# Bachelor of Science in Biology -- 120 Credits

JBIOL-BS (RG 7612)

# **GENERAL EDUCATION REQUIREMENTS**

#### **REQUIRED COURSES (RG 6813)**

Foundational Courses		CR	Satisfie	ed/Term		
Engcmp 0005	Composition I	3				
Engcmp 0006	Composition II	3				
CommRc 0052	Public Speaking	3				
Basic Algebra	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.						
		2				

#### **FREE ELECTIVES**

Free electives are the balance of credits required f	or		
graduation (120) that are not used to satisfy compe	etenci	es,	
knowledge areas, major requirements, electives, o	r any		
related area required by the department.			
	CR	Satisfie	d/Term

### WORLDS OF KNOWLEDGE (RG 6825)

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

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

			3		
Science 8	k Nature				
Subject	Number	Course Title	CR	Satisf	ied/Term
Chem	0111	General Chemistry 1	3		

0221 Analytic Geom & Calc 1

Select one course from the following courses

Human Anatomy

Biology of Plants

Invertebrate Biology

Human Physiology

Vertebrate Biology

Special Topics - Org

Ornithology

Global History & Culture

Math

ollow-Up C	ourses				
Subject	Number	Course Title	CR	Satisfie	d/Term
Chem	0112	General Chemistry 2	3		
Phys			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	Satisfie	d/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		
Requirem	ent Satisfied	16		

Required C	Required Chemistry (RQ 3742)		Satisfie	d/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 N	Math (RQ 3743)	CR	Satisfie	d/Term
Math 0221	Analytic Geom & Calc 1	4		
Requireme	ent Satisfied	4		

# (RQ 3745)

Required U	pper Level Chem Options	CR	Satisfie	d/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		
Requiremen	nt Satisfied	8 or 9	9	

Required Physics options (RQ 3746)	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			

Biology Electives	(RQ	3903
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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)

(RQ 3903-20)

(1100	10)				
Cellular ar	nd Molecular Elective	CR	Satisfie	d/Term	
Select one	Select one course from the following courses				
Biol 0352	Genetics	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 3903-30)

Ecology a	nd Evolution Elective	CR	Satisfied/	Term
Select one	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 3903-50)

dditional Biology Electives	CR	Satisfied/Term	
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## (RQ 3903-35)

(RQ 3903-20)
Organismal Elective

Biol 1122

Biol 1130

Biol 1144

Biol 1224

3iol 1269

Biol 1274

Biol 1280

Capstone	Experience	CR	Satisfie	d/Term
Minimum 1	1 credit, Included as Biol Elective C	redit		
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		

CR Satisfied/Term

3

3

3

3

17

### Requirement Satisfied

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

Major GPA (RG 3747) Residency (RG 3748)

#### IMPORTANT INFORMATION:

Updated 4/11/23

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.

	Upper Level Interdiscip. Science Elective (RQ 3740)			
Select one course from the following courses				
Prereqs must	CR	isfied/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 0142/0	143 Intro Physics 2 & lab	5		
Phys 0152/0	153 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		