ CHEM 1320 College Chem I (4)
- _____ CHEM 1330 College Chemistry II (4)
- _____ CHEM 2100 Organic Chemistry I (3)
- _____ CHEM 2110 Organic Chemistry II (3) **and**
- _____ CHEM 2130 Organic Lab (2)
- _____ PHYSCS 1210 College Physics I (4) **and**
- _____ PHYSCS 1220 College Physics II (4) **or**
- _____ PHYSCS 2750 **and**
- _____ PHYSCS 2760 University Physics I & II (10)

Core Curriculum (39 hours)

- _____ BIO SC 2200 General Genetics (4)
- _____ BIO SC 2300 Introduction to Cell Biology (4)
- _____ BIOCH 4270 Biochemistry (3)
- _____ BIOCH 4272 Biochemistry (3)
- _____ MPP 3202 Elements of Physiology (5) **or**
_____ BIO SC 3700 Animal Physiology (5)
- _____ MPP 4204 Medical Pharmacology (5)
- _____ NEP 2340 Human Nutrition I (3) (sp)
- _____ NEP 2450 Nutrition Throughout the Life Span (3) (sp)
- _____ NEP 4400 Pathophysiology of Disease (3) (sp)
- _____ NEP 4950 Capstone: Research in Nutr. Sciences (2) (f)
- _____ NEP 4951W Nutrition Research Communication (1)

Choose from two options for the remaining core curriculum:

Option 1:

- _____ NEP 4340 Human Nutrition II Lecture (3) (f)
- _____ NEP 4360 Nutrition Assessment (3) (f)

Option 2:

- _____ NEP 1340 Introduction to Exercise and Fitness (3)
- _____ NEP 3450 Activity Throughout the Lifespan (3)
- _____ NEP 3850W Physiology of Exercise (3)

Math & Statistics Requirements (6-8 hours)

- _____ MATH 1400 Calculus for Social and Life Sciences (3) **or**
_____ MATH 1500 Analytic Geometry and Calculus I (5)
- _____ ESC PS 4170 Introduction to Applied Statistics (3)

Communications Requirement

- _____ COMMUN 1200 Public Speaking (3)

Professional Electives (a minimum of 10 hours)

- _____ BIOCHM 4974 Biochemistry Lab(5)
- _____ BIO SC 4976 Molecular Biology (3)
- _____ CHEM 3200 Quantitative Methods of Analysis with Lab (4)
- _____ FS 4310 Food Chemistry and Analysis (3)
- _____ FS 4370 Food Microbiology (3)
- _____ MATH 1700 Calculus II (5) **or**
_____ MATH 2100 Calculus for Social and Life Sciences II (3)
- _____ MICROB 3200 ntro. to Medical Microb & Immun. (4)
- _____ MPP 4202 Medical Physiology (4)
- _____ NEP 2460 Eating Disorders (2) (f)
- _____ NEP 3131 International Nutr & Ex Phys (study abroad) (3)
- _____ NEP 4330 Human Nutrition II Lab (2)
- _____ NEPS 4370 Nutrition Therapy I (3) (sp)
- _____ NEP 4590 Community Nutrition (3) (su)
- _____ PTH AS 2201 Elementary Anatomy Lecture (3)

Minimum of 120 credit hours are required.

Human Physiology and Translational Sciences (Pre-med program)

Sample Course Guide

Fall I

Am. History or Government	3
CHEM 1320 College Chem I	4
ENGLSH 1000 Expos & Argumentation	3
GN HES 1100 Intro to Human Env Sc	1
MATH 1400 Calc for Social & Life Sci I or	
<u>MATH 1500 Analytic Geom & Calc I</u>	<u>3-5</u>
Total	14-16

Fall II

BIO SC 2200 General Genetics	4
CHEM 2100 Organic Chemistry I	3
Elective or NEP 1340 Intro to Fitness (f)	3
Humanities (recommend Phil 2440 Medical Ethics)	3
<u>HES Foundation Course (WI) recommended</u>	<u>3</u>
Total	16

Fall III

BIOCHM 4270 Biochemistry	3
MPP 3202 Human Phys. or Bio 3700 Animal Phys.	5
NEP 4360 Nutritional Assessment (f) or	
NEP 3450 Activity throughout the Lifespan	3
<u>PHYSCS 1210 Physics I or PHYSCS 2750</u>	<u>4-5</u>
Total	15-16

Fall IV

Elective	2
MPP 4204 Medical Pharmacology	5
NEP 4340 Human Nutrition II or	
NEP 3850W Physiology of Exercise (f)	3
NEP 4950 Capstone: Research in Nutritional Science (f)	2
<u>Professional Elective</u>	<u>3</u>
Total	15

Spring I

BIO SC 1500 Intro Bio Systems with lab	5
CHEM 1330 College Chem II	4
COMMUN 1200 Public Speaking	3
<u>Social/Behavioral Science (Psych 1000)</u>	<u>3</u>
Total	15

Spring II

Bio Sc 2300 Intro to Cell Biology	4
CHEM 2110 Organic Chem II	3
CHEM 2130 Organic Chem I Lab	2
NEP 2340 Human Nutrition I (sp)	3
<u>Social/Behavioral Science (Sociol 3440 recommended)</u>	<u>3</u>
Total	15

Spring III

BIOCHM 4272 Biochemistry	3
Esc Ps 4170 Intro to Applied Stat	3
Professional Elective	3
NEP 2450 Nutrition Throughout the Life Span	3
<u>PHYSCS 1220 Physics II or PHYSCS 2760</u>	<u>4-5</u>
Total	16-17

Spring IV

NEP 4400 Pathophysiology	3
HES Foundation Course	3
Humanities	3
NEP 4951 Nutrition Research Communication (WI) (sp)	1
<u>Professional Electives</u>	<u>4</u>
Total	14