## RAMAPO COLLEGE

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

## **Biology**

Recommended Four-Year Plan (Fall 2018)

The recommended four-year plan is designed to provide a blueprint for students to complete their degrees within four years. Students must meet with their Major Advisor to develop a more individualized plan to complete their degree. This plan assumes that no developmental courses are required. If developmental courses are needed, students may have additional requirements to fulfill which are not listed in the plan and may extend degree completion.

**NOTE:** This recommended Four-Year Plan is applicable to students admitted into the major during the 2017-2018 academic year.

First Year							
Fall Semester	HRS	✓	Spring Semester	HRS	1		
BIOL 111 & BIOL 111L-Fundamentals of	4+1		BIOL 113 & BIOL 113L-Fundamentals of	4			
Biology I Lecture & Lab			Biology II Lecture & Lab				
CHEM 116 & CHEM 116L-General Chemistry	4+1		CHEM 117 & CHEM 117L*-General	4+1			
I Lecture & Lab			Chemistry II Lecture & Lab				
Gen Ed: CRWT 102 - Critical Reading &	4		MATH 121-Calculus I* A or CMPS 147-	4			
Writing II			Computer Science I				
Gen Ed: INTD 101-First Year Seminar	4		Gen Ed: Historical Perspectives	4			
Total:	18		Total:	17			

Second Year							
Fall Semester	HRS	<b>√</b>	Spring Semester	HRS	<b>\</b>		
BIOL 221-General Ecology*	4		Bio Elective 1	4			
CHEM 206 & CHEM 206L-Essentials Organic Chemistry Lecture & Lab*	4+1		BIOL 332 & BIOL 332L-Genetics Lecture & Lab* WI	4+1.5			
MATH 121-Calculus* A or MATH 122-Calculus II* or ENSC 345-Research Design & Statistics* or PSYC 242-Statistics or CMPS 147-Computer Science I	4		Gen Ed: Studies in the Arts & Humanities	4			
Gen Ed: Social Science Inquiry	4		Gen Ed: Distribution	4			
Total:	17		Total:	17.5			

Third Year							
Fall Semester	HRS	✓	Spring Semester	HRS	1		
BIOL 356-Evolution* WI	4		PHYS 113-Fundamentals of Physics II* & PHYS 119L-Introductory Physics II Lab*	4+1			
PHYS 111-Fundamentals of Physics I & PHYS 118L-Introductory Physics I Lab	4+1		Bio Elective 3 #	4			
Bio Elective 2 #	4		Gen Ed: Global Awareness	4			
			Gen Ed: Distribution	4			
Total:	13		Total:	17			

Fourth Year							
Fall Semester	HRS	✓	Spring Semester	HRS	<b>✓</b>		
Bio Elective 4 (Lab/field experience required) #	4		Elective 2	4			
BIOL 407 & BIOL 407L-Cell and Molecular Biology Lecture & Lab* <b>WI</b>	4+1.5		Elective 3	4			
Elective 1	4		Elective 4	4			
			Elective 5 +	3			

Total:	13.5	Total:	15	

The General Education courses can be taken in any sequence, not necessarily what is suggested here.

Total Credits Required: 128 credits

**GPA Required:** 2.0

\* 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 to 5.5 credits.

<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> General Elective to reach 128 credits.

WI: Writing Intensive-3 required in the major