The University of Rhode Island Biological Sciences

Pre-Health Pathway Curriculum Sheet

See sample four-year plan page 4

Courses highlighted in Yellow may be used to satisfy BIO SCI major requirements and Pre-Health.

BIOLOGICAL SCIENCES

MAJOR CONCENTRATION
(40 credits total)

Introductory Courses (8 credits)

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

Course Name	Course Code	Semester	Credits	Grade
Intro. BIO I Lec.	*BIO 101	1st Year Fall	3	
Intro. BIO II Lec.	*BIO 102	1st Year Spr	3	
Intro. BIO I Lab	*BIO 103	1st Year Fall	1	
Intro. BIO II Lab	*BIO 104	1st Year Spr	1	

Foundational Courses (12 credits)

Select three (3) of five (5) courses

Found. Area	Course Code	Semester	Credits	Grade
Microbiology	*CMB 211	2nd Year Spr	4	
Physiology	BIO 201 **or** BIO 220/221	2nd Year Fall	4	
Cell/Molecular	BIO 232		4	
Ecology	BIO 262		4	
Evolution	BIO 272	2nd Year Fall	4	

Advanced Courses (At least 15 credits)

300/400-Level BIO courses**

Course Name	Course Code	Semester	Credits	Grade
Genetics	BIO 352	3rd Year Fall	4	
Cell Biology	BIO 341	3rd Year Spr	3	
Intro Endocrinology	BIO 372	3rd Year Spr	3	
Intro Neurobiology	BIO 502	4th Year Fall	3	
Plant Diversity	BIO 321	4th Year Spr	4	
	BIO _____			

Elective Courses

Any BIO course to reach 40 credits**

Course Name	Course Code	Semester	Credits	Grade
Human Anat & Phys II	BIO 222/223	2nd Year Spr	4	
	BIO _____			
	BIO _____			

Major Credits: 41/40

ADDITIONAL BIO REQUIREMENTS

Fulfill the following course requirements. A single course may meet more than one requirement but cannot be double counted towards the 40 required credits for the major

Animal Course	Select **one** course: BIO 201, 220, 286, 300, 301, 302, 350, 354, 355, 366, 385, 388, 412, 417, 419, 422, 425G, 444, 467	**Course** BIO 220
Plant Course	Select **one** course: BIO 308, 311, 321, 323, 332, 346, 365, 416	**Course** BIO 321
Lab Courses	Select **four** courses: BIO 201, 221, 223, 301, 302, 310, 311, 321, 323, 331, 345, 348, 350, 353, 354, 355, 360, 365, 366, 404, 412, 416, 417, 469, 475, 485, *CMB 211	

Lab One	Lab Two	Lab Three	Lab Four
BIO 221	BIO 223	BIO 321	CMB 211

***Course approved for General Education**

****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

Excludes BIO 181G

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

Minimum overall 2.0 cumulative GPA required for graduation.

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Introduction and Supporting Sciences 35-36 Credits

CHEMISTRY Requirement: (16-17 credits)

Introductory Chemistry (8 credits)

Course Name	Course Code	Semester	Credits	Grade
General Chemistry Lecture I	*CHM 101	1st Year Fall	3	
Laboratory General Chemistry 101	CHM 102	1st Year Fall	1	
General Chemistry Lecture II	CHM 112	1st Year Spr	3	
Laboratory for Chemistry 112	CHM 114	1st Year Spr	1	

Organic Chemistry (7-8 credits)

Course Name	Course Code	Semester	Credits	Grade
Organic Chemistry Laboratory	CHM 226	2nd Year Spr	2	
Organic Chemistry Lecture I	CHM 227	2nd Year Fall	3	
Organic Chemistry Lecture II	CHM 228	2nd Year Spr	3	
OR				
Intro. To Organic Chemistry	CHM 124		3	
Laboratory for Chemistry 124	CHM 126		1	
Introductory Biochemistry	CMB 311		3	

MATH Requirement: (7 credits)

Course Name	Course Code	Semester	Credits	Grade
Applied Calculus I	*MTH 131	1st Year Fall	3	
Introductory Statistics	STA 308	3rd Year Fall	4	

PHYSICS Requirement: (8 credits)

Course Name	Course Code	Semester	Credits	Grade
General Physics I	*PHY 111	2nd Year Fall	3	
Labratory for General Physics I	*PHY 185	2nd Year Fall	1	
General Physics II	*PHY 112	3rd Year Fall	3	
Labratory for General Physics II	*PHY 186	3rd Year Fall	1	

WRITING Requirement: (3 credits)

Any WRT course, 104 or above

Course Name	Course Code	Semester	Credits	Grade
Writing to Inform and Explain	WRT 104	1st Year Spr		

Introduction Requirement: (1 credit)

Course Name	Course Code	Semester	Credits	Grade
Planning for Academic Success	URI 101	1st Year Fall	1	

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Red text delineates additional Pre-Health recommendations that may also satisfy General Education requirements.

LIST COURSE AS EACH OUTCOME IS MET:

General Education Outcome Audit

	Course	Grade
KNOWLEDGE		
A1. STEM	*BIO101	
A2. Social & Behavioral Sciences	PSY 113	
A3. Humanities	ENG 110	
A4. Arts & Design		
COMPETENCIES		
B1. Write effectively	WRT 104	
B2. Communicate effectively		
B3. Mathematical, statistical, or computational strategies	MTH 131	
B4. Information literacy	WRT 104	
RESPONSIBILITIES		
C1. Civic knowledge & responsibilities		
C2. Global responsibilities		
C3. Diversity & Inclusion	SOC 100	
INTEGRATE & APPLY		
D1. Ability to synthesize	CMB 211	
GRAND CHALLENGE		
G. At least one course of your 40 credits is an approved "G" course		

LIST COURSES THAT MEET GENERAL EDUCATION:

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				
MTH 131	3				
WRT 104	3				
CMB 211	4				
ENG 110	4				
NUT 207	3				
PSY 113	3				
SOC 100	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.

*course fulfills general education and a major requirement

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
CMB 311	3rd Year Fall	3					

B.S. Biological Sciences

Pre-Health 4 Year Plan - Effective Fall 2026

College of the Environment & Life Sciences

Courses highlighted in Yellow may be used to satisfy BIO SCI major requirements and Pre-Health.

Red text delineates additional Pre-Health recommendations that may also satisfy General Education requirements.

Freshman Year *Fall* Semester

Course Code	Description	Cr
BIO 101/103	Principles of Biology I w/ Lab	4
CHM 101/102	General Chemistry I w/lab	4
MTH 131	Applied Calculus	3
SOC 100, 204 or 224	Intro Sociology, Social Psychology or Health, Illness, and Medical Care	3
URI 101	Planning for Academic Success	1
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Freshman Year *Spring* Semester

Course Code	Description	Cr
BIO 102/104	Principles of Biology II w/ Lab	4
CHM 112/114	Gen. Chem II w/lab	4
WRT 104 or 106	Writing to Inform and Explain or Intro to Research Writing	3
PSY 113	General Psychology	3
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Year 1 Pre-Health Milestones: Aim for a GPA ≥ 3.6
Attend a Pre-Health 101 info session in the Fall semester
Investigate research opportunities, direct patient care/clinical experience
Join 1-2 on campus clubs or organizations that interest you

Sophomore Year *Fall* Semester

Course Code	Description	Cr
BIO 220/221	Human Anatomy & Physiology I	4
CHM 227	Organic Chemistry I	3
PHY 111/185	General Physics I w/lab	4
BIO 272	Evolution	4
		15

Sophomore Year *Spring* Semester

Course Code	Description	Cr
CMB 211	Microbiology	4
BIO 222/223	Human Anatomy & Physiology II	4
CHM 226/228	Organic Chemistry II w/Lab	5
NUT 207	General Nutrition	3
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Year 2 Pre-Health Milestones: Aim for a GPA ≥ 3.6
Consider earning leadership experience through on campus clubs or organizations
Get involved in service and shadowing (suggested over J-Term or summer)
Start research and direct patient care/clinical experience

Junior Year *Fall* Semester

Course Code	Description	Cr
BIO 352	Genetics	4
STA 308	Introductory Statistics	4
PHY 112/186	General Physics II w/lab	4
CMB 311	Introductory Biochemistry	3
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Junior Year *Spring* Semester

Course Code	Description	Cr
BIO 341	Principles of Cell Biology	3
BIO 372	Introductory Endocrinology	3
	General Education course	3
	General Education course	4
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Year 3 Pre-Health Milestones: Aim for a GPA ≥ 3.6
Study Abroad interest could include: Spanish Immersion and Global Health
If applying in junior year, complete pre-health requirements by first semester
Take MCAT or other pre-health standardized exam spring semester
Gen. Ed. Courses can include: PHL 212: Big Ethics; HIS 117: History or Medicine; HIS119G: Vaccines and Society

Senior Year *Fall* Semester

Course Code	Description	Cr
BIO 502	Introduction to Neurobiology	4
	General Education course	4
	General Education course	4
	General Education course	4
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Senior Year *Spring* Semester

Course Code	Description	Cr
BIO 321	Plant Diversity	4
ENG 110	Introduction to Literature	4
	General Education Course **or** Elective	4
	Elective	4
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Year 4 Pre-Health Milestones: Aim for a GPA ≥ 3.6
Electives can include: KIN 222 Medical Terminology; CMB 333: Immunology and Serology; CMB 334: Virology;
BPS 321: Introduction to the Principles of Pharmacology; NEU 310: Developmental Neurobiology