

# Biology (B.S.) – Science 7-12 Cert.

2023-2024 Academic Catalog, Bachelor of Science – Biology, Science 7-12 Certification

<b>Academic Core for B.S.</b>		<b>49 Hours</b>	<b>Biology – Science 7-12 Cert.</b>		<b>94 Hours</b>
<b>CHRISTIAN STUDIES</b>		<b>6</b>	<b>B.S. BIOLOGY MAJOR REQUIRED COURSES</b>		<b>36</b>
CSBS 1311	Engaging the Old Testament	3	BIOL 1090	Freshman Evaluation ( <i>Freshman Only</i> )	0
CSBS 1312	Engaging the New Testament	3	BIOL 1350	Biology for Science Majors I	3
<b>ENGLISH</b>		<b>9</b>	BIOL 1150	Biology for Science Majors I Lab	1
ENGL 1321	Rhetoric & Composition I	3	BIOL 1360	Biology for Science Majors II	3
ENGL 1322	Rhetoric & Composition II	3	BIOL 1160	Biology for Science Majors II Lab	1
ENGL	Literature	3	BIOL 3310	Genetics	3
<i>A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.</i>			BIOL 3110	Genetics Lab	1
<b>EXERCISE &amp; SPORT SCIENCE – SELECT TWO DIFFERENT COURSES</b>		<b>2</b>	BIOL 4090	Senior Evaluation	0
EXAC	Activity Course	1	BIOL 4194	Capstone Writing	1
EXAC	Activity Course	1	BIOL 4295	Capstone Seminar	2
<b>FINE ARTS – SELECT ONE</b>		<b>3</b>	BIOL 4370	Applied Ecology	3
ARTS 1350	Art Appreciation	3	BIOL 4170	Applied Ecology Lab	1
COMM 2335	Film Appreciation	3	<b>Biology Electives</b>		
FINA 2330	Exploring the Fine Arts	3	BIOL	Upper-level Elective with Lab	4
MUSI 1340	Music Appreciation	3	BIOL	Any Biology with Lab	4
THEA 2350	Introduction to the Theatre	3	BIOL	Biology Electives	5-6
<b>WORLD CULTURES – SELECT ONE</b>		<b>3</b>	<b>Physiology Elective – Select one</b>		
ARTS 2354	World Art	3	BIOL 2330	Foundations of Comparative Physiology	3
EXSS 2353	Lifespan Nutrition	3		or	
GLBL 2310	Cultural Immersion	3	BIOL 2140	Human Anatomy & Physiology I Lab	1
HIST 1311	History of World Civilizations to 1500	3	BIOL 2340	Human Anatomy & Physiology I	3
HIST 1312	History of World Civilizations since 1500	3		or	
MUSI 2358	World Music	3	BIOL 2180	Microbiology Lab	1
PHIL 2315	Introduction to Philosophy	3	BIOL 2380	Microbiology	3
<b>LAB SCIENCE</b>		<b>8</b>	<i>No grade lower than a "C" will count toward fulfillment of Biology major requirements.</i>		
GEOL 1402	Historical Geology	4	<b>Biology Required Support Courses</b>		
PHYS 2411	General Physics I	4	GEOL 1401	Physical Geology	4
<b>PUBLIC SPEAKING</b>		<b>3</b>	MATH 1306	College Algebra	3
COMM 1320	Public Speaking	3	<b>MINOR IN CHEMISTRY</b>		
<b>MATHEMATICS</b>		<b>3</b>	CHEM 1410	General Chemistry I	4
MATH 2303	Statistics	3	CHEM 1420	General Chemistry II	4
<b>RESEARCH METHODS OR INTERNSHIP</b>		<b>2</b>	CHEM 3001	Lab Assistantship	0
BIOL 2170	Research Methods	1	CHEM 3400	Quantitative Analysis	4
BIOL 2171	Research Methods	1	CHEM 3410	Organic Chemistry I	4
<b>SOCIAL SCIENCE – SELECT ONE</b>		<b>3</b>	CHEM 3420	Organic Chemistry II	4
PSYC 1301	General Psychology	3	CHEM 4191	Seminar	1
PSYC 2399	Child and Adolescent Development	3	CHEM 4300	Safety in the Academic Laboratory	3
<b>US HISTORY OR US GOVERNMENT – SELECT ONE</b>		<b>3</b>	<b>MINOR IN PEDAGOGY (SECONDARY LEVEL CERTIFICATION)</b>		
HIST 2311	American History to 1877	3	EDUC 3315	Students and Learning	3
HIST 2312	American History since 1877	3	EDUC 4324	Classroom Management	3
POLS 2305	United States Government	3	EDUC 4328	Curriculum Design	3
POLS 2306	Texas State and Local Government	3	EDUC 4385	Educational Internship	3
<b>CLASSROOM TECHNOLOGY</b>		<b>3</b>	READ 4326	Disciplinary Literacy	3
EDUC 2311	Classroom Technology	3	EDUC 4250	Certification Preparation Seminar	2
<b>FRESHMAN SEMINAR</b>		<b>1</b>	EDUC 4501	Student Teaching I	5
UMHB 1101	Freshman Seminar	1	EDUC 4502	Student Teaching II	5
<b>CHAPEL – 1 to 4 credits</b>			<b>Total Hours</b>		
UMHB 1002	Chapel		Academic Core for B.S.		49
<b>Fine Arts Experience – 2 to 8 credits</b>			B.S. Biology Major Required Courses		36
UMHB 1005	Fine Arts Experience		Biology Required Support Courses		7
			Minor in Chemistry		24
			Minor in Pedagogy (Secondary Level Certification)		27
			<b>Total hours required for graduation</b>		<b>143</b>
			<b>Additional Graduation Requirements</b>		
			Minimum Upper Level hours		36
			Minimum hours taken at UMHB		30
			Minimum Upper Level hours taken at UMHB		24
			Minimum cumulative GPA		2.75