Biological Sciences - BS

THE UNIVERSITY OF RHODE ISLAND

Student: _____

EL_BSC_BOS

Student ID: _____

120 Earned Credits Total

Advisor: _____

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 sub-disciplines 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 COURSE Requirement: (12 credits)

Must earn a C or better in BIO 101, 102, 103, 104

Course	Semester	Credits	Grade
*BIO 101 or 101H		3	
*BIO 102		3	
*BIO 103		1	
*BIO 104		1	
BIO 352		4	

BIOLOGY CORE Requirement: (9-12 credits)

Pick **one** course from **three** of the following **CORE** areas:

Cell & Development: BIO 302, 311, 341

Course	Semester	Credits	Grade

Ecology & Evolution: BIO 262, 272

Course	Semester	Credits	Grade

Molecular Biology: BIO 437

Course	Semester	Credits	Grade

Organismal Diversity: BIO 308, 310, 321, 323, 354, 365, 366, 385, 404, 412, 417

Course	Semester	Credits	Grade

Physiology: BIO 201, 220/221, 222/223, 346

Course	Semester	Credits	Grade

BIOLOGY ELECTIVE Requirement: Balance to reach 35 credits of Bio after completing 21-24 credits of BIO COURSES and BIO CORE

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

Course	Semester	Credits	Grade

***Course approved for general education**

****** Up to 3 credits of 491, 492, 493, 494, or 495 from one of the following programs may be used for a BIO elective: AFS, AVS, BIO, CMB, NRS, PLS, or OCG. 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.**

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, one course from the Plant list, and 3 courses that include a laboratory, or stand-alone laboratory courses ***(BIO 103, 104, 491 and 492 excluded***)

	Course	Grade
Animal Course List (3-4 credits): BIO 201, 220, 222, 223, 286, 300, 301, 302, 350, 354, 355, 366, 385, 388, 404, 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 fulfill the lab requirement though the credit is counted only once	1	
	2	
	3	

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 201 or 211		4	

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)			
Course	**Semester**	**Credits**	**Grade**
*WRT 104		3	
OR			
*WRT 106		3	

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

Advising Notes: _____

THE UNIVERSITY OF RHODE ISLAND

Biological Sciences - B.S.

120 Earned Credits Total

Student: _____

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General Education Guidelines:

General education is 40 credits. Each of the twelve outcomes (A1-D1) must be met by at least 3 credits. A single course may meet more than one outcome, but cannot be double counted towards the 40 credit total. At least one course must be a Grand Challenge (G). No more than twelve credits can have the same course code. General education courses may also be used to meet requirements of the major or minor when appropriate. https://web.uri.edu/general-education/

The requirement for transfer to CELS from University College for Academic Success is:

Minimum 30 credits and a grade of C or better in the following: BIO 101 or 101H, 103, 102, and 104; and min. of C- in CHM 101.

General Education Outcome Audit

	Course	Grade
KNOWLEDGE		
A1. STEM	*BIO101	
A2. Social & Behavioral Sciences		
A3. Humanities		
A4. Arts & Design		
COMPETENCIES		
B1. Write effectively		
B2. Communicate effectively		
B3. Mathematical, statistical, or computational strategies		
B4. Information literacy		
RESPONSIBILITIES		
C1. Civic knowledge & responsibilities		
C2. Global responsibilities		
C3. Diversity & Inclusion		
INTEGRATE & APPLY		
D1. Ability to synthesize		
GRAND CHALLENGE		
G. At least one course of your 40 credits is an approved "G" course		

*course fulfills general education and a major requirement

General Education Credit Count

At least 40 credits, no more than 12 credits with the same course code.

Course	Cr.	Grade		Course	Cr.	Grade
*BIO101	3					
*BIO103	1					
*BIO102	3					
*BIO104	1					
*CHM____	3					
				Total Gen Ed Credits		

NOTE: BECAUSE MOST COURSES MEET MORE THAN ONE OUTCOME, YOUR OUTCOME AUDIT MIGHT BE COMPLETED BEFORE YOU REACH YOUR 40 CREDITS. HOWEVER, YOU MUST STILL COMPLETE 40 CREDITS OF GENERAL EDUCATION.

Free Electives: Courses taken beyond the requirements of the major and gen. eds. to reach the **120 total earned credits** required for graduation.

Course	Semester	Credits	Grade	Course	Semester	Credits	Grade

Advising Notes: _____

B.S. Biological Sciences
Sample 4 Year plan - Effective Fall 2019
College of the Environment and Life Sciences

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 General Education Course	3-4
MTH 103 or MTH 131	Precalculus or Applied Calculus	3
	General Education Course	3-4
URI 101	Planning for Academic Success	1
		15-17

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

Course Code	Description	Cr
	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	Introductory 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	BIO Core or General Genetics	3-4
	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

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 overall 2.0 cumulative GPA required for graduation.