

# Bioinformatics (B.S.) – Study Abroad

2024-2025 Academic Catalog, Bachelor of Science – Bioinformatics, Global Emphasis: Study Abroad

## 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

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 or higher	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 – STUDY ABROAD 3

	Study Abroad	3
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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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## 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

9 Hours

### UPPER LEVEL ELECTIVES 3

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

### ELECTIVES 6

You need 6 additional hours to reach your minimum 120 required hrs.

## Total Hours

Academic Core for B.S.	46
Global Emphasis – Study Abroad	3
Biology	19
Mathematics	17
Computer Science	18
Chemistry	8
Upper Level Electives	3
Electives	6
<b>Total hours required for graduation</b>	<b>120</b>

## 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