

# ALLIED HEALTH SCIENCES (BS)

## Health and Human Enrichment

The Allied Health Sciences degree program is designed for students who wish to pursue a career in various allied health settings. Students choose from among three options: 3+2 Athletic Training; Pre-Professional; or Healthcare Administration option.

### 3+2 BS/MS Degree Option for Athletic Training

Students interested in a career in athletic training can choose our unique 3+2 option that allows students to complete a bachelor's and master's degree in 5 years. Students who have completed all prerequisite courses and have a minimum 3.2 GPA at the end of their 3rd year of study will be given special consideration for early entry into the Master of Science degree program in Athletic Training beginning in their 4th year of study. The MS degree program is a two-year program constituted of years four and five for a student who entered the 3+2 program. Students who complete all requirements will earn the Bachelor of Science in Allied Health Sciences at the completion of year four and the Master of Science in Athletic Training at the completion of year five.

### Pre-Professional

The Pre-Professional option serves as a Pre-Physical Therapy, Pre-Occupational Therapy, Pre-Physician's Assistant program. It will also prepare students to seek further study in Chiropractic medicine or to enter an accelerated/direct entry Nursing program. A minimum GPA of 3.0 is required to graduate from this major, but students who intend to pursue graduate study in one of the programs listed above should strive to achieve an even stronger academic record. Students will work closely with an academic advisor to choose the most appropriate major electives to support their intended career trajectory.

### Healthcare Administration

For those students who wish to work in the medical field, but not in direct patient care, the Healthcare Administration option is a good choice. Students will combine allied health science courses with business courses to be prepared for entry-level employment in the business functions of various medical settings. Within the HCA option, we also offer a 4+1 opportunity in which students may choose to take up to 12 graduate credits toward an MBA and then complete their MBA with one additional year earning a Bachelor's and Master's in 5 years.

## Degree Requirements

Course	Title	Credits
<b>Major Requirements</b>		
AHS 2000	Introduction to Allied Health Sciences	3
AHS 2001	Intro to Allied Health Sciences Lab	1
HHP 1000	Introduction to HHP Disciplines	0
AHS 3305	Epidemiology and Evidence Based Medicine (GACO,QRCO,WRCO)	4
MA 1800	College Algebra	3
BI 2110	Human Anatomy and Physiology I	3
BI 2130	Human Anatomy and Physiology Laboratory I	1
BI 2120	Human Anatomy and Physiology II	3

BI 2140	Human Anatomy and Physiology Laboratory II	1
PY 3325	Medical Ethics (INCO,WECO)	3
EX 3580	Physiology of Exercise	3
MA 2300	Statistics I (QRCO)	3
PE 3570	Kinesiology	3
PS 2015	Introduction to General Psychology	4
General Education ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> )		
EN 1400	Composition	4
IS 1115	Tackling a Wicked Problem	4
CTDI ( <a href="https://coursecatalog.plymouth.edu/general-education/#CTDI">https://coursecatalog.plymouth.edu/general-education/#CTDI</a> )	Creative Thought Direction	3-4
PPDI ( <a href="https://coursecatalog.plymouth.edu/general-education/#PPDI">https://coursecatalog.plymouth.edu/general-education/#PPDI</a> )	Past and Present Direction	3-4
SSDI ( <a href="https://coursecatalog.plymouth.edu/general-education/#SSDI">https://coursecatalog.plymouth.edu/general-education/#SSDI</a> )	Self and Society Direction	3-4
Directions (choose from CTDI, PPDI, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		4-8
DICO ( <a href="https://coursecatalog.plymouth.edu/general-education/#DICO">https://coursecatalog.plymouth.edu/general-education/#DICO</a> )	Diversity Connection	3-4
INCP ( <a href="https://coursecatalog.plymouth.edu/general-education/#INCP">https://coursecatalog.plymouth.edu/general-education/#INCP</a> )	Integrated Capstone	3-4
WECO ( <a href="https://coursecatalog.plymouth.edu/general-education/#WECO">https://coursecatalog.plymouth.edu/general-education/#WECO</a> )	Wellness Connection	3-4
Choose one of the following options:		45-55
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Directions should total 17-16 credits because SIDI is waived for BS Allied Health Sciences.

## Pre-Nursing Option

The Pre-Nursing program is designed for students who were not initially admitted to Nursing as first-year incoming students. Pre-Nursing AHS students must complete the first-year sequence as outlined below and earn a minimum of B- in all pre-requisite\* courses. PSU Pre-Nursing students will apply for internal transfer/admission to the Nursing program at the end of their first year of study.

**Pre-Nursing students MUST complete these courses in year 1**

- BI 2110/2120 Human Anatomy/Physiology I and II\*
- BI 2130/2140 Human Anatomy/Physiology I and II Lab\*
- IS 1115 Tackling a Wicked Problem
- PS 2015 Intro to General Psych \*
- Intro to Allied Health Sciences
- Intro to Allied Health Sciences Lab
- MA 2300 Statistics I \*
- EN 1400 Composition \*
- Gen Ed Directions Course
- Gen Ed Directions Course

Pre-Nursing Students must apply to Nursing for Internal Transfer no later than May 1st

#### Pre-Nursing Internal Transfer application requirements:

- Score proficient or above on the TEAS V exam;
- Meet all pre-requisite requirements with a minimum grade of B- for internal transfer admission;
- Internal Transfer Admission applicants must submit a letter of request, addressed to [psu-apnrnursing@plymouth.edu](mailto:psu-apnrnursing@plymouth.edu) addressed to the chair of the Admission, Retention, Progression (APR) committee, by May 1<sup>st</sup> of the year requesting transfer admission.

Students who are not admitted to Nursing through the internal transfer/admission process will be moved to the Pre-Professional Option in Allied Health Sciences. All courses taken in year 1 count toward the BS in AHS: Pre-Professional Option (<https://coursecatalog.plymouth.edu/undergraduate-programs/bachelors/allied-health-sciences-bs/#degree requirementstext>) **Allied Health Sciences**

## 3+2 Option BS Allied Health Sciences

Course	Title	Credits
<b>Pre-Athletic Training Option Requirements</b>		
BI 1110 or BI 1120	Biological Science I (TECO) Biological Science II	4
CH 2335	General Chemistry I (QRCO)	4
HE 2500	First Aid and CPR/AED	1.5
HE 3220	Applied Nutrition for Healthy Living (TECO)	3
EX 3860	Exercise Testing and Prescription	3
EX 3865	Exercise Testing and Prescription Laboratory	1
PH 2110	College Physics I	4
<b>MS in Athletic Training 3+2 <sup>1</sup></b>		
AT 5400	Preventative Theories and Psychomotor Skills	4
AT 5410	Lower Extremity Assessment	4
AT 5420	Upper Extremity Assessment	4
AT 5430	Spine, Posture and Function	4
AT 5470	Therapeutic Intervention I	4
AT 5480	Therapeutic Intervention II	4
AT 5810	Clinical Athletic Training I	4
AT 5820	Clinical Athletic Training II	4
Electives <sup>3</sup>		0-2.5
<b>Total Credits</b>		<b>52.5-55</b>

<sup>1</sup> Students who wish to be considered for early entry into the Masters degree program must complete prerequisites for that program and earn a minimum 3.20 GPA.

## MS in Athletic Training (final year)

Course	Title	Credits
AT 5440	Athletic Training Administration	4
AT 5450	Pathology and Pharmacology in Sports Medicine	4
AT 5460	Research Design and Statistics	4
AT 5830	Clinical Athletic Training III	4
AT 5490	Athletic Training Capstone	4
AT 5845	Clinical Athletic Training IV	10
<b>Total Credits</b>		<b>30</b>

## BS in AHS- Pre-Professional Option

Course	Title	Credits
<b>Pre-Professional Option</b>		
HE 2500	First Aid and CPR/AED	1.5
HE 3220	Applied Nutrition for Healthy Living (TECO)	3
EX 3860	Exercise Testing and Prescription	3
EX 3865	Exercise Testing and Prescription Laboratory	1
<b>Major Electives <sup>1</sup></b>		<b>16</b>
Minimum of 10 credits at 3000/4000 level from one or more of the following disciplines: AHS, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS		
Electives		20.5-30.5
<b>Total Credits</b>		<b>45-55</b>

<sup>1</sup> Major Electives are chosen in consultation with the academic advisor to best prepare students for their intended career.

Overall GPA of 3.00 is required to graduate.

## BS in AHS- Healthcare Administration Option

Course	Title	Credits
<b>Healthcare Administration Option</b>		
PBH 2000	Foundations of Public Health	4
PBH 3210	Social and Behavioral Health Psychology	4
or PBH 3400	Program Planning for Public Health (WRCO)	
SW 3300	Mental Health and Society (GACO)	3
or SW 3500	Health and Society (GACO,WECO)	
<b>Choose 12 credits from the following: <sup>1</sup></b>		<b>12</b>
BUS 1100	Introduction to Marketing and Sales	4
BUS 2000	Financial & Managerial Accounting	4
MGM 3450	Organizational Behavior & Team Development (DICO)	4
MGM 4250	Managing Human Resources	4
BU 5070	Foundations of Accounting and Finance	
BU 5075	Foundations of Management and Strategy	
BU 5410	Human Resources in Health Care Administration	
BU 5420	Health Care Law and Ethics	

BU 5430	Health Care Administration and Financial Management	
Electives		22-32
<b>Total Credits</b>		<b>61-71</b>

<sup>1</sup> Students must be at senior level and have a 3.0 GPA to enroll in the following courses that will count towards the MBA and graduate Healthcare Administration certificate: BU 5070, BU 5075, BU 5410, BU 5420, and BU 5430.

## MBA with Healthcare Administration certificate

Course	Title	Credits
BU 5110	Managing Organizational Behavior	3
BU 5120	Financial Analysis	3
BU 5190	Accounting for Managers	3
BU 5210	Economic Analysis	3
BU 5220	The Legal Environment of Business	3
BU 5410	Human Resources in Health Care Administration	3
BU 5490	Capstone: Health Care Topics	3
BU 5510	Operations Management	3
BU 5700	Marketing Techniques	3
BU 5720	Seminar in Executive Management	3
5000 level courses from undergraduate program		12
<b>Total Credits</b>		<b>42</b>

## Recommended Course Sequence

Check all course descriptions for prerequisites before planning course schedule. Course sequence is suggested but not required.

To complete the bachelor's degree in 4 years, you must successfully complete a minimum of 15 credits each semester or have a plan to make up credits over the course of the 4 years. For example, if you take 14 credits one semester, you need to take 16 credits in another semester. Credits completed must count toward your program requirements (major, option, minor, certificate, general education or free electives).

## BS in Allied Health Sciences- Pre-Professional Option

Course	Title	Credits
<b>Year One</b>		
AHS 2000	Introduction to Allied Health Sciences	3
AHS 2001	Intro to Allied Health Sciences Lab	1
MA 1800	College Algebra	3
BI 2110	Human Anatomy and Physiology I	3
BI 2120	Human Anatomy and Physiology II	3
BI 2130	Human Anatomy and Physiology Laboratory I	1
BI 2140	Human Anatomy and Physiology Laboratory II	1
EN 1400	Composition	4
IS 1115	Tackling a Wicked Problem	4
MA 2300	Statistics I (QRCO)	3

Directions (choose from CTDI, PPDI, SSDI) (<https://coursecatalog.plymouth.edu/general-education/>)<sup>1</sup> 6-8

**Credits** **32-34**

### Year Two

EX 3580	Physiology of Exercise	3
HE 2500	First Aid and CPR/AED	1.5
PE 3570	Kinesiology	3
PS 2015	Introduction to General Psychology	4
PY 3325	Medical Ethics (INCO,WECO)	3
Directions (choose from CTDI, PPDI, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		6-8
Major Electives (AHS, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS) or Electives		7-10

**Credits** **27.5-32.5**

### Year Three

HE 3220	Applied Nutrition for Healthy Living (TECO)	3
WECO ( <a href="https://coursecatalog.plymouth.edu/general-education/#WECO">https://coursecatalog.plymouth.edu/general-education/#WECO</a> )	Wellness Connection	3-4
Major Electives (AHS, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS) or Electives		15-18

**Credits** **21-25**

### Year Four

DICO ( <a href="https://coursecatalog.plymouth.edu/general-education/#DICO">https://coursecatalog.plymouth.edu/general-education/#DICO</a> )	Diversity Connection	3-4
INCP ( <a href="https://coursecatalog.plymouth.edu/general-education/#INCP">https://coursecatalog.plymouth.edu/general-education/#INCP</a> )	Integrated Capstone	3-4
Major Electives (AHS, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS) or Electives		20-24

**Credits** **26-32**

**Total Credits** **120**

<sup>1</sup> Directions should total 16-17 credits because SIDI is waived for BS Allied Health Sciences. Students need one each of SSDI, CTDI, and PPDI **AND 16 TOTAL** credits (e.g. students may complete this requirement with four 4-credit courses).

Overall GPA of 3.00 is required to graduate.

## BS in Allied Health Sciences- Healthcare Administration Option

Course	Title	Credits
<b>Year One</b>		
AHS 2000	Introduction to Allied Health Sciences	3
AHS 2001	Intro to Allied Health Sciences Lab	1
MA 1800	College Algebra	3
BI 2110	Human Anatomy and Physiology I	3
BI 2120	Human Anatomy and Physiology II	3
BI 2130	Human Anatomy and Physiology Laboratory I	1

BI 2140	Human Anatomy and Physiology Laboratory II	1
EN 1400	Composition	4
IS 1115	Tackling a Wicked Problem	4
MA 2300	Statistics I (QRCO)	3
Directions (choose from CTDI, PPDI, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		6-8

**Credits 32-34**

**Year Two**

EX 3580	Physiology of Exercise	3
PBH 2000	Foundations of Public Health	4
PE 3570	Kinesiology	3
PS 2015	Introduction to General Psychology	4
PY 3325	Medical Ethics (INCO,WECO)	3
SW 3300 or SW 3500	Mental Health and Society (GACO) or Health and Society (GACO,WECO)	3
Directions (choose from CTDI, PPDI, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		6-8

Electives 3-4

**Credits 29-32**

**Year Three**

AHS 3305	Epidemiology and Evidence Based Medicine (GACO,QRCO,WRCO)	4
EX 3860	Exercise Testing and Prescription	3
EX 3865	Exercise Testing and Prescription Laboratory	1
HE 3220	Applied Nutrition for Healthy Living (TECO)	3
PBH 3210 or PBH 3400	Social and Behavioral Health Psychology or Program Planning for Public Health (WRCO)	4
PBH 4000	Ethics, Social Justice, and Policy in Public Health	4
WECO ( <a href="https://coursecatalog.plymouth.edu/general-education/#WECO">https://coursecatalog.plymouth.edu/general-education/#WECO</a> )	Wellness Connection	3-4
Electives		10-12

**Credits 32-35**

**Year Four**

Choose four BU courses from the following:<sup>2</sup> 12

BUS 1100	Introduction to Marketing and Sales	
BUS 2000	Financial & Managerial Accounting	
MGM 4250	Managing Human Resources	
MGM 3450	Organizational Behavior & Team Development (DICO)	
BU 5070	Foundations of Accounting and Finance	
BU 5075	Foundations of Management and Strategy	
BU 5410	Human Resources in Health Care Administration	
BU 5420	Health Care Law and Ethics	
BU 5430	Health Care Administration and Financial Management	

DICO (<https://coursecatalog.plymouth.edu/general-education/#DICO>) Diversity Connection 3-4

INCP (<https://coursecatalog.plymouth.edu/general-education/#INCP>) Integrated Capstone 3-4

Electives 10-12

**Credits 28-32**

**Total Credits 121-133**

<sup>1</sup> Directions should total 16-17 credits because SIDI is waived for BS Allied Health Sciences. Students need one each of SSDI, CTDI, and PPDI **AND 16 TOTAL** credits (e.g. students may complete this requirement with four 4-credit courses).

<sup>2</sup> Students must be at senior level and have a 3.0 GPA to enroll in the following courses that will count towards the MBA and graduate Healthcare Administration certificate: BU 5070, BU 5075, BU 5410, BU 5420, and BU 5430.

**3+2 Option BS Allied Health Sciences**

Course	Title	Credits
<b>Year One</b>		
AHS 2000	Introduction to Allied Health Sciences	3
AHS 2001	Intro to Allied Health Sciences Lab	1
MA 1800	College Algebra	3
BI 2110	Human Anatomy and Physiology I	3
BI 2130	Human Anatomy and Physiology Laboratory I	1
BI 2120	Human Anatomy and Physiology II	3
BI 2140	Human Anatomy and Physiology Laboratory II	1
EN 1400	Composition	4
IS 1115	Tackling a Wicked Problem	4
MA 2300	Statistics I (QRCO)	3
Directions (choose from CTDI, PPDI, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		3-8
<b>Credits</b>		<b>29-34</b>

**Year Two**

BI 1110 or BI 1120	Biological Science I (TECO) or Biological Science II	4
EX 3580	Physiology of Exercise	3
HE 2500	First Aid and CPR/AED	1.5
PE 3570	Kinesiology	3
PS 2015	Introduction to General Psychology	4
Directions (choose from CTDI, PPDI, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		6-8
Connections (choose from DICO, INCO, WECO) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>2</sup>		3-4
Pre-Professional Sports Medicine Elective		3
<b>Credits</b>		<b>27.5-30.5</b>

**Year Three**

AHS 3305	Epidemiology and Evidence Based Medicine (GACO,QRCO,WRCO)	4
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CH 2335	General Chemistry I (QRCO)	4
EX 3860	Exercise Testing and Prescription	3
EX 3865	Exercise Testing and Prescription Laboratory	1
HE 3220	Applied Nutrition for Healthy Living (TECO)	3
PH 2510	University Physics I	4
Directions (choose from CTDI, PPD, SSDI) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>1</sup>		3-4
Connections (choose from DICO, INCO, WECO) ( <a href="https://coursecatalog.plymouth.edu/general-education/">https://coursecatalog.plymouth.edu/general-education/</a> ) <sup>2</sup>		6-8
Electives		0-2.5

Credits		28-33.5
<b>Year Four</b>		
AT 5400	Preventative Theories and Psychomotor Skills	4
AT 5410	Lower Extremity Assessment	4
AT 5420	Upper Extremity Assessment	4
AT 5810	Clinical Athletic Training I	4
AT 5430	Spine, Posture and Function	4
AT 5470	Therapeutic Intervention I	4
AT 5480	Therapeutic Intervention II	4
AT 5820	Clinical Athletic Training II	4
Credits		32
Total Credits		120

<sup>1</sup> Directions should total 17-16 credits because SIDI is waived for BS Allied Health Sciences. Students need one each of SSDI, CTDI, and PPD **AND 16 TOTAL** credits (e.g. students may complete this requirement with four 4-credit courses).

<sup>2</sup> Student must choose a course from each connections category - DICO, INCP, WECO - for a total of 9-12 credits.

**Major Electives:** *Major electives will be chosen in consultation with the academic advisor to best prepare the student for their intended career.*

\* Use these electives and major electives to complete pre-requisites for grad school admission

Complete 9 credits from one or more of the following disciplines: AT, BI, CH, NR, PH

AT BS/MS students will need at least one semester of Biology, Chemistry, and Physics.

Complete 18 UL (3000 or higher) credits from one or more of the following: AT, BI, CH, HE, EX, PS, NR

## Learning Outcomes

- Employ critical thinking and innovation to analyze challenges, concepts, research, and clinical outcomes and apply them to professional practice
- Analyze, interpret, integrate and evaluate information with the ability to communicate findings in a written or oral format
- Demonstrate a broad-based and integrative understanding of basic biological, physical, chemical, and/or psychological concepts that prepare them for careers in health science.
- Approach patient care from a cultural humility perspective that respects varied backgrounds including but not limited to: cultural,

social, religious, racial, gender, and ethnic diversity of the patient and family regarding disease and their health.

- Integrate concepts from various scientific fields to meet the requirements for entry-level healthcare administrative positions or admission to professional programs in allied health fields (e.g. athletic training, physical therapy, occupational therapy, physician assistant, chiropractic, etc).

## Career Pathways

The Allied Health Sciences degree program is designed to provide students with the background and pre-requisites for a career in the medical/allied health fields. The program is designed to meet the needs of students interested in pursuing graduate study in various fields of allied health such as Athletic Training, Physical Therapy, Occupational Therapy, Chiropractic medicine, Physician's Assistant or wish to work on the business end of healthcare.