

Biology (B.S.) – Pre-Health Professions (Physical Therapy)

2025-2026 Academic Catalog, Bachelor of Science – Biology, Pre-Health Professions (Physical Therapy)

Academic Core for B.S.

46 Hours

CHRISTIAN STUDIES		6
CSBS 1311	Engaging the Old Testament	3
CSBS 1312	Engaging the New Testament	3

ENGLISH		9
ENGL 1321	Rhetoric & Composition I	3
ENGL 1322	Rhetoric & Composition II	3
ENGL	Literature	3

A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.

EXERCISE & SPORT SCIENCE – SELECT TWO DIFFERENT COURSES		2
EXAC	Activity Course	1
EXAC	Activity Course	1

FINE ARTS – SELECT ONE		3
ARTS 1310	Drawing I	3
ARTS 1320	Design	3
ARTS 1350	Art Appreciation	3
ARTS 2360	Ceramics I	3
COMM 2335	Film Appreciation	3
FINA 2330	Exploring the Fine Arts	3
MUSI 1340	Music Appreciation	3
THEA 2350	Theatre Appreciation	3

WORLD CULTURES – SELECT ONE		3
ARTS 2354	World Art	3
EXSS 2353	Lifespan Nutrition	3
GLBL 2310	Cultural Immersion	3
HIST 1311	History of World Civilizations to 1500	3
HIST 1312	History of World Civilizations since 1500	3
HIST 2350	An Introduction to the Politics and Culture of Ancient Greece and Rome	3
HUMA 2355	Foundations of the Humanities	3
MUSI 2358	World Music	3
PHIL 2315	Introduction to Philosophy	3

LAB SCIENCE		8
CHEM 1410	General Chemistry I	4
PHYS 2411	General Physics I	4

PUBLIC SPEAKING		3
COMM 1320	Public Speaking	3

MATHEMATICS		3
MATH 2303	Statistics	3

RESEARCH METHODS OR INTERNSHIP		2
BIOL 2170	Research Methods	1
BIOL 2171	Research Methods	1

SOCIAL SCIENCE		3
PSYC 1301	General Psychology	3

US HISTORY OR US GOVERNMENT – SELECT ONE		3
HIST 2311	American History to 1877	3
HIST 2312	American History since 1877	3
POLS 2305	United States Government	3
POLS 2306	Texas State and Local Government	3

FRESHMAN SEMINAR		1
UMHB 1101	Freshman Seminar	1

CHAPEL – 1 to 4 credits		
UMHB 1002	Chapel	

Fine Arts Experience – 2 to 8 credits		
UMHB 1005	Fine Arts Experience	

Biology – Pre-Health Professions

B.S. BIOLOGY MAJOR REQUIRED COURSES – PRE-HEALTH 34-35

BIOL 1350	Biology for Science Majors I	3
BIOL 1150	Biology for Science Majors I Lab	1
BIOL 1360	Biology for Science Majors II	3
BIOL 1160	Biology for Science Majors II Lab	1
BIOL 3310	Genetics	3
BIOL 3110	Genetics Lab	1
BIOL 4090	Senior Evaluation	0
BIOL 4194	Capstone Writing	1
BIOL 4195	Capstone Seminar	1

Integrative Biology - Select one: 3-4

BIOL 4370	Applied Ecology	
BIOL 4170	Applied Ecology Lab	
	or	
BIOL 3340	Immunology	
	or	
BIOL 4355	Adaptation & Phylogeny	
BIOL 4155	Adaptation and Phylogeny Lab	

Physiology Electives

BIOL 2340	Human Anatomy & Physiology I	3
BIOL 2140	Human Anatomy & Physiology I Lab	1

Biology Electives

BIOL 2341	Human Anatomy & Physiology II	3
BIOL 2141	Human Anatomy & Physiology II Lab	1
BIOL 3375	Human Physiology	3
BIOL 3175	Human Physiology Lab	1
BIOL	Biology Electives	5

No grade lower than a "C" will count toward fulfillment of Biology major requirements.

REQUIRED COURSES FOR PRE-PT 24

CHEM 1420	General Chemistry II	4
CHEM 3410	Organic Chemistry I	4
MATH 1306	College Algebra	3
MATH 1320	Pre Calculus	3
PHYS 2412	General Physics II	4
PSYC 2311	Developmental Psychology	3
	or	
PSYC 3315	Abnormal Psychology	3
SOCI 1311	Introduction to Sociology	3

Electives

UPPER LEVEL ELECTIVES

As needed to reach your minimum 36 UL required hrs.

ELECTIVES

As needed to reach your minimum 120 required hrs.

Total Hours

Academic Core for B.S.	46
B.S. Biology Major Required Courses	34-35
Required Courses for Pre-PT	24
Upper Level Electives	
Total hours	120

Additional Graduation Requirements

Minimum hours required for graduation	120
Minimum Upper Level hours	36
Minimum hours taken at UMHB	30
Minimum Upper Level hours taken at UMHB	24
Minimum cumulative GPA	2.0

Biology (B.S.) – Pre-Health Professions (Physical Therapy)

2025-2026 Academic Catalog, Bachelor of Science – Biology, Pre-Health Professions (Physical Therapy) – DEGREE SEQUENCE

FRESHMAN FALL		15 Hours
<i>BIOL 1350/1150</i>	<i>Biology for Science Majors I</i>	4
<i>ENGL 1321</i>	<i>Rhetoric & Composition I</i>	3
<i>CHEM 1410</i>	<i>General Chemistry I</i>	4
MATH 1306	College Algebra*	3
UMHB 1101	Freshman Seminar	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

FRESHMAN SPRING		15 Hours
<i>BIOL 1360/1160</i>	<i>Biology for Science Majors II</i>	4
<i>ENGL 1322</i>	<i>Rhetoric & Composition II</i>	3
<i>CHEM 1420</i>	<i>General Chemistry II</i>	4
<i>PSYC 1301</i>	<i>General Psychology</i>	3
EXAC	Activity Course	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

SOPHOMORE FALL		14 Hours
BIOL 2170/2171	Research Methods	2
<i>BIOL 2340/2140</i>	<i>Human Anatomy & Physiology I with Lab</i>	4
CHEM 3410	Organic Chemistry I	4
	<i>PSYC 2311 or PSYC 3315</i>	3
EXAC	Activity Course	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

SOPHOMORE SPRING		16 Hours
<i>BIOL 2341/2141</i>	<i>Human Anatomy & Physiology II with Lab</i>	4
BIOL	Biology Elective	5
BIOL 3310/3110	Genetics	4
	Upper Level Electives	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

JUNIOR FALL		16 Hours
ENGL	Literature	3
	Upper Level Electives	3
MATH 1320	Pre Calculus*	3
<i>PHYS 2411</i>	<i>General Physics I</i>	4
CSBS 1311	Engaging the Old Testament	3
UMHB 1005	Fine Arts Experience	0

JUNIOR SPRING		17 Hours
BIOL 3375/3175	Human Physiology with Lab*	4
COMM 1320	Public Speaking*	3
<i>PHYS 2412</i>	<i>General Physics II</i>	4
CSBS 1312	Engaging the New Testament	3
	Upper Level Electives	3
UMHB 1005	Fine Arts Experience	0

SENIOR FALL		15 Hours
BIOL	Integrative Biology	4
BIOL 4194	Capstone Writing	1
	Upper Level Electives	4
	US History or Government	3
	Fine Arts	3
UMHB 1005	Fine Arts Experience	0

SENIOR SPRING		15 Hours
BIOL 4195	Capstone Seminar	1
BIOL 4090	Senior Evaluation	0
	Upper Level Electives	5
<i>MATH 2303</i>	<i>Statistics</i>	3
SOCI 1311	Introduction to Sociology*	3
	World Cultures	3
UMHB 1005	Fine Arts Experience	0

Items in italics are required by all or most of the eleven PT schools in Texas. If there is an asterisk by the item, only a few of the PT schools require this. A minor in Psychology will allow you to fulfill the 6 hours required by PT schools and will also fulfill two of the requirements for the Bachelor of Science Core, therefore doing "double duty" so to speak on your degree plan. This allows you to finish in 4 years. Precalculus is a corequisite for PHYS 2411/2412. You must have an ACT math score of at least 23 or an SAT math score of at least 580 to be able to take this as your first math class at UMHB. Without those scores, you must take MATH 1306 first. A grade of "C" or better must be made in all Biology courses applying to the major. You must also complete 8 credits of a Fine Arts Experience (UMHB 1005).

Total Minimum Credit Hours: 120