

BS in Biological Sciences
General Biology Concentration
 (Effective Fall 2023)



Freshman Fall Semester				Freshman Spring Semester			
Course	Course Name	Cr	Grade	Course	Course Name	Cr	Grade
BIOL-101	General Biology I	4		BIOL-102	General Biology II	4	
CHEM-101	General Chemistry I	4		CHEM-102	General Chemistry II	4	
ENGL-121	Rhetoric and Composition I	2		ENGL-123	Rhetoric and Speech	3	
ENGL-122	Rhetoric and Composition II	2		MTSC-122	Trigonometry	3	
	Social Science	3					
UNIV 191	University Seminar I	1					
	Total Credits	16			Total Credits	14	
Sophomore Fall Semester				Sophomore Spring Semester			
Course	Course Name	Cr	Grade	Course	Course Name	Cr	Grade
BIOL-215	Cell Biology	4		BIOL-210	Genetics*	4	
CHEM-210	Organic Chemistry I	4		CHEM-211	Organic Chemistry II	4	
BIOL 321	Biostatistics	3		ENGL-XXX	Literature#	3	
ENGL-124	Rhetoric, Research, & Comp III	2		HIST-XXX	History#	3	
UNIV 291	Braven	3		BIOL-299	Applied Scientific Writing	1	
	Total Credits	16			Total Credits	15	
Junior Fall Semester				Junior Spring Semester			
Course	Course Name	Cr	Grade	Course	Course Name	Cr	Grade
BIOL-310	Molecular Biology*	4		CHEM-403	Biochemistry OR	--	
BIOL-xxx	Biology Elective	4		BIOL-422	Biochemical Mechanisms	4	
BIOL-xxx	Biology Elective	4		GLOB-395	Global Societies	3	
PHYS-111	Introduction to Physics I	4		PHYS-112	Introduction to Physics II	4	
				BIOL-xxx	Biology Elective	4	
				BIOL-301/451	Capstone I (research/internship)**	2	
	Total Credits	16			Total Credits	17	
Summer Research Internship							
Senior Fall Semester				Senior Spring Semester			
Course	Course Name	Cr	Grade	Course	Course Name	Cr	Grade
XX-XXX	Arts and Humanities#	3		XX-XXX	Arts and Humanities#	3	
BIOL-xxx	Biology Elective	4		BIOL-xxx	Biology Elective	4	
BIOL-xxx	Biology Elective	4			Open Elective	4	
	Open Elective	4					
				BIOL-499	Senior Seminar (Capstone II) [§]	1	
	Total Credits	15			Total Credits	12	

Total Credits: 120

** Pre-requisite (not co-requisite) for BIOL 499

* Writing Intensive Course(s)

One of these courses must be used to meet the African American Experience requirement and at least one of the others must meet the Multicultural Experience requirement

§ Registration for BIOL 499 requires approval of Chair of the Undergraduate Academics Committee, Department Chair, and Instructor

A grade of C or better must be earned in all courses

BIOLOGY ELECTIVES: Students must not take less than 18 credits of Biology courses from the course elective list below. These are the only ones that can satisfy the Biology elective requirement for this concentration. Substitutions can be requested, under special circumstances, but written approval of advisor and Chair is needed in advance.

REQUIREMENTS: Students must take each of the five biology core courses (101, 102, 215, 210 and 310) in order and earn a “C” or higher in each before being able to progress to the next in the sequence or to take any 300 or 400 level Biology Department course. These grade requirements take precedence over and supersede any lesser specific prerequisites of all 300 or 400 level Biology electives.

SPECIAL NOTES: For all programs and concentrations within the Department of Biological Sciences, a grade of “C” or better is required for all courses.

All Biology majors must complete an independent research project or internship. Those who have completed a research project with a faculty member should register for BIOL 301. If they have not completed a research project, or their internship is inadequate, then they must register for BIOL-451 to complete a Capstone research project.

All Biology majors are required to successfully complete Senior Seminar (Capstone II, BIOL-499), no waivers or substitutions. Registration for BIOL 499 requires completion of or waiver from, BIOL 451 (cannot co-register).

General Note: The minimum University requirement for graduation is 121 hours; in Biology you will usually complete between 121-125 hours depending on selections.

General Biology[^]

Recommended Biology Electives:

BIOL-307 Principles of Physiology
BIOL-311 Neuroscience
BIOL-315 Behavior
BIOL-316 Phys. of Reproduction and Devel
BIOL-317 Principles of Virology
BIOL-322 Microbiology
BIOL-324 Medical Microbiology
BIOL-370 Human Anatomy
BIOL 407 Biology of Cancer
BIOL 408 Pathophysiology
BIOL 411 Pharmacology
BIOL 420 Immunology
BIOL 442 Biology of Aging
BIOL-311 Neuroscience
BIOL-315 Behavior

Recommended Open Electives:

AGRI-205 Plant Physiology
AGRI-206 Intro Animal Science
AGRI 375 Molec Genetics & Genomics
PSYC-208 Health Psychology
PSYC-300 Neuropsychology
PSYC-201 General Psychology

[^] Electives not on the list require advisor / Chair written approval in advance. Non-majors biology courses are not suitable electives for Biology Majors, and will not be approved.