# 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 with a grade of C or higher and have a minimum 2.5 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.

#### 3+3 BS/DPT Degree Option for Physical Therapy

Students interested in a career in physical therapy can choose to apply to the 3+3 DPT option at the time of application to PSU. Students entering this option must meet the minimum admissions requirements, including a minimum high school GPA of 3.5, at least 3 years of math, and at least 3 years of science. A limited number of admissions spots are available. If accepted into the 3+3 DPT option, students will have the opportunity to complete a bachelor's and Doctor of Physical Therapy degree in 6 years. During the first 3 years, students must meet the following requirements to begin the DPT program year 4:

- Letter of intent at end of sophomore year (to confirm intent to pursue the DPT)
- Observation hours in Panther Pro-Bono Clinic: ≥ 25 hours (via AHS 2200)
- Minimum grade of B- in all DPT pre-requisite courses
- Overall GPA: ≥ 3.5
- · Science GPA: ≥ 3.3
- · Completed PTCAS application

#### **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. Students who intend to pursue graduate study in one of the programs listed above should strive to achieve a GPA of 3.0 or higher. Students will work closely with an academic advisor to choose the most appropriate major electives to support their intended career trajectory.

#### **Pre-Nursing**

The pre-nursing option is for students who were denied admission into PSU's BS in Nursing program. If students meet requirements of earning a B- or higher in all required courses, and earn an overall GPA of  $\geq$  2.67,

students will be invited to transfer into the BS in Nursing program. If students do not meet the requirements, they may remain in the AHS program, and must select a different option.

#### **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.

#### **Public Health**

Public Health occupations work to promote and protect health where we live, learn, work and play. Courses build skills in health sciences, behavioral psychology, communication, planning, policy development and ethics. Students also have choices for a variety of enrichment areas. Opportunities for Public Health careers are in both the public and private sectors. The Centers for Disease Control and Prevention (CDC), and the Association of Schools and Programs of Public Health (ASPH) have determined that public health workforce needs are increasing.

### **Degree Requirements**

Course	Title	Credits
Major Requirement	nts	
AHS 2000	Introduction to Allied Health Sciences	3
AHS 2001	Intro to Allied Health Sciences Lab	1
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 education/)	n (https://coursecatalog.plymouth.edu/general-	
EN 1400	Composition	4
IS 1115	Tackling a Wicked Problem	4
CTDI (https:// coursecatalog.ply general- education/#CTDI)		3-4
PPDI (https:// coursecatalog.ply general- education/ #PPDI)	Past and Present Direction mouth.edu/	3-4

Total Credits	120
Choose one of the following options:	45-55
WECO (https:// Wellness Connection coursecatalog.plyi general- education/ #WECO)	3-4
INCP (https:// Integrated Capstone coursecatalog.plymouth.edu/ general-education/#INCP)	3-4
DICO (https:// Diversity Connection coursecatalog.ply) general- education/ #DICO)	3-4
Directions (choose from CTDI, PPDI, SSDI) (https://coursecatalog.plymouth.edu/general-education/)	4-8
SSDI (https:// Self and Society Direction coursecatalog.ply) general- education/ #SSDI)	3-4

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-aprnursing@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/#degreerequirementstext) Allied Health Sciences

### 3+2 Pre-Athletic Training

Course	Title	Credits
Pre-Athletic Tra	ining Option Requirements	
BI 1110	Biological Science I (TECO)	4
or BI 1120	Biological Science II	
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
MS in Athletic T	raining 3+2 <sup>1</sup>	
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>		52.5-55

Students who wish to be considered for early entry into the Masters degree program must complete prerequisites for that program and earn a minimum 2.50 GPA.

## MS in Athletic Training (final year)

Course	Title	Credits
AT 5440	Athletic Training Administration	4
AT 5450	Pathology and Pharmacology in Sports Medicine	e 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
Total Credits		30

## 3+3 BS in AHS, Doctor of Physical Therapy Option

Course	Title	Credits
3+3 DPT Option	on Requirements	
AHS 2200	Pre-Professional Observation Experience	1-2
PH 2110	College Physics I	4

PH 2120	College Physics II	4
CH 2335	General Chemistry I (QRCO)	4
CH 2340	General Chemistry II	4
EX 3860	Exercise Testing and Prescription	3
EX 3865	Exercise Testing and Prescription Laboratory	1
Social / Behaviora	al Science elective	3-4
To satisfy the social / behavioral science elective requirement, take any 3-4 credit course within the following disciplines at the 3000/4000 level: PS, SO, PBH, SW		
T . I O I'.		04.00

Total Credits:		24-26
DPT Year 1 (Summer and Fall semesters) 1		
PTH 6110	Clinical & Functional Anatomy	4
PTH 6111	Clinical Physiology	3
PTH 6112	Ethics and Value Systems	2
PTH 6115	Patient/Client Management I	2
PTH 6116	Integrated Clinical I	1
PTH 6120	Neuroscience	4
PTH 6121	Musculoskeletal Conditions & Management	3
PTH 6122	Dynamic Systems I: Movement & Adaptation	3
PTH 6124	Clinical Inquiry I: Causality and Inference	3
PTH 6125	Patient/Client Management II	4
PTH 6127	Integrated Clinical II	1
Total Credits:		30

Students who wish to matriculate early into the DPT program, consistent with the 3+3 AHS to DPT framework, must earn a minimum grade of B- in all pre-requisite courses (BI 2110, BI 2030, BI 2120, BI 2140, CH 2335, CH 2340, PH 2110, PH 2120, MA 2300, PS 2015, PE 3570, EX 3580, EX 3860, social / behavioral science elective), earn a minimum science GPA of 3.3 (BI 2110, BI 2030, BI 2120, BI 2140, CH 2335, CH 2340, PH 2110, PH 2120, PE 3570, EX 3580), and a minimum overall GPA of 3.5, and complete the PTCAS application requirements during fall of year 3 in the AHS program.

## **BS in AHS- Pre-Professional Option**

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Course	Title	Credits
Pre-Professional	Option	
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
Major Electives <sup>1</sup>		16
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	2	20.5-30.5
Total Credits		45-55

Major Electives are chosen in consultation with the academic advisor to best prepare students for their intended career.

## **BS in AHS - Public Health Option**

Course	Title	Credits
Public Health opti	ion requirements	
PBH 2000	Foundations of Public Health	4
PBH 3210	Social and Behavioral Health Psychology	4
PBH 3400	Program Planning for Public Health (WRCO)	4
PBH 4000	Ethics, Social Justice, and Policy in Public Healt	th 4
CM 3095	Technical Communication (TECO,WRCO)	4
Choose two of the	e following:	6-8
IS 4360	Cultural Diversity and American Society (DICO,INCO)	3
ESP 3550	Environment and Health (WECO)	3
SO 3510	Illness, Wellness, and Healing (WECO)	4
HI 3355	Health and Illness in American History (WECO)	4
Total Credits:		26-28

## **BS in AHS- Healthcare Administration Option**

Course	Title	Credits
Healthcare Admir	nistration Option	
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)	
Choose 12 credits	s from the following: <sup>1</sup>	12
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 Administratio	n
BU 5420	Health Care Law and Ethics	
BU 5430	Health Care Administration and Financial Management	
Electives		22-32
Total Credits		61-71

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

<b>Total Credits</b>		42
5000 level courses from undergraduate program		12
BU 5720	Seminar in Executive Management	3
BU 5700	Marketing Techniques	3
BU 5510	Operations Management	3
BU 5490	Capstone: Health Care Topics	3
BU 5410	Human Resources in Health Care Administration	3

## **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
Year One		
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 fr	om CTDI, PPDI, SSDI) (https://	6-8
coursecatalog.plymo	outh.edu/general-education/)	
	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
•	om CTDI, PPDI, SSDI) (https:// outh.edu/general-education/) <sup>1</sup>	6-8
Major Electives (AHS Electives	, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS) or	7-10
	Credits 2	7.5-32.5
Year Three		
HE 3220	Applied Nutrition for Healthy Living (TECO)	3
Major Electives (AHS Electives	, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS) or	15-18
EX 3860	Exercise Testing and Prescription	3

EX 3865	Exercise Testing and Prescription Laboratory	1
	Credits	22-25
Year Four		
AHS 3305	Epidemiology and Evidence Based Medicine (GACO,QRCO,WRCO)	4
DICO (https:// coursecatalog.plymogeneral-education/ #DICO)	Diversity Connection outh.edu/	3-4
INCP (https:// coursecatalog.plymogeneral-education/ #INCP)	Integrated Capstone ou	3-4
Major Electives (AHS Electives	S, AT, BI, CH, EX, HE, NR, PBH, PE, PH, PS) or	20-24
	Credits	30-36
	Total Credits	120

<sup>&</sup>lt;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
Year One		
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
`	om CTDI, PPDI, SSDI) (https:// uth.edu/general-education/) <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

,	om CTDI, PPDI, SSDI) (https:// uth.edu/general-education/) <sup>1</sup>	6-8
Electives		3-4
	Credits	29-32
Year Three		
AHS 3305	Epidemiology and Evidence Based Medicine (GACO,QRCO,WRCO)	4
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
Electives		10-12
	Credits	22-24
Year Four		
Choose four BU cours	ses 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.plymor general-education/ #DICO)	Diversity Connection uth.edu/	3-4
INCP (https:// coursecatalog.plymor general-education/ #INCP)	Integrated Capstone	3-4
Electives		10-12
	Credits	28-32
	Total Credits	120

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

## **BS Allied Health Sciences- 3+2 Pre- Athletic Option**

Course	Title	Credits
Year One		
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
	efrom CTDI, PPDI, SSDI) (https:// mouth.edu/general-education/) <sup>1</sup>	3-8
	Credits	29-34
Year Two		
EX 3580	Physiology of Exercise	3
PH 2510	University Physics I	4
HE 2500	First Aid and CPR/AED	1.5
PE 3570	Kinesiology	3
PS 2015	Introduction to General Psychology	4
	e from CTDI, PPDI, SSDI) (https:// mouth.edu/general-education/) <sup>1</sup>	6-8
	ose from DICO, INCO, WECO) (https:// mouth.edu/general-education/) <sup>2</sup>	3-4
Pre-Professional S	ports Medicine Elective	3
	Credits 2	7.5-30.5
Year Three		
AHS 3305	Epidemiology and Evidence Based Medicine (GACO,QRCO,WRCO)	4
BI 1110	Biological Science I (TECO)	4
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
	e from CTDI, PPDI, SSDI) (https://	3-4
	mouth.edu/general-education/)	
coursecatalog.plyr	ose from DICO, INCO, WECO) (https:// mouth.edu/general-education/) <sup>2</sup>	6-8
Electives		0-2.5
	Credits	28-33.5
Year Four		
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

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.

- Directions should total 17-16 credits because SIDI is waived for BS Allied Health Sciences. Students need one each of SSDI, CTDI, and PPDI <u>AND 16 TOTAL</u> credits (e.g. students may complete this requirement with four 4-credit courses).
- 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
  - Students need a minimum GPA of 2.5 to qualify for the MS in AT program, and a minimum grade of C in all required courses.

### **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.