

Biology (B.S.) – Pre-Optometry – Foreign Language

2023-2024 Academic Catalog, Bachelor of Science – Biology, Pre-Optometry, 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 | Introduction to the Theatre | 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 |
| MUSI 2358 | World Music | 3 |
| PHIL 2315 | Introduction to Philosophy | 3 |

LAB SCIENCE **8**

| | | |
|-----------|---------------------|---|
| CHEM 1410 | General Chemistry I | 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 **3**

| | | |
|-----------|--------------------|---|
| PSYC 1301 | General Psychology | 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 |

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 | |
|-----------|--------|--|

Fine Arts Experience – 2 to 8 credits

| | | |
|-----------|----------------------|--|
| UMHB 1005 | Fine Arts Experience | |
|-----------|----------------------|--|

Biology – Pre-Optometry

62 Hours

B.S. BIOLOGY MAJOR REQUIRED COURSES – PRE-OPTOMETRY **36**

| | | |
|-----------|--|---|
| BIOL 1090 | Freshman Evaluation (<i>Freshman Only</i>) | 0 |
| 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 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 |

Physiology Electives

| | | |
|-----------|-----------------------------------|---|
| BIOL 2380 | Microbiology | 3 |
| BIOL 2180 | Microbiology Lab | 1 |
| BIOL 2340 | Human Anatomy & Physiology I | 3 |
| BIOL 2140 | Human Anatomy & Physiology I Lab | 1 |
| BIOL 2341 | Human Anatomy & Physiology II | 3 |
| BIOL 2141 | Human Anatomy & Physiology II Lab | 1 |
| BIOL 3375 | Human Physiology | 3 |
| BIOL 3175 | Human Physiology Lab | 1 |

Biology Electives

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|------|-------------------|---|
| BIOL | Biology Electives | 1 |
|------|-------------------|---|

No grade lower than a "C" will count toward fulfillment of Biology major requirements

REQUIRED COURSES FOR PRE-OPTOMETRY **26**

| | | |
|-----------|----------------------|---|
| CHEM 1420 | General Chemistry II | 4 |
| CHEM 3410 | Organic Chemistry I | 4 |
| CHEM 4430 | Biochemistry | 4 |
| MATH 1306 | College Algebra | 3 |
| MATH 1320 | Pre Calculus | 3 |
| MATH 1430 | Calculus | 4 |
| PHYS 2412 | General Physics II | 4 |

Electives

13 Hours

UPPER LEVEL ELECTIVES **13**

You need 13 additional hours to reach your minimum 36 UL required hrs.

Total Hours

| | |
|--|------------|
| Academic Core for B.S. | 46 |
| Global Emphasis – Foreign Language | 8 |
| B.S. Biology Major Required Courses | 36 |
| Required Courses for Pre-Optometry | 26 |
| Upper Level Electives | 13 |
| Total hours required for graduation | 129 |

Additional Graduation Requirements

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|---|-----|
| Minimum Upper Level hours | 36 |
| Minimum hours taken at UMHB | 30 |
| Minimum Upper Level hours taken at UMHB | 24 |
| Minimum cumulative GPA | 2.0 |