

Biology (B.S.) – Science 7-12 Cert.

2022-2023 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
<i>A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.</i>		
EXERCISE & SPORT SCIENCE		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	Introduction to the Theatre	3
WORLD CULTURES – SELECT ONE		3
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
LAB SCIENCE		8
GEOL 1402	Historical Geology	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 – SELECT ONE		3
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
US HISTORY OR US GOVERNMENT – SELECT ONE		3
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
CLASSROOM TECHNOLOGY		3
EDUC 2311	Classroom Technology	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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B.S. BIOLOGY MAJOR REQUIRED COURSES		36
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
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
<i>No grade lower than a "C" will count toward fulfillment of Biology major requirements.</i>		
Biology Required Support Courses		10
GEOL 1401	Physical Geology	4
MATH 1306	College Algebra	3
WRIT 3344	Scientific Writing	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		10
Minor in Chemistry		24
Minor in Pedagogy (Secondary Level Certification)		27
Total hours required for graduation		146
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