

## BACHELOR OF SCIENCE BIOLOGY

### GENERAL EDUCATION REQUIREMENTS

#### Competencies

- ☐ ♦ Basic College Math
- ☐ ♦ Reading Comprehension

#### ♦ General Education Categories - 34-35 credits

♦FYS	First Year Seminar			3	
♦W-I	Written Communication - Level I			3	
♦OC	Oral Communication			3	
PGR	Personal Growth & Responsibility			3	
CEA	Creative Expression & Appreciation			3	
WC	World Cultures			3	
HP	The Human Past			3	
CS	Contemporary Society			3	
SR	Scientific Reasoning:	# Any SR course		3-4	
		# SR Lab course		4	
QR	Quantitative Reasoning			3	

#### ‡ Written Communication (Level II and Level III) and Diversity, Power Dynamics and Social Justice

W-II	Written Communication - Level II				<input type="checkbox"/>
W-III	Written Communication - Level III				<input type="checkbox"/>
DPDS	Diversity, Power Dynamics and Social Justice				<input type="checkbox"/>

#### Free Electives/Optional Minor (20-25 credits)

Additional free elective credits beyond the credits listed may be required based on the use of support courses to satisfy General Education Category requirements


#### ∞ Minor (Optional):


### COURSES IN MAJOR (42 - 45 credits total)

#### Required (36-37 credits)

BIO	131	Introduction to Organisms	4	
BIO	132	Introduction to Cells	4	
BIO	212	Cell Biology	4	
BIO	217	General Genetics	3	
BIO	218	Ecology & the Environment	3	
BIO	219	Evolution	3	
BIO		† Populations/Ecosystems Elective	3-4	
BIO		† Organismal/Physiology Elective	3-4	
BIO		† Cellular/Molecular Elective	3-4	

#### Biology Capstone Courses

BIO	415	Biology Seminar	3	
BIO		φ Capstone Elective – check box	<input type="checkbox"/>	
BIO	419	ω Biology Portfolio Seminar	1	

#### † Free Biology Electives (6-8 credits)

BIO		Biology elective	3-4	
BIO		Biology elective	3-4	

#### ∞ Required Chemistry Support Courses (12 credits)

CHE	130	General Chemistry I	4	
CHE	131	General Chemistry II	4	
CHE	212	Organic chemistry I	4	

#### ∞ Recommended Additional Chemistry (4 credits)

CHE	213	Organic chemistry II	4	
-----	-----	----------------------	---	--

#### ♥ Required Support Courses (7 – 8 credits)

MAT	150	Pre-calculus	3-4	
	OR 220	Calculus I		
♦PHS	211A	College Physics I	4	
	OR 221	General Physics I		
*PHS	212A	College Physics I	4	
	OR 222	General Physics I		

♥ Students may choose to use support courses to satisfy general education categories but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

- ♦ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
- # These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline
- ‡ Level II, Level III Written Communications and Diversity, Power Dynamics and Social Justice Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.
- ♦ The sequence can be either PHS211A and 212A or PHS221 and 222.
- † One Biology elective must be chosen from each group (Population/Ecosystems, Organismal/Physiology, Cellular/Molecular) and then any two more 300-400 level electives. At least two of these must have a lab.
- φ The Capstone Elective can include certain courses (BIO300 Botany, BIO313 Molecular Biology, BIO323 Fish Biology, BIO325 Behavioral Ecology, BIO345 Introduction to Aquaculture, BIO407 Directed Study, BIO408 Research in Biology, BIO416 Biology Internship), independent studies, internships, study abroad, service learning and other courses – approval required by the chairperson of Biology.
- ω The Portfolio Seminar is a 1-credit hybrid class where students reflect on their capstone experience and that ensures all portfolio requirements are met.
- ∞ It is recommended that students complete CHE213 and earn a Chemistry minor.
- ♦ The sequence can be either PHS211A and PHS212A or PHS221 and PHS222.
- \* **Note:** All biology concentrations and options except the Environmental Biology option must take PHS212A or PHS222. In place of a second physics course, the Environmental Biology option must take a group A elective and a group B elective. **Group A** – GLS210, GLS212, GLS221, GLS330, GLS334, GLS342, GLS362, GPH222, GPH245, GPH264, GPH282P, GPH301, GPH314, GPH371, GPH376P, GPH383P. **Group B** – ECO319, IDS220, IDS325, PHL224, POL304, POL319.

♦ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

♦ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Exceptions in the timing of courses will be made for transfer students

**Total credits for graduation: 120**

**Effective: 09/2021**