CORBAN UNIVERSITY

**2023-2024 Program Overview**

# MAJOR: BIOLOGY

**Eligibility to graduate is based on the completion of all degree requirements and a minimum of 120 credits. Some majors require more than 120 credits to fulfill their degree requirements.**

| ***Degree Summary*** | |
|---|---|
| ***General Education Core Requirements*** | ***60-61*** |
| ***Core Requirements for all Biology Majors*** | ***25-27*** |
| ***Concentration Requirements*** | ***31*** |
| ***Minimum Required for Graduation:*** | ***120*** |

## B.S. General Education Core Requirements (60)

**Biblical Education Requirements (12-18)**

***Prorated based on transfer hours accepted at point of matriculation: 30 hrs=15 credits, 60 hrs = 12 credits***

***All students are required to take BIB103, BIB105, THE205, ITC elective***

| | | |
|---|---|---|
| BIB103 | Introduction to Biblical Literature | 3 |
| BIB105 | Bible Study Methods | 3 |
| THE205 | Introduction to Theology | 3 |
| ITC | Intercultural Studies Elective | 3 |
| CMI | Christian Ministry Elective | 3 |
| BIB/THE | Bible/Theology Elective | 3 |

***6 Credits of upper division are required in the minor***

**Communications (9)**

| | | |
|---|---|---|
| WRI123 | College Writing I | 3 |
| WRI132 | College Writing II | 3 |
| COM102 | Fundamentals of Speech **or** approved course w/ oral presentations | 3 |

**Humanities (9)**

| | | |
|---|---|---|
| ENG/HUM | English Lit **or** HUM prefix Elective | 3 |
| PHL213 | The Worldview Seminar | 3 |
| | Humanities Elective | 3 |

**Mathematics and Sciences (9)**

| | | |
|---|---|---|
| MTH | Math elective | **met in major** |
| SCI | Science w/ lab elective | **met in major** |
| MTH/SCI | Math or Science elective | **met in major** |

**Social Sciences (9)**

| | | |
|---|---|---|
| HIS114/124 | American History I **or** II | 3 |
| | Non-U.S. History Elective | 3 |
| | Non-History Social Science Elec | 3 |

**General Education (6)**

| | | |
|---|---|---|
| IDS101 | Freshman Seminar | 1 |
| | General Education Electives* | 5 |

***(Any Gen Ed Discipline & HPR121/131/250***

***HPR limited to 3 total hours, No Varsity Sports.***

***Prorated Bible must be made up with Gen Ed Electives)***

## B.A. General Education Core Requirements (61)

Same requirements as Bachelor of Science

Exception: **Humanities (18)**

| | | |
|---|---|---|
| ENG/HUM | English Literature or Approved Lit based HUM prefix Elective | 3 |
| PHL213 | The Worldview Seminar | 3 |
| | Foreign Language | 12** |

Math and Science: Only 6 credits required

## Core Requirements for all Biology Majors (25-27)

**Biology Core Requirements (19)**

| | | |
|---|---|---|
| BIO210 | Biology I w/lab | 4 |
| BIO220 | Biology II w/lab | 4 |
| CHM214 | General Chemistry I w/lab | 4 |
| CHM224 | General Chemistry II w/lab | 4 |
| SCI271 | Introduction to Literature Review | 1 |
| Two credits of the following: | | 1 |

- SCI391 Scientific Research
- SCI481 Internship

**Math Requirements (6-8)**

**Choose 2 of the following courses:**

| | | |
|---|---|---|
| MTH133 | Pre-Calculus | 3 |
| MTH223 | Statistics & Probability | 3 |
| MTH234 | Calculus I: Differential | 4 |
| MTH244 | Calculus II: Integral | 4 |

***BA Degree requires the equivalent of 12 credits of study in foreign language. This requirement may be fulfilled by:***

1. ***Completing the second year of a college sequence if completed 2 yrs in high school with proof of proficiency. Remaining 6 cr may be met through humanities electives.***
2. ***CLEP and transcript 6 cr or 12 cr. Remaining credits in humanities.***
3. ***COM363, COM373 Language & Culture Acquisition I, II and 6 additional credit hours of foreign language.***
4. ***Two foreign languages may be selected with the minimum of 6 credits in each language.***
5. ***Completion of the Corban Language Institute Pathway to English advanced fluency courses.***
6. ***12 credits of study in a Foreign Language.***

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## B.S. BIOLOGY CONCENTRATION (31)

| | | |
|---|---|---|
| BIO283 | Ecology and Evolution | 3 |
| **Choose one of the following Physiology components:** | | |
| BIO310 | Animal Physiology | 3 |
| BIO312 | Plant Physiology | 3 |
| **Choose one of the following Cellular components** | | |
| BIO304 | Microbiology w/lab | 4 |
| BIO330 | Cell & Molecular Biology w/lab | 4 |
| **Select additional credits to complete 31 credits required** | | |
| PHY215 | Physics I w/ lab | 4 |
| PHY230 | Physics II w/ lab | 4 |
| BIO234 | Human Anatomy & Physiology I w/lab | 4 |
| BIO244 | Human Anatomy & Physiology II w/lab | 4 |
| BIO310 | Animal Physiology | 3 |
| BIO312 | Plant Physiology | 3 |
| CHM314 | Organic Chemistry I w/lab | 4 |
| CHM324 | Organic Chemistry II w/lab | 4 |
| BIO304 | Microbiology w/lab | 4 |
| BIO330 | Cell & Molecular Biology w/lab | 4 |
| BIO444 | Genetics w/lab | 4 |
| BIO443 | Virology & Immunology | 3 |
| SCI391/SCI481 | Research or Internship (max 6 cr) | 1 |
| BIO4031 | Biochemistry | 3 |

**Total of 20 credits upper division is required in the major**

## BIOMEDICAL SCIENCES CONCENTRATION (26-34)

| | | |
|---|---|---|
| PHY215 | Physics I w/lab | 4 |
| PHY230 | Physics II w/lab | 4 |
| BIO444 | Genetics w/lab | 4 |
| ***Choose one of the following Physiology components:*** | | |
| BIO234/244 | Human A&P I & II, labs (must take both semesters to satisfy this category) **OR** | **8** |
| BIO310 | Animal Physiology | 3 |
| ***Choose one of the following Cellular components:*** | | |
| BIO304 | Microbiology w/lab | 4 |
| BIO330 | Cell & Molecular Biology w/lab | 4 |
| ***Choose two of the following Chemistry components:*** | | |
| CHM314 | Organic Chemistry I w/lab | 4 |
| CHM324 | Organic Chemistry II w/lab | 4 |
| BIO4031 | Biochemistry | 3 |
| ***Select additional classes from the list below to complete the minimum 20 upper division credits for the major:*** | | |
| BIO304 | Microbiology w/lab | 4 |
| BIO330 | Cell & Molecular Biology w/lab | 4 |
| SCI391,SCI481-3 | Research or Internship (max 6 cr) | 1 |
| BIO443 | Virology & Immunology | 3 |
| CHM314 | Organic Chemistry I w/ lab | 4 |
| CHM324 | Organic Chemistry II w/ lab | 4 |
| BIO4031 | Biochemistry | 3 |

## BIOKINETICS CONCENTRATION (40)

| | | |
|---|---|---|
| BIO234 | Human Anatomy & Physiology I w/ Lab | 4 |
| BIO244 | Human Anatomy & Physiology II w/ Lab | 4 |
| PHY215 | Physics I w/lab | 4 |
| PHY230 | Physics II w/lab | 4 |
| KIN323 | Motor Learning and Development | 3 |
| KIN343 | Biomechanics | 3 |
| KIN423 | Physiology of Exercise | 3 |
| PSY105 | General Psychology | 3 |
| **Choose one of the following [3]** | | |
| PSY205 | Lifespan Psychology | 3 |
| PSY275 | Abnormal Psychology | 3 |
| **Choose at least two of the following to complete a minimum of 20 upper division credits:** | | |
| KIN300-KIN400 | Kinesiology Elective | |
| Upper Division Elective: BIO, CHM | | |

## MINOR IN BIOLOGY (23)

Minors must be taken in conjunction with a major to satisfy requirements for a bachelor's degree. Some of these requirements also may be counted toward the appropriate General Education Requirements.

| | | |
|---|---|---|
| BIO210 | Biology I with lab | 4 |
| BIO220 | Biology II with lab | 4 |
| CHM214 | General Chemistry I w/lab | 4 |

**Elective hours must include 3 classes, of which 8 credits must be upper division and 1 class of which must include a lab component (minimum of 11 elective credits)**

| | | |
|---|---|---|
| BIO234 | Anatomy and Physiology I w/lab | 4 |
| BIO244 | Anatomy and Physiology II w/lab | 4 |
| BIO283 | Ecology and Evolution | 3 |
| BIO304 | Microbiology I w/lab | 4 |
| BIO310 | Animal Physiology | 3 |
| BIO312 | Plant Physiology | 3 |
| BIO330 | Cell and Molecular Biology w/ lab | 4 |
| BIO444 | Genetics w/lab | 4 |
| SCI391 | Scientific Research Exp. (up to 6 cr) | 1 |
| BIO4031 | Biochemistry | 3 |
| BIO433 | Virology and Immunology w/Lab | 4 |

## MINOR IN CHEMISTRY (22)

Minors must be taken in conjunction with a major to satisfy requirements for a bachelor's degree. Some of these requirements also may be counted toward the appropriate General Education Requirements.

| | | |
|---|---|---|
| CHM214 | General Chemistry I w/lab | 4 |
| CHM224 | General Chemistry II w/lab | 4 |
| CHM314 | Organic Chemistry I w/lab | 4 |
| CHM324 | Organic Chemistry II w/lab | 4 |
| CHM320 | Quantitative Analysis | 3 |
| BIO4031 | Biochemistry | 3 |