

Bioinformatics (B.S.) – Foreign Language

2024-2025 Academic Catalog, Bachelor of Science – Bioinformatics, Global Emphasis: Foreign Language

Academic Core for B.S.

54 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**

CHEM 1410	General Chemistry I	4
CHEM 1420	General Chemistry II	4

PUBLIC SPEAKING **3**

COMM 1320	Public Speaking	3
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MATHEMATICS **3**

MATH 1306	College Algebra <i>or higher</i>	3
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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 2305	United States Government	3
POLS 2306	Texas State and Local Government	3

RESEARCH METHODS OR INTERNSHIP **2**

BIOL 4185	Bioinformatics Research Capstone	1
BIOL 4185	Bioinformatics Research Capstone	1

FRESHMAN SEMINAR **1**

UMHB 1101	Freshman Seminar	1
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GLOBAL EMPHASIS – FOREIGN LANGUAGE **8**

8 credit hours (2 semesters or the equivalent) in one language 8

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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Bioinformatics

62 Hours

BIOLOGY **19**

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 4305	Cell Biology	3
BIOL 4105	Cell Biology Lab	1
BIOL 4375	Bioinformatics	3

MATHEMATICS **17**

MATH 1430	Calculus I	4
MATH 2303	Statistics	3
MATH 2320	Linear Algebra	3
MATH 2430	Calculus II	4
MATH	Mathematics Elective (upper level)	3

COMPUTER SCIENCE **18**

CISC 1305	Introduction to Computing	3
CISC 2315	Discrete Structures of Computer & Eng. Sciences	3
CISC 2330	Introduction to Object-Oriented Programming	3
CISC 3323	Algorithms & Data Structures	3
CISC 4327	Database Theory and Application	3
CISC	Computer Science Elective (upper level)	3

CHEMISTRY **8**

CHEM 3410	Organic Chemistry I	4
CHEM 4430	Biochemistry	4

Electives

4 Hours

UPPER LEVEL ELECTIVES **3**

You need 3 additional hours to reach your minimum 36 UL required hrs.

ELECTIVES **1**

You need 1 additional hour to reach your minimum 120 required hrs.

Total Hours

Academic Core for B.S.	46
Global Emphasis – Foreign Language	8
Biology	19
Mathematics	17
Computer Science	18
Chemistry	8
Upper Level Electives	3
Electives	1
Total hours required for graduation	120

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