Bachelor of Science in Biology -- 120 Credits

JBiol-BS (RG 0261)

Effective August 2018

GENERAL EDUCATION REQUIREMENTS

REQUIRED COURSES

Foundational Courses	CR	Satisfied/Term	
Engcmp 0003 **or** 0005	3		
Engcmp 0004 **or** 0006	3		
CommRc 0052 Public Speaking	3		
Basic Algebra or Placement Test			
Math 0001 Algebra 1	3		
Quantitative Reasoning (QR) - 1 Course			
Note - a student cannot test out of their QR requirement.			
	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

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

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

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

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

Follow-Up Courses					
Subject	**Number**	**Course Title**	**CR**	Satisfied/Term	
Chem	0112	Gen. Chem 2	3		
Phys	140 or 150	Intro to Physics 1 Physics 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 1515 Ecology	3		
Biol 0360 Cell Biology	3		
Biol 0361 Cell Biology Lab	1		
Requirement Satisfied	**16**		

(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		
Requirement Satisfied	**8**		

(RQ 3743)

Required Math	CR	Satisfied/Term	
Math 0221 Analytic Geom & Calc 1	4		
Requirement Satisfied	**4**		

(RQ3745)

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		
Requirement Satisfied	**8 or 9**		

(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		
Requirement Satisfied	**5**		

Updated 10/4/18

Major GPA (RG 3747)

Residency (RG 3748)

(RQ 3739)

Cellular and Molecular Elective	CR	Satisfied/Term	
Select one course from the following courses			
Biol 0350 Genetics	4		
Biol 1137 Molecular Genetics (C)	3		
Biol 1185 Microbiology	4		
Biol 1186 Immunology	3		
Biol 1135 Developmental Biology (C)	4		
Biol 1280 Special Topics (Permission Req)	3		
Requirement Satisfied	**3**		

Organismal Elective	CR	Satisfied/Term	
Select one course from the following courses			
Biol 1120 Vertebrate Anatomy	4		
Biol 1125 Animal Physiology	3		
Biol 1130 Biology of Plants	3		
Biol 1142 Entomology	3		
Biol 1170 Vertebrate Biology	3		
Biol 1175 Ornithology	3		
Biol 1280 Special Topics (Permission Req)	3		
Requirement Satisfied	**3**		

Ecology and Evolution Elective	CR	Satisfied/Term	
Select one course from the following courses			
Biol 1110 Biodiver Conservation (C)	3		
Biol 1158 Local Flora	4		
Biol 1165 Evolution	3		
Biol 1171 Wildlife Management	3		
Biol 1172 Animal Behavior	3		
Biol 1197 Ecol of Infect Disease (C)	3		
Biol 1520 Aquatic Ecology (C)	3		
Biol 1280 Special Topics (Permission Req)	3		
Requirement Satisfied	**3**		

Capstone Experience	CR	Satisfied/Term	
Minimum of 1 credit, Included as Biology Elective Credit			
Biol 1200 Independent Study			
Biol 1161 Internship			
Biol Capstone Lab			
Biol Capstone Course			
Requirement Satisfied	**1**		

Biology Lab Requirement - Min of 2 labs	CR	Satisfied/Term	
Requirement Satisfied			

Additional Biology Electives to min 17cr	CR	Satisfied/Term	
Requirement Satisfied			

(RQ 3740)

Upper Level Interdiscip. Science Elective			
Select one course from the following courses			
Prereqs must be fulfilled (* Prereq may be waived)			
	CR	Satisfied/Term	
Math 0231 Calc 2	4		
Chem 1321 BioChemistry 1	4		
Phys 0142/0143 Intro Physics 2 & lab	5		
Phys 0152/0153 Physics 2 & lab	5		
Geol 1061 Geomorphology *	4		
Geol 1106 HydroGeology *	4		
Geol 1139 Geology of Soils *	4		
Geol 1202 Intro to Invert Paleo *	4		
Psy 1500 Physiological Psych	3		
Psy 1216 Health Psychology	3		
Psy 1440/1441 Psych Learning & Lab	3		
Psy 0211 Comparative Psych	3		
Psy 1650 Advanced Seminar	3		
Requirement Satisfied	**3 to 5**		