Biological Sciences - BS

THE UNIVERSITY OF RHODE ISLAND

Student:	
Student ID:	
Advisor:	

EL_BSC_BOS

120 Earned Credits Total

ABOUT THE BS in BIOLOGICAL SCIENCES:

The B.S. in Biological Sciences provides extensive training in fundamental biological principles while allowing students to specialize in subdisciplines such as ecology, evolution, genetics, physiology, molecular, cell, or developmental biology. We emphasize exposure to ongoing research that seeks to expand the frontiers of science; students are encouraged to work with faculty and researchers to develop and conduct original research in their chosen field. Graduates work in a variety of fields, enroll in medical, dental, or veterinary schools, or pursue graduate work in the biological sciences.

web.uri.edu/bio/bachelor-of-science-in-biological-sciences/

			•	
			BIOLOGICAL	SCIENCES (35 Credits)
BIOLOGY COURS	SE Requirem	ent: (8 cre	dits)	BIOLOGY ELECTIVE
Must earn a C or be	etter in BIO 101,	, 102, 103, 1	04	credits for the maj
Course	Semester	Credits	Grade	Any BIO course in the I
*BIO 101 or 101H		3		on this sheet not used
*BIO 102		3		Core Requirement, plu
*BIO 103		1		491, 492**, and 498**
*BIO 104		1		be used).
				Course

BIOLOGY CORE I	Requirement	:: (12-16 cı	redits)	
Pick a total of TW	O (2) courses	from the E	cology,	
Evolution, & Gene	etics CORE are	ea .		
Ecology, Evolution	n, & Genetics:	BIO 262, 27	72, 352	
Course	Semester	Credits	Grade	
Pick a total of TW	O (2) courses	each cour	se must be in a	
different category	(FOUR (4) cat	egories are	e below).	
Cell & Developme	ent: BIO 302, 3	11, 341		
Course	Semester	Credits	Grade	
Molecular Biology	: BIO 437	1		
Course	Semester	Credits	Grade	
Organismal Diver	-	310, 321, 32	3, 350, 354,	
365, 366, 385, 404,				
Course	Semester	Credits	Grade	
Di dala sesse	04.000/004.00	2/222 2:5		
Physiology: BIO 201, 220/221, 222/223, 346				
Course	Semester	Credits	Grade	

BIOLOGY ELECTIVE Requirement: Balance to reach 35 credits for the major

Any BIO course in the latest catalog, including any BIO course listed on this sheet not used to satisfy BIO Course Requirement or BIO Core Requirement, plus BIO 345, 353, 360, 396, 455, 457, 480, 485, 491, 492**, and 498***. Excludes BIO 181G (that course may not be used).

Course	Semester	Credits	Grade

^{*}Course approved for general education

Minimum 2.0 cumulative GPA required in all BIO and CMB courses for graduation.

Minimum overall 2.0 cumulative GPA required for graduation.

Major Credits:	/35
Total Credits:	/120

Plant, Animal, and Lab Course requirements		
The courses selected satisfy the CORE and BIO Elective requirements, and must include one course from the Animal list, on Plant list, and 3 courses that include a laboratory, or stand-alone laboratory courses (BIO 103, 104, 491 and 492 excluded)		m the
Animal Course List (3-4 credits): BIO 201, 220, 221, 222, 223, 286, 300, 301, 302, 350, 354, 355, 366, 385, 388, 404,	Course	Grade
412, 417, 419, 422, 425G, 444, 467		
Plant Course List (3-4 credits): BIO 308, 310, 311, 321, 323, 332, 346, 365, 416		
Laboratory Courses (3): Labs that fulfill the BIO Core or the Plant or Animal biology requirements may also be used to	1	
fulfill the lab requirement though the credit is counted only once	2	
	3	

^{**} Up to 3 credits of 491 or 492 from one of the following programs may be used for a BIO elective: AFS, AVS, BIO, CMB, NRS, or PLS. These may not be used to fulfill the lab requirement. Students may submit a petition for research credit in other programs. Additional research credits count as free electives.

^{***}Only one credit of BIO 498 is allowed

Introduction and Supporting Sciences 37-40 Credits

CHEMISTRY Requirement: (15-16 credits)				
Course	Semester	Credits	Grade	
*CHM 101		3		
CHM 102		1		
OR				
CHM 191		5		
Course	Semester	Credits	Grade	
CHM 112		3		
CHM 114		1		
OR				
CHM 192		5		
		·		
Course	Semester	Credits	Grade	
CHM 226		2		
CHM 227		3		
CHM 228		3		
OR				
CHM 124		3		
CHM 126		1		
CMB 311		3		

MATH Requirement: (6-8 credits)				
Course	Semester	Credits	Grade	
*MTH 131		3		
OR				
*MTH 141		4		
Course	Semester	Credits	Grade	
MTH 132		3		
OR				
*MTH 142		4		
OR				
STA 308		4		

CELL & MOLECULAR BIOLOGY Requirement : (4 credits)				
Course	Semester Credits Grade			
CMB 211		4		
OR				
CMB 201		3		
CMB 202		1		

PHYSICS Requirement: (8 credits)				
Course	Semester	Credits	Grade	
*PHY 111		3		
*PHY 185		1		
OR				
*PHY 203		3		
*PHY 273		1		
	•			
Course	Semester	Credits	Grade	
*PHY 112		3		
*PHY 186		1		
OR	·	,		
*PHY 204		3		
*PHY 274		1		

WRITING Requirement: (3 credits)				
Any WRT course, 104 or above				
Course	ourse Semester Credits Grade			
WRT				

Introduction Requirement: (1 credit)			
Course	Semester	Credits	Grade
URI 101		1	

Advising Notes:			

THE UNIVERSITY OF RHODE ISLAND

Student:

Biological Sciences - B.S.

120 Earned Credits Total						Student	ID:			
General Education Guidelines:						Advis	or:			
General education than one outcome than twelve credit minor when approache requirement f Minimum 30 credit	e, but cannot be do s can have the sar opriate. https://wo for transfer to CELS	ouble coun me course o eb.uri.edu/ S from Univ	ted towar code. Gen general-e versity Co	ds the eral ed ducation	40 credit total ucation course on/ or Academic Su	l. At least es may als occess is:	one course mus so be used to me	t be a Grand Cl eet requiremer	hallenge (C	G). No more
	Education Outo]	70 101 01 101		neral Education			
30113131		Course	Grade	ł			st 40 credits, no			
KNOWLEDGE		Course	Grade			710100	with the same		· cuits	
A1. STEM		*BIO101			Course	Cr.	Grade	Course	Cr.	Grade
A2. Social & Behav	ioral Sciences	BIOIOI			*BIO101	3	Grade	Course	<u> </u>	Grade
A3. Humanities					*BIO103	1				+
A4. Arts & Design					*BIO102	3			1	†
COMPETENCIES					*BIO104	1				†
B1. Write effective	lv				*CHM	3				
B2. Communicate	•					_				
B3. Mathematical, st										
computational strate										
B4. Information lit										
RESPONSIBILITIES	•	•								
C1. Civic knowledg	e &									
responsibilities								Total Gen		
C2. Global respons	ibilities							Ed Credits		
C3. Diversity & Incl	lusion							•		
INTEGRATE & APP		•				165 14067				
D1. Ability to synth	nesize						COURSES MEET			
GRAND CHALLENG		•					HT BE COMPLET			
G. At least one co	urse of your 40						OU MUST STILL	COMPLETE 40	CREDITS O	F GENERAL
credits is an appro	· · · · · · · · · · · · · · · · · · ·				EDUCATION.					
*course fulfills gen Free Electives: (graduation.					major and ge	n. eds. to	reach the 120 to	tal earned crec	lits require	ed for
Course	Semester	Credits	Grade		Cour	se	Sem	ester	Credits	Grade
	3223(2)	- C. Cuito	3.000		- 5541		1		3. 54.65	3.440
				1						+
				1						+
				1						†
				1						†
Advising Notes:		1		•	•					

B.S. Biological Sciences Sample 4 Year plan - Effective Fall 2025 College of the Environment and Life Sciences

15-17

Freshman Year Fall Semester

Course Code	Description	Cr
BIO 101,103	Principles of Biology, Lab	4
CHM 101,102 or Gen Ed	General Chemistry, Lab or Genereal Education Course	3-4
MTH 103 or MTH 131	Precalculus or Applied Calculus	3
	General Education Course	3-4

Freshman Year Spring Semester

Course Code	Description	Cr
BIO 102,104	Principles of Biology 2, Lab	4
CHM 112,114 or CHM 101,102	General Chemistry 2, Lab or General Chemistry 1, Lab	4
MTH 131, 132 or STA 308	Applied Calculus, Applied Calculus 2, or Introduction to Statistics	3-4
	General Education Course	3-4
		15-17

Year 1 Milestones: Complete BIO 101, 103, 102, 104, CHM 101, 102, MTH 131

Sophomore Year Fall Semester

Planning for Academic Success

URI 101

Course Code	Description	
	BIO Core Course	3-4
CHM 124,126 or 227 or CHM112,114	Introduction to Organic Chemistry, Lab, or General Chemistry lecture 2, Lab	4
Elective or MTH 132 or STA 308	Elective, or Applied Calculus 2, or Introduction to Statistics	3-4
	General Education Course	3-4
		15-17

Sophomore Year Spring Semester

Course Code	Description	Cr
	BIO Core Course	4
CHM 124,126 or 227 or 228 or CMB 311	Introduction to Organic Chemistry, Lab or Organic Chemistry Lecture 2, or Introductory Biochemistry	3-5
CMB 201 or CMB 211	Introuctory Microbiology OR Introductory Medical Microbiology	4
	General Education Course	3-4
	-	15-17

Year 2 Milestones: Complete **CMB** 201 or 211 and **CHM** 112, 114 begin **organic chemistry** sequence. Meet with faculty advisor to plan year 3 courses.

Junior Year Fall Semester

Course Code	Description	Cr
BIO Core or BIO 352	BIO Core or General Genetics	3-4
PHY 111,185	General Physics, Lab	4
CHM 226	Organic Chemistry Lecture	3-5
	General Education Course	3-4
	·	15-17

Junior Year Spring Semester

Course Code	Description	Cr
BIO Core or BIO 352	re or BIO BIO Core or General Genetics	
	BIO Elective	3-4
PHY 112,186	General Physics, Lab	4
Gen Ed or CMB 311	General Education or Introductory Biochemistry	3-4
		15-17

Year 3 Milestones: Complete BIO 352 and BIO core courses, PHY 111, 185, 112, 186, finish organic chemistry sequence. Meet with faculty advisor to plan year 4 courses, and discuss internship and/or research opportunities.

Senior Year Fall Semester

Jemes Tear Tun Jemester				
Course Code	Description	Cr		
	BIO Elective	3-4		
	BIO Elective	3-4		
	General Education Course	3-4		
	Elective	3-4		
		15-17		

Senior Year Spring Semester

Course Code	Description	Cr
	BIO Elective	3-4
	BIO Elective or Elective	3-4
	General Education Course or Elective	3-4
	Elective	3-4
_		15.17

Year 4 Milestones: Finish Biology electives and general education.

Minimum of 120 credits to graduate.

Minimum 2.0 cumulative GPA required in the 36 credits in Biology courses for graduation.

Minimum overrall 2.0 cumulative GPA required for graduation.