

## **School of Theoretical and Applied Science**

## **Biology**

Recommended Graduation Plan (Fall 2024)

The recommended graduation plan is designed to provide a blueprint for students to complete their degrees on time. Students must meet with their Academic Advisor to develop a more individualized plan to complete their degree.

**NOTE:** This recommended Graduation Plan is applicable to students admitted into the major during the 2024-2025 academic year.

CRWT Placement	
CRWT 101 to CRWT 102	
CRWT 101S to CRWT 102S	

Math Placement
MATH 021/022 to MATH 024 to MATH 110-121

**NOTE**: CRWT and MATH courses are determined by placement testing and should be taken following the sequence above.

First Year						
Fall Semester	HRS	<b>√</b>	Spring Semester	HRS	<b>√</b>	
BIOL 111 & BIOL 111L- Fundamentals of Biology I Lecture & Lab	4+1		BIOL 113 & BIOL 113L* - Fundamentals of Biology II Lecture & Lab	4+1		
CHEM 116 & CHEM 116L - General Chemistry I Lecture & Lab	4+1		CHEM 117 & CHEM 117L*- General Chemistry II Lecture & Lab	4+1		
Gen Ed: CRWT 102 - Critical Reading & Writing II	4		Gen Ed: Quantitative Reasoning - Strongly Recommended: MATH 110 Precalculus^, MATH 121 Calculus I^, or CMPS 147 Computer Science I	4		
Gen Ed: INTD 101 - First Year Seminar	4		General Education Requirement	4		
			TAS Pathways Module 1: (PATH TS1) Career Assessment/Advising	Degree Rqmt.		
Total:	18		Total:	18		

Second Year						
Fall Semester	HRS	<b>√</b>	Spring Semester	HRS	<b>✓</b>	
BIOL 221* - General Ecology	4		Bio Elective 1	4		
CHEM 211 & CHEM 211L* Organic Chemistry I Lecture & Lab OR CHEM 206 & CHEM 206L* - Essentials of Organic Chemistry Lecture & Lab MATH 122* - Calculus II or BIOL 354/ENSC 345* - Research Design & Statistics or PSYC	4+1		CHEM 213 & CHEM 213L* Organic Chemistry II Lecture & Lab OR Gen Ed: AIID 201* - Studies in the Arts & Humanities (if CHEM 206 & 206L are taken in Fall) BIOL 332 & BIOL 332L* - Genetics Lecture & Lab <b>WI</b>	4+1 or 4 4+1.5		
242* - Statistics General Education Requirement	4		General Education Requirement	4		
TAS Pathways Module 2: (PATH TS2) Resume/CV Writing	Degree Rqmt.		TAS Pathways Module 3: (PATH TS3) Interview Preparation	Degree Rqmt.		
Total:	17		Total:	14.5-17.5		

Third Year						
Fall Semester	HRS	<b>✓</b>	Spring Semester	HRS	<b>&gt;</b>	
BIOL 356* - Evolution WI	4		Bio Elective 3 #	4-5.5		
PHYS 111-Fundamentals of Physics I & PHYS 118L-Introductory Physics I Lab	4+1		PHYS 113* - Fundamentals of Physics II & PHYS 119L* - Introductory Physics II Lab	4+1		
Bio Elective 2 #	4-5.5		General Education Requirement	4		
			General Education Requirement	4		
Total:	13		Total:	17		

Fourth Year							
Fall Semester	HRS	<b>✓</b>	Spring Semester	HRS	<b>✓</b>		
Bio Elective 4 #	4-5.5		Free Elective (minor, certificate, or second major requirement)	4			
BIOL 407 & BIOL 407L* - Cell and Molecular Biology Lecture & Lab <b>WI</b>	4+1.5		Free Elective (minor, certificate, or second major requirement)	4			
General Education Requirement	4		Free Elective (minor, certificate, or second major requirement)	4			
			Free Elective (minor, certificate, or second major requirement)	4			
Total:	13.5		Total:	16			

**Total Credits Required:** 128 credits

**GPA Required:** 2.0

General Education courses can be done in any order with the exception of INTD 101, CRWT and MATH. Those three general education courses will need to be done first. First Year Seminar is taken in the first semester. Failure to complete CRWT and MATH will result in a hold when the student hits 64 credits. The following general education courses can be done in any order. For more info on these courses, please visit the General Education program requirements website in the College Catalog:

- Social Science Inquiry (SOSC 110) [+W]
- Scientific Reasoning
- Historical Perspectives [+W]
- Studies in the Arts & Humanities (*CRWT 102 is a prerequisite to this course*) [+W]
- Global Awareness [+W]
- Distribution Category (Systems, Sustainability, & Society **OR** Culture & Creativity **OR** Values and Ethics) (**Must be outside of TAS**)
- Distribution Category

+W: Students transferring in with 48 or more credits are waived from these general education requirements.

\* This course has a pre-requisite. Please refer to the course catalog for information about pre-requisites.

# Biology electives with Lab or Field experiences are up to 5.5 credits. One of the four required Biology electives must include Lab or Field experience. Only one can be 200-level. BIOL 214/214L and BIOL 216/216L count as one elective.

<sup>A</sup> This course requires a CLM test for placement purposes.

+ Depending on the Biology electives selected, students may need to take a 5<sup>th</sup> Elective to reach 128 credits.

WI: Writing Intensive-3 required in the major