

# BACHELOR OF SCIENCE IN HEALTH SCIENCES (BSHS) IN PHYSIOLOGY AND MEDICAL SCIENCES

**Sample** four-year plan for MATH 112 (College Algebra) as your first semester math course – this tool can help you generally understand the recommended flow of classes; however, it’s always best to consult with your Academic Advisor to create a plan that is best for you!

## FIRST YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
WRIT 101 First-Year Composition I	3	WRIT 102 First-Year Composition II	3
MATH 112 College Algebra	3	MATH 120R Pre-Calculus	4
MCB 181R Introductory Biology I	3	*CHEM 151 General Chemistry I	4
MCB 181L Introductory Biology I Lab	1	PSIO 101 Tackling Physiological Topics, or *Gen Ed – Core Course, or second language course	3-4
second language course, or *Gen Ed – Core Course	3-4		
UNIV 101 Intro to Gen Ed Experience	1		
<b>Total Units</b>	<b>14-15</b>	<b>Total Units</b>	<b>14-15</b>

## SECOND YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
MATH 122A + B Calculus I	5	MATH 129 (Calculus 2) <b>or</b> MATH 263, BIOS 376, or ECOL 379 (Biostatistics)	3
CHEM 152 General Chemistry II	4	CHEM 241a Organic Chemistry Lecture	3
PSIO 201 Human Anatomy & Physiology I	4	CHEM 243a Organic Chemistry Lab	1
*Gen Ed – Core Course	3	PSIO 202 Human Anatomy & Physiology II	4
		*Gen Ed – Core Course	3
		*Gen Ed – Core Course	3
<b>Total Units</b>	<b>16</b>	<b>Total Units</b>	<b>17</b>

\*A second language is required through second semester proficiency or higher.

\*Please see a more detailed breakdown of the core courses required in the Gen Ed curriculum.

\*To enroll in 300/400-level PSIO courses, students must complete their Calculus 1 requirement (MATH 122A + MATH 122B or MATH 125 or MATH 119A), and earn a letter grade of a “C” or higher in both PSIO 201 and PSIO 202.

# Physiology Emphasis

## THIRD YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
PSIO 303 Integrative Cellular Physiology	3	PSIO 305 Integrative Systems Physiology	3
PSIO 4XX lecture	3	PSIO 4XX lecture	3
CHEM 241b Organic Chemistry Lecture	3	ECOL 182R Introductory Biology II	3
CHEM 243b Organic Chemistry Lab	1	ECOL 182L Introductory Biology II Lab	1
PHYS 110 Introductory Studio Physics I	4	PHYS 111 Introductory Studio Physics II	4
*Gen Ed – Core Course	3	UNIV 301 Gen Ed Portfolio	1
<b>Total Units</b>	<b>17</b>	<b>Total Units</b>	<b>15</b>

## FOURTH YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
PSIO 4XX lecture	3	PSIO 4XX lecture	3
PSIOM Major Elective	3	PSIOM Major Elective	3
PSIOM Major Elective	3	PSIOM Major Elective	3
BIOC 384 Foundations in Biochemistry or BIOC 385 Metabolic Biochemistry	3	UD general elective (any 300/400-level course)	3
UD gen elective (any 300/400-level course)	3	UD general elective (any 300/400-level course)	3
<b>Total Units</b>	<b>15</b>	<b>Total Units</b>	<b>15</b>

**\*120 total units required for graduation, 42 of which must be upper-division (300/400-level). Your major requirements do NOT provide you with enough upper-division unit requirements for graduation, so it's important for you to incorporate other upper-division courses into your plan.**

## Medical Sciences Emphasis

### THIRD YEAR

<b>FALL SEMESTER</b>	<b>Units</b>	<b>SPRING SEMESTER</b>	<b>Units</b>
PSIO 303 Integrative Cellular Physiology	3	PSIO 305 Integrative Systems Physiology	3
PSIO 4XX lecture	3	PSIO 4XX lecture	3
CHEM 241b Organic Chemistry Lecture	3	ECOL 182R Introductory Biology II	3
CHEM 243b Organic Chemistry Lab	1	ECOL 182L Introductory Biology II Lab	1
PHYS 110 Introductory Studio Physics I	4	PHYS 111 Introductory Studio Physics II	4
*Gen Ed – Core Course	3	UNIV 301 Gen Ed Portfolio	1
<b>Total Units</b>	<b>17</b>	<b>Total Units</b>	<b>15</b>

### FOURTH YEAR

<b>FALL SEMESTER</b>	<b>Units</b>	<b>SPRING SEMESTER</b>	<b>Units</b>
BIOC 384 Foundations in Biochemistry or BIOC 385 Metabolic Biochemistry	3	Medical Science course	3
Medical Science course	3	PSIOM Major Elective	3
PSIOM Major Elective	3	PSIOM Major Elective	3
UD general elective (any 300/400-level course)	3	PSIOM Major Elective	3
UD general elective (any 300/400-level course)	3	UD general elective (any 300/400-level course)	3
<b>Total Units</b>	<b>15</b>	<b>Total Units</b>	<b>15</b>

**\*120 total units required for graduation, 42 of which must be upper-division (300/400-level). Your major requirements do NOT provide you with enough upper-division unit requirements for graduation, so it's important for you to incorporate other upper-division courses into your plan.**

# Exercise and Extreme Physiology Emphasis

## THIRD YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
PSIO 303 Integrative Cellular Physiology	3	PSIO 305 Integrative Systems Physiology	3
PSIO 420 Exercise + Environmental PSIO	3	Emphasis Course	3
CHEM 241b Organic Chemistry Lecture	3	ECOL 182R Introductory Biology II	3
CHEM 243b Organic Chemistry Lab	1	ECOL 182L Introductory Biology II Lab	1
PHYS 110 Introductory Studio Physics I	4	PHYS 111 Introductory Studio Physics II	4
*Gen Ed – Core Course	3	UNIV 301 Gen Ed Portfolio	1
<b>Total Units</b>	<b>17</b>	<b>Total Units</b>	<b>15</b>

## FOURTH YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
BIOC 384 Foundations in Biochemistry or BIOC 385 Metabolic Biochemistry	3	Emphasis course	3
Emphasis course	3	PSIOM Major Elective	3
PSIOM Major Elective	3	PSIOM Major Elective	3
PSIOM Major Elective	3	UD general elective (any 300/400-level course)	3
UD general elective (any 300/400 level)	3	UD general elective (any 300/400-level course)	3
<b>Total Units</b>	<b>15</b>	<b>Total Units</b>	<b>15</b>

**\*120 total units required for graduation, 42 of which must be upper-division (300/400-level). Your major requirements do NOT provide you with enough upper-division unit requirements for graduation, so it's important for you to incorporate other upper-division courses into your plan.**

# Physiological Research and Innovation Emphasis

## THIRD YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
PSIO 303 Integrative Cellular Physiology	3	PSIO 305 Integrative Systems Physiology	3
Emphasis Core course	3	Emphasis Core course	3
CHEM 241b Organic Chemistry Lecture	3	ECOL 182R Introductory Biology II	3
CHEM 241b Organic Chemistry Lab	1	ECOL 182L Introductory Biology II Lab	1
PHYS 110 Introductory Studio Physics I	4	PHYS 111 Introductory Studio Physics II	4
*Gen Ed - Core Course	3	UNIV 301 Gen Ed Portfolio	1
<b>Total Units</b>	<b>17</b>	<b>Total Units</b>	<b>15</b>

## FOURTH YEAR

FALL SEMESTER	Units	SPRING SEMESTER	Units
BIOC 384 Foundations in Biochemistry or BIOC 385 Metabolic Biochemistry	3	Emphasis course	3
Emphasis Core course	3	PSIOM Major Elective	3
PSIOM Major Elective	3	PSIOM Major Elective	3
PSIOM Major Elective	3	UD general elective (any 300/400-level course)	3
UD general elective (any 300/400-level course)	3	UD general elective (any 300/400-level course)	3
<b>Total Units</b>	<b>15</b>	<b>Total Units</b>	<b>15</b>

**\*120 total units required for graduation, 42 of which must be upper-division (300/400-level). Your major requirements do NOT provide you with enough upper-division unit requirements for graduation, so it's important for you to incorporate other upper-division courses into your plan.**