

# 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.

<u>Degree Summary</u>	
General Education Core Requirements	60-61
Core Requirements for all Biology Majors	25
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 BIB113, BIB123, BIB105, THE205

BIB113	Survey Bible Literature I	3
BIB123	Survey Bible Literature II	3
BIB105	Bible Study Methods	3
THE205	Introduction to Theology	3
CMI	Christian Ministry Elective	3
ITC	Intercultural Studies Elective	3

### Communications (9)

ENG123	College Writing I	3
ENG132	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

\*\*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.

## 2020-2021 Program Overview

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

#### 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 Review1	
SCI471	Advanced Literature Review	1
One of the following:		1
	• SCI391 Scientific Research	
	• SCI481 Internship	

#### Math Requirements (6)

##### Choose 2 of the following courses:

MTH133	Pre-Calculus	(3)
MTH223	Statistics & Probability	(3)
MTH233	Calculus I: Differential	(3)
MTH243	Calculus II: Integral	(3)

### B.S. BIOLOGY CONCENTRATION (31)

BIO283	Ecology and Evolution	3
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#### Choose one of the following Physiology components:

BIO310	Animal Physiology	4
BIO312	Plant Physiology	4

#### 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 Anat & Physiology I w/lab	4
BIO244	Human Anat & 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
BIO374	Genetics w/lab	4
BIO443	Virology & Immunology	3
BIO391/BIO48103	Research or Internship (max 6 cr)	1
BIO4031	Biochemistry	3

Total of 20 credits upper division is required in the major

# Major: Biology

# 2020-2021 Program Overview

## BIOMEDICAL SCIENCES CONCENTRATION (31)

PHY215 Physics I w/lab 4

PHY230 Physics II w/lab 4

BIO374 Genetics w/lab 4

### Choose one of the following Physiology components:

BIO234/244 Human A&P I & II, labs (must take both 8 semesters to satisfy this category) **OR**

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 20 credits to complete 31

#### credits required for concentration:

KIN315 Nutrition 3

BIO115 Medical Terminology 2

BIO283 Ecology and Evolution 3

BIO304 Microbiology w/lab 4

BIO330 Cell & Molecular Biology w/lab 4

BIO343 Health Care Practices in the Developing World 3

BIO391, BIO481-3 Research or Internship (max 6 cr) 1

BIO443 Virology & Immunology 3

## BIOKINETICS CONCENTRATION (31)

BIO234 Human Anatomy & Physiology I, Lab 4

BIO244 Human Anatomy & Physiology II, 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

BIO435 Cell and Molecular Biology w/ lab 4

BIO374 Genetics w/lab 4

SCI391 Scientific Research Experience (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