

Biology (B.S.) – Science 7-12 Cert.

2024-2025 Academic Catalog, Bachelor of Science – Biology, Science 7-12 Certification

Academic Core for B.S. 49 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 1350	Art Appreciation	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
HUMA 2355	Foundations of the Humanities	3
MUSI 2358	World Music	3
PHIL 2315	Introduction to Philosophy	3

LAB SCIENCE 8

GEOL 1402	Historical Geology	4
PHYS 2411	General Physics I	4

PUBLIC SPEAKING 3

COMM 1320	Public Speaking	3
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MATHEMATICS 3

MATH 2303	Statistics	3
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RESEARCH METHODS OR INTERNSHIP 2

BIOL 2170	Research Methods	1
BIOL 2171	Research Methods	1

SOCIAL SCIENCE – SELECT ONE 3

PSYC 1301	General Psychology	3
PSYC 2399	Child and Adolescent Development	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

CLASSROOM TECHNOLOGY 3

EDUC 2311	Classroom Technology	3
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FRESHMAN SEMINAR 1

UMHB 1101	Freshman Seminar	1
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CHAPEL – 1 to 4 credits

UMHB 1002	Chapel	
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Fine Arts Experience – 2 to 8 credits

UMHB 1005	Fine Arts Experience	
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Biology – Science 7-12 Cert. 94 Hours

B.S. BIOLOGY MAJOR REQUIRED COURSES 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 3310	Genetics	3
BIOL 3110	Genetics Lab	1
BIOL 4090	Senior Evaluation	0
BIOL 4194	Capstone Writing	1
BIOL 4295	Capstone Seminar	2
BIOL 4370	Applied Ecology	3
BIOL 4170	Applied Ecology Lab	1

Biology Electives

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

Physiology Elective – Select one

BIOL 2330	Foundations of Comparative Physiology or	3
BIOL 2140	Human Anatomy & Physiology I Lab	1
BIOL 2340	Human Anatomy & Physiology I or	3
BIOL 2180	Microbiology Lab	1
BIOL 2380	Microbiology	3

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

Biology Required Support Courses 7

GEOL 1401	Physical Geology	4
MATH 1306	College Algebra	3

MINOR IN CHEMISTRY 24

CHEM 1410	General Chemistry I	4
CHEM 1420	General Chemistry II	4
CHEM 3001	Lab Assistantship	0
CHEM 3400	Quantitative Analysis	4
CHEM 3410	Organic Chemistry I	4
CHEM 3420	Organic Chemistry II	4
CHEM 4191	Seminar	1
CHEM 4300	Safety in the Academic Laboratory	3

MINOR IN PEDAGOGY (SECONDARY LEVEL CERTIFICATION) 27

EDUC 3315	Students and Learning	3
EDUC 4324	Classroom Management	3
EDUC 4328	Curriculum Design	3
EDUC 4385	Educational Internship	3
READ 4326	Disciplinary Literacy	3
EDUC 4250	Certification Preparation Seminar	2
EDUC 4501	Student Teaching I	5
EDUC 4502	Student Teaching II	5

Total Hours

Academic Core for B.S.	49
B.S. Biology Major Required Courses	36
Biology Required Support Courses	7
Minor in Chemistry	24
Minor in Pedagogy (Secondary Level Certification)	27
Total hours required for graduation	143

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	2.75