

# Bachelor of Science in Biology -- 120 Credits

JBIOL-BS (RG 7612)  
Effective August 2019

## GENERAL EDUCATION REQUIREMENTS

### REQUIRED COURSES (RG 6813)

Foundational Courses	CR	Satisfied/Term
Engcmp 0003 or 0005	3	
Engcmp 0004 or 0006	3	
CommRc 0052 Public Speaking	3	
<b>Basic Algebra or Placement Test</b>		
Math 0001 Algebra 1	3	
<b>Quantitative Reasoning (QR) - 1 Course</b>		
<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)

(RQ 3741)

Required Courses	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	
<b>Requirement Satisfied</b>	<b>16</b>	

(RQ 3742)

Required Chemistry	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	
<b>Requirement Satisfied</b>	<b>8</b>	

(RQ 3743)

Required Math	CR	Satisfied/Term
Math 0221 Analytic Geom & Calc 1	4	
<b>Requirement Satisfied</b>	<b>4</b>	

(RQ 3745)

Required Upper Level Chem Options	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	
<b>Requirement Satisfied</b>	<b>8 or 9</b>	

(RQ 3746)

Required Physics options	CR	Satisfied/Term
Phys 0140 Intro to Physics 1 or Phys 0150 Physics 1	4	
Phys 0141 Experimental Physics 1 or Phys 0151 Physics 1 Lab	1	
<b>Requirement Satisfied</b>	<b>5</b>	

(RQ 3903)

Cellular and Molecular Elective	CR	Satisfied/Term
Select one course from the following courses		
Biol 0352 Genetics	3	
Biol 1137 Molecular Genetics (C)	3	
Biol 1140 Cancer Biology	3	
Biol 1186 Immunology	3	
Biol 1236 Developmental Biology (C)	3	
Biol 1240 Microbiology	3	
Biol 1280 Special Topics - C & M	3	
<b>Requirement Satisfied</b>	<b>3</b>	

(RQ 3903)

Organismal Elective	CR	Satisfied/Term
Select one course from the following courses		
Biol 1122 Vertebrate Anatomy	3	
Biol 1130 Biology of Plants	3	
Biol 1144 Invertebrate Biology	3	
Biol 1224 Animal Physiology	3	
Biol 1269 Vertebrate Biology	3	
Biol 1274 Ornithology	3	
Biol 1280 Special Topics - Org	3	
<b>Requirement Satisfied</b>	<b>3</b>	

(RQ 3903)

Ecology and Evolution Elective	CR	Satisfied/Term
Select one course from the following courses		
Biol 1110 Biodiver Conservation (C)	3	
Biol 1162 Plant Diversity and 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	
<b>Requirement Satisfied</b>	<b>3</b>	

Biol Lab Requirement, Minimum 2 labs	CR	Satisfied/Term
<b>Requirement Satisfied</b>		

Additional Biol Electives to Min. 17cr	CR	Satisfied/Term
<b>Requirement Satisfied</b>		

Capstone Experience	CR	Satisfied/Term
Minimum 1 credit, Included as Biol Elective Credit		
Biol 1200 Independent Study		
Biol 1161 Internship		
Biol Capstone Lab		
Biol Capstone Course		
<b>Requirement Satisfied</b>		

(RQ 3740)

Upper Level Interdiscip. Science Elective	CR	Satisfied/Term
Select one course from the following courses		
Prereqs must be fulfilled (* Prereq may be waived)	CR	Satisfied/Term
Chem 1321 Biochemistry 1	4	
Geol 1061 Geomorphology *	4	
Geol 1106 Hydrogeology *	4	
Geol 1139 Geology of Soils *	4	
Geol 1202 Intro to Invert Paleo *	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 1216 Health Psychology	3	
Psy 1440 Psych Learning & Lab	4	
Psy 1500 Physiological Psych	3	
Psy 1650 Advanced Seminar	3	
<b>Requirement Satisfied</b>	<b>3 to 5</b>	

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.