

Bachelor of Science in Biology -- 120 Credits

JBIOL-BS (RG 7612)

Effective August 2025

GENERAL EDUCATION REQUIREMENTS

REQUIRED COURSES (RG 6813)

Foundational Courses		CR	Satisfied/Term
Engcomp 0005	Composition I	3	
Engcomp 0006	Composition II	3	
CommRc 0052	Public Speaking	3	
Basic Algebra or Placement Test			
Math 0001	Algebra 1	3	
Quantitative Reasoning (QR) - 1 Course			
<i>Note - a student cannot test out of their QR requirement.</i>			
		3	

FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

		CR	Satisfied/Term

WORLDS OF KNOWLEDGE (RG 6825)

Aesthetic and Creative Expression				
Subject	Number	Course Title	CR	Satisfied/Term
			3	
			3	

Societies & Civics				
Subject	Number	Course Title	CR	Satisfied/Term
			3	
			3	

Follow-Up Courses				
Subject	Number	Course Title	CR	Satisfied/Term
Chem	0112	General Chemistry 2	3	
Phys			4	

Global History & Culture				
Subject	Number	Course Title	CR	Satisfied/Term
			3	
			3	

Science & Nature				
Subject	Number	Course Title	CR	Satisfied/Term
Chem	0111	General Chemistry 1	3	
Math	0221	Analytic Geom & Calc 1	4	

Each student must take 2 courses in each World of Knowledge. The 8 courses taken in the Worlds must represent 8 different Subjects. A student must take two additional "Follow-Up" courses in any World.

- >The minimum number of courses taken in the Worlds must be 10.
- >The Follow-Up courses may repeat a subject previously taken in a World.
- >A student cannot use a major required Subject course in one of the Worlds.
- >For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.
- >Students cannot use a course to count both in their QR requirement and one of the Worlds.
- >Students can choose QR and Worlds of Knowledge courses from published course lists.

MAJOR REQUIREMENTS (RG 7612)

Required Courses (RQ 3741)		CR	Satisfied/Term
Biol 0130	Biol Freshman Seminar	1	
Biol 0110	General Biology 1	3	
Biol 0111	General Biology 1 Lab	1	
Biol 0120	General Biology 2	3	
Biol 0121	General Biology 2 Lab	1	
Biol 0340	Ecology	3	
Biol 0360	Cell Biology	3	
Biol 0361	Cell Biology Lab	1	
Requirement Satisfied		16	

Required Chemistry (RQ 3742)		CR	Satisfied/Term
Chem 0111	General Chemistry 1	3	
Chem 0113	General Chemistry 1 Lab	1	
Chem 0112	General Chemistry 2	3	
Chem 0114	General Chemistry 2 Lab	1	
Requirement Satisfied		8	

Required Math (RQ 3743)		CR	Satisfied/Term
Math 0221	Analytic Geom & Calc 1	4	
Requirement Satisfied		4	

Required Upper Level Chem Options (RQ 3745)		CR	Satisfied/Term
Chem 0231	Organic Chemistry 1	3	
Chem 0233	Organic Chemistry 1 Lab	1	
Chem 0232	Organic Chemistry 2	3	
Chem 0234	Organic Chemistry 2 Lab	1	
OR			
Chem 0230	Fund of Organic Chem	4	
Chem 0235	Fund of Organic Chem Lab	1	
Chem 0325	Analytical Chemistry	4	
Requirement Satisfied		8 or 9	

Required Physics options (RQ 3746)		CR	Satisfied/Term
Phys 0140	Intro to Physics 1	4	
or Phys 0150	Physics 1		
Phys 0141	Experimental Physics 1	1	
or Phys 0151	Physics 1 Lab		
Requirement Satisfied		5	

Biological Electives (RQ 3903)

Complete one course from each of the following elective areas, and additional biology electives for a total of 17 credits.
(Must include a minimum of 2 laboratory credits and Capstone courses may only satisfy one elective area.)

(RQ 3903-10)					
Cellular and Molecular Elective				CR	Satisfied/Term
Select one course from the following courses					
Biol 0352	Genetics		3		
Biol 1126	Human Nutrition		3		
Biol 1137	Molecular Genetics (C)		3		
Biol 1140	Cancer Biology (C)		3		
Biol 1186	Immunology (C)		3		
Biol 1236	Developmental Biology		3		
Biol 1240	Microbiology		3		
Biol 1280	Special Topics - C & M		3		

(RQ 3903-20)					
Organismal Elective				CR	Satisfied/Term
Select one course from the following courses					
Biol 1122	Human Anatomy		3		
Biol 1130	Biology of Plants		3		
Biol 1144	Invertebrate Biology		3		
Biol 1224	Human Physiology		3		
Biol 1269	Vertebrate Biology		3		
Biol 1274	Ornithology		3		
Biol 1280	Special Topics - Org		3		

(RQ 3903-30)					
Ecology and Evolution Elective				CR	Satisfied/Term
Select one course from the following courses					
Biol 1110	Biodiver Conservation		3		
Biol 1162	Plant Diversity & Local Flora		3		
Biol 1165	Evolution		3		
Biol 1197	Ecol of Infect Disease (C)		3		
Biol 1220	Wildlife Management		3		
Biol 1232	Animal Behavior		3		
Biol 1280	Special Topics - E & E		3		
Biol 1520	Aquatic Ecology (C)		3		

(RQ 3903-35)					
Capstone Experience				CR	Satisfied/Term
Minimum 1 credit, included as Biol Elective Credit					
Biol 1111	Biodiversity Conservation Lab		1		
Biol 1137	Molecular Genetics (C)		3		
Biol 1140	Cancer Biology (C)		3		
Biol 1145	Invertebrate Biology Lab		1		
Biol 1161	Internship		1 to 15		
Biol 1186	Immunology (C)		3		
Biol 1197	Ecol of Infect Disease (C)		3		
Biol 1200	Independent Study		1 to 6		
Biol 1221	Wildlife Management Lab		1		
Biol 1225	Human Physiology Lab		1		
Biol 1233	Animal Behavior Lab		1		
Biol 1237	Developmental Biology Lab		1		
Biol 1520	Aquatic Ecology (C)		3		

(RQ 3903-50)					
Additional Biology Electives				CR	Satisfied/Term

Requirement Satisfied **17**

Verify Biology Lab Requirement	
Minimum of 2 Labs within Required 17 Elective Credits	

Upper Level Interdiscip. Science Elective (RQ 3740)			
Select one course from the following courses			
Prereqs must be fulfilled (* Prereq may be waived)		CR	Satisfied/Term
Chem 1321	Biochemistry 1	4	
Geo 0920	Geomorphology *	4	
Geo 0940	Paleontology*	4	
Geo 1030	Sustainable Food and Agriculture*	3	
Geo 1110	Hydric Soils and Wetlands*	4	
Math 0231	Calculus 2	4	
Phys 0142/0143	Intro Physics 2 & lab	5	
Phys 0152/0153	Physics 2 & lab	5	
Psy 0211	Comparative Psych	3	
Psy 0351	Psychopharmacology	3	
Psy 1141	Psychopathology	3	
Psy 1216	Health Psychology	3	
Psy 1440	Psych Learning & Lab	4	
Psy 1500	Physiological Psych	3	
Psy 1650	Advanced Seminar	3	

Updated 03/28/25

Major GPA (RG 3747)
Residency (RG 3748)

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.