

# Biology (B.S.) – Science 7-12 Cert. – Foreign Language

2022-2023 Academic Catalog, Bachelor of Science – Biology, Science 7-12 Certification, Global Emphasis: Foreign Language

## Academic Core for B.S.

49 Hours

<b>CHRISTIAN STUDIES</b>		<b>6</b>
CSBS 1311	Engaging the Old Testament	3
CSBS 1312	Engaging the New Testament	3
<b>ENGLISH</b>		<b>9</b>
ENGL 1321	Rhetoric & Composition I	3
ENGL 1322	Rhetoric & Composition II	3
ENGL	Literature	3
<i>A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.</i>		
<b>EXERCISE &amp; SPORT SCIENCE</b>		<b>2</b>
EXAC	Activity Course	1
EXAC	Activity Course	1
<b>FINE ARTS – SELECT ONE</b>		<b>3</b>
ARTS 1350	Art Appreciation	3
COMM 2335	Film Appreciation	3
FINA 2330	Exploring the Fine Arts	3
MUSI 1340	Music Appreciation	3
THEA 2350	Introduction to the Theatre	3
<b>WORLD CULTURES – SELECT ONE</b>		<b>3</b>
ARTS 2354	World Art	3
EXSS 2353	Lifespan Nutrition	3
HIST 1311	History of World Civilizations to 1500	3
HIST 1312	History of World Civilizations since 1500	3
MUSI 2358	World Music	3
PHIL 2315	Introduction to Philosophy	3
<b>LAB SCIENCE</b>		<b>8</b>
GEOL 1402	Historical Geology	4
PHYS 2411	General Physics I	4
<b>PUBLIC SPEAKING</b>		<b>3</b>
COMM 1320	Public Speaking	3
<b>MATHEMATICS</b>		<b>3</b>
MATH 2303	Statistics	3
<b>RESEARCH METHODS OR INTERNSHIP</b>		<b>2</b>
BIOL 2170	Research Methods	1
BIOL 2171	Research Methods	1
<b>SOCIAL SCIENCE – SELECT ONE</b>		<b>3</b>
BECO 2310	Principles of Economics	3
PSYC 1301	General Psychology	3
PSYC 2399	Child and Adolescent Development	3
SOCI 1311	Introduction to Sociology	3
SOCW 2311	Introduction to Social Work	3
<b>US HISTORY OR US GOVERNMENT – SELECT ONE</b>		<b>3</b>
HIST 2311	American History to 1877	3
HIST 2312	American History since 1877	3
POLS 2310	State and Federal Government I	3
POLS 2311	State and Federal Government II	3
<b>CLASSROOM TECHNOLOGY</b>		<b>3</b>
EDUC 2311	Classroom Technology	3
<b>FRESHMAN SEMINAR</b>		<b>1</b>
UMHB 1101	Freshman Seminar	1
<b>GLOBAL EMPHASIS – FOREIGN LANGUAGE</b>		<b>8</b>
8 credit hours (2 semesters or the equivalent) in one language		8
<b>CHAPEL – 1 to 4 credits</b>		
UMHB 1002	Chapel	
<b>Fine Arts Experience – 2 to 8 credits</b>		
UMHB 1005	Fine Arts Experience	

## Biology – Science 7-12 Cert.

<b>B.S. BIOLOGY MAJOR REQUIRED COURSES</b>		<b>36</b>
BIOL 1090	Freshman Evaluation ( <i>Freshman Only</i> )	0
BIOL 1350	Biomolecules, Genes, and Cells	3
BIOL 1150	Biomolecules, Genes, and Cells Lab	1
BIOL 1360	Organisms, Populations, and Ecosystems	3
BIOL 1160	Organisms, Populations, and Ecosystems 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
<b>Biology Electives</b>		
BIOL	Upper-level Elective with Lab	4
BIOL	Any Biology with Lab	4
BIOL	Biology Electives	5-6
<b>Physiology Elective – Select one</b>		
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
<i>No grade lower than a "C" will count toward fulfillment of Biology major requirements.</i>		
<b>Biology Required Support Courses</b>		<b>10</b>
GEOL 1401	Physical Geology	4
MATH 1306	College Algebra	3
WRIT 3344	Scientific Writing	3
<b>MINOR IN CHEMISTRY</b>		<b>24</b>
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
<b>MINOR IN PEDAGOGY (SECONDARY LEVEL CERTIFICATION)</b>		<b>27</b>
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
<b>Total Hours</b>		
Academic Core for B.S.		49
Global Emphasis – Foreign Language		8
B.S. Biology Major Required Courses		36
Biology Required Support Courses		10
Minor in Chemistry		24
Minor in Pedagogy (Secondary Level Certification)		27
<b>Total hours required for graduation</b>		<b>154</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