



# 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.

#### Science Foundation (29 - 31 hours)

<sup>1</sup>These courses also may meet General Education requirements.

- \_\_\_\_\_ BIO SC 1500 Introduction to Biological Systems (5)
- \_\_\_\_\_ CHEM 1320 College Chem I (4)
- \_\_\_\_\_ CHEM 1330 College Chemistry II (3)
- \_\_\_\_\_ CHEM 2100 Organic Chemistry I (3)
- \_\_\_\_\_ <sup>1</sup>CHEM 2110 Organic Chemistry II (3) **and**
- \_\_\_\_\_ <sup>1</sup>CHEM 2130 Organic Lab (2)
- \_\_\_\_\_ PHYSCS 1210 College Physics I (4) **and**
- \_\_\_\_\_ PHYSCS 1220 College Physics II (4) **or**
- \_\_\_\_\_ PHYSCS 2750 **and** 2760 University Physics I & II (10)

#### Math & Statistics Requirements (6-8 hours)

- \_\_\_\_\_ <sup>1</sup>MATH 1400 Calculus for Social and Life Sciences (3) **or**
- \_\_\_\_\_ MATH 1500 Analytic Geometry and Calculus I (5)
- \_\_\_\_\_ <sup>1</sup>ESC PS 4170 Introduction to Applied Statistics (3)

#### Communications Requirement (3 hours)

- \_\_\_\_\_ COMMUN 1200 Public Speaking (3)

#### Core Curriculum (39 hours)

- \_\_\_\_\_ <sup>1</sup>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)
- \_\_\_\_\_ <sup>2</sup>NEP 2340 Human Nutrition I (3) (sp)
- \_\_\_\_\_ <sup>2</sup>NEP 2450 Nutrition Throughout the Life Span (3) (sp)
- \_\_\_\_\_ <sup>2</sup>NEP 4340 Human Nutrition II Lecture (3) (f)
- \_\_\_\_\_ <sup>2</sup>NEP 4360 Nutrition Assessment (3) (f)
- \_\_\_\_\_ <sup>2</sup>NEP 4950 Capstone: Research in Nutr. Sciences (2) (f)
- \_\_\_\_\_ <sup>2</sup>NEP 4951W Nutrition Research Communication (1)

#### Professional Electives (10 hours)

- \_\_\_\_\_ BIOCHM 4280 Biochem of Human Disease (3)
- \_\_\_\_\_ 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)
- \_\_\_\_\_ <sup>2</sup>NEP 2460 Eating Disorders (2) (f)
- \_\_\_\_\_ <sup>2</sup>NEP 3131 International Nutr & Ex Phys (study abroad) (3)
- \_\_\_\_\_ <sup>2</sup>NEPS 4370 Nutrition Therapy I (3) (sp)
- \_\_\_\_\_ <sup>2</sup>NEP 4590 Community Nutrition (3) (su)
- \_\_\_\_\_ PTH AS 2201 Elementary Anatomy Lecture (3)

Total of 120 credits Minimum

<sup>1</sup>These courses require a grade of C- or higher.

<sup>2</sup>These courses require a grade of C or higher.

# Human Physiology and Translational Sciences (Pre-med program)

## Sample Course Guide

### Fall I

<sup>1</sup> Am. History or Government	3
<sup>1</sup> 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 <sup>2</sup> MATH 1500 Analytic Geom & Calc I	3-5
<b>Total</b>	<b>14-16</b>

### Fall II

<sup>1</sup> BIO SC 2200 General Genetics	4
CHEM 2100 Organic Chemistry I	3
Elective	3
Humanities (recommend Phil 2440 Medical Ethics)	3
HES Foundation Course (WI) recommended	3
<b>Total</b>	<b>16</b>

### Fall III

<sup>1</sup> BIOCHM 4270 Biochemistry	3
MPP 3202 Human Phys. or Bio 3700 Animal Phys.	5
<sup>3</sup> NEP 4360 Nutritional Assessment (f)	3
PHYSCS 1210 Physics I	4
<b>Total</b>	<b>15</b>

### Fall IV

Elective	2
MPP 4204 Medical Pharmacology	5
NEP 4340 Human Nutrition II	3
NEP 4950 Capstone: Research in Nutritional Science (f)	2
Professional Elective	3
<b>Total</b>	<b>15</b>

### Spring I

BIO SC 1500 Intro Bio Systems with lab	5
CHEM 1330 College Chem II	4
<sup>1</sup> COMMUN 1200 Public Speaking	3
Social/Behavioral Science (Psych 1000)	3
<b>Total</b>	<b>15</b>

### 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
Social/Behavioral Science (Sociol 3440 recommended)	3
<b>Total</b>	<b>15</b>

### 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
PHYSCS 1220 Physics II	4
<b>Total</b>	<b>16</b>

### Spring IV

Elective (NEP 4001 Pathophysiology)	3
HES Foundation Course	3
Humanities	3
NEP 4951 Nutrition Research Communication (WI) (sp)	1
Professional Electives	4
<b>Total</b>	<b>14</b>

<sup>1</sup>These courses also may meet General Education requirements.

<sup>2</sup>Prerequisites include a grade of C- or better in Math 1160 or both 1100 & 1140 or sufficient ALEKS score.

<sup>3</sup>Prerequisites include Psych 1000