

# Biology (B.S.)

2025-2026 Academic Catalog, Bachelor of Science – Biology – DEGREE SEQUENCE

## **FRESHMAN FALL** **15 Hours**

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

## **FRESHMAN SPRING** **15 Hours**

BIOL 1360/1160	Biology for Science Majors II	4
CHEM 1420	General Chemistry II	4
ENGL 1322	Rhetoric & Composition II	3
EXAC	Activity Course	1
COMM 1320	Public Speaking	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **SOPHOMORE FALL** **13 Hours**

BIOL 2170/2171	Research Methods	2
CHEM 3410	Organic Chemistry I	4
ENGL	Literature	3
	Electives	4
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **SOPHOMORE SPRING** **15 Hours**

BIOL 3310/3110	Genetics	4
BIOL	Biology Elective with Lab	4
CSBS 1311	Engaging the Old Testament	3
	Electives	4
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **JUNIOR FALL** **16 Hours**

BIOL	Biology Physiology Elective	4
	Upper Level Elective	3
	Social Science	3
CSBS 1312	Engaging the New Testament	3
	Elective	3
UMHB 1005	Fine Arts Experience	0

## **JUNIOR SPRING** **16 Hours**

BIOL	Biology Elective	3
MATH 2303	Statistics	3
EXAC	Activity Course	1
	World Cultures	3
	Upper Level Electives	6
UMHB 1005	Fine Arts Experience	0

## **SENIOR FALL** **15 Hours**

BIOL 4194	Capstone Writing	1
	Integrative Biology	4
BIOL	Biology Upper Level Elective with Lab	4
	Fine Arts	3
	Elective	3
UMHB 1005	Fine Arts Experience	0

## **SENIOR SPRING** **15 Hours**

BIOL 4090	Senior Evaluation	0
BIOL 4195	Capstone Seminar	1
BIOL	Biology Elective	2
	US History or Government	3
	Upper Level Electives	9
UMHB 1005	Fine Arts Experience	0

**Total Credit Hours: 120**

# Biology (B.S.)

2025-2026 Academic Catalog, Bachelor of Science – Biology

## 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
CHEM 1420	General Chemistry II	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 – SELECT ONE		3
BECO 2311	Principles of Macroeconomics	3
EDUC 2399	Child and Adolescent Development	3
PSYC 1301	General Psychology	3
SOCI 1311	Introduction to Sociology	3
SOCW 2311	Introduction to Social Work	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
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## Biology

B.S. BIOLOGY MAJOR REQUIRED COURSES		33-36
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 2170	Research Methods	-
BIOL 2171	Research Methods Lab	-
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	

The hours for BIOL 2170 and BIOL 2171 are already accounted for in the Academic Core

## Biology Electives

BIOL	Upper-level Elective with Lab	4
BIOL	Any Biology with Lab	4
BIOL	Biology Electives	5-6

## Physiology Elective – Select one 3-4

BIOL 2330	Foundations of Comparative Physiology	
	or	
BIOL 2140	Human Anatomy & Physiology I Lab	
BIOL 2340	Human Anatomy & Physiology I	
	or	
BIOL 2180	Microbiology Lab	
BIOL 2380	Microbiology	

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

Biology Required Support Courses		7
CHEM 3410	Organic Chemistry I	4
MATH 1306	College Algebra	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	33 to 36
Biology Required Support Courses	7
Upper Level Electives	
Electives	
<b>Total hours required for graduation</b>	<b>120</b>

## Additional Graduation Requirements

Minimum Upper Level hours	36
Minimum hours taken at UMHB	30
Minimum Upper Level hours taken at UMHB	24
Minimum cumulative GPA	2.0