

# BIOLOGY (B.S.) - BLOOMFIELD COLLEGE

Unless otherwise noted, 120 credits of coursework is required for a baccalaureate degree with a minimum 2.0 overall GPA, and a minimum 2.0 major GPA.

## Degree Requirements Overview

Code	Title	Credits
New Student Seminar		3
SEEDS General Education Requirements		30-33
Major Requirements		71-76
Free Electives		16-8
<b>Total Credits</b>		<b>120</b>

## Major Requirements

Code	Title	Credits
<b>Required Courses</b>		
BIO 111B	General Biology: Cell	4
BIO 121	General Biology: Diversity	4
BIO 200	Microbiology	4
BIO 205	Human Anatomy and Physiology I	4
BIO 206	Human Anatomy and Physiology II	4
BIO 213A	Molecular and Cellular Biology	4
BIO 320	Ecology	4
BIO 450A	Bioseminar	4
CHM 111	General Chemistry I	4
CHM 112	General Chemistry II	4
CHM 301	Organic Chemistry I	3-4
CHM 302	Organic Chemistry II	3-4
PHY 105	General Physics I	4
PHY 106	General Physics II	4
MTH 200	Applied Statistics I	4
MTH 221C	Calculus I	4
Select three of the following:		9-12
BIO 208	Advanced Zoology	
BIO 214	Issues in Human Ecology	
BIO 304	Developmental Biology	
BIO 309A	Genetics	
BIO 317	Immunology	
BIO 326	Histology	
BIO 390	Science Internship	
BIO 401	Biochemistry I	
BIO 402	Biochemistry II	
BIO 412	General Mammalian Physiology	
BIO 430	Advanced Topics in Biology	
BIO 460	Bioresearch	
<b>Total Credits</b>		<b>71-76</b>

## New Student Seminar

Code	Title	Credits
FYS 100	First Year Seminar	3
<b>Total Credits</b>		<b>3</b>

## SEEDS General Education Requirements

Click here for a listing of courses that fulfill the SEEDS requirements. (<http://catalog.montclair.edu/programs/seeds-general-education-requirements/>)

Code	Title	Credits
<b>Foundations</b>		
<i>Effective Writing I</i>		
	Complete one Effective Writing I course.	3
<i>Effective Writing II</i>		
	Complete one Effective Writing II course.	3
<i>Interactive Communication</i>		
	Complete one Interactive Communication course.	3
<i>Quantitative Reasoning</i>		
	Complete one Quantitative Reasoning course.	3
<i>Political and Civic Life</i>		
	Complete one Political and Civic Life course.	3
<i>World Languages</i>		
	Complete two sequential classes in one World Language when starting at the Beginner I or Beginner II level. Complete one class when starting at the Intermediate/Advanced Level.	3-6
<b>Exploration</b>		
	Complete one course from four different Exploration categories.	12
<i>Analyzing Cultures and Societies</i>		
<i>Creative Expression</i>		
<i>Ethical Inquiry</i>		
<i>Historical Thinking</i>		
<i>Literary and Artistic Analysis</i>		
<i>Scientific Reasoning</i>		
<b>Total Credits</b>		<b>30-33</b>

## Recommended Roadmap to Degree Completion

This recommended degree plan is provided as an outline for students to follow in order to complete their degree requirements within four years and 120 credits. This plan is a recommendation and MUST be used in consultation with their academic advisor. Important note: Students should be aware this plan assumes no pre-requisite coursework is required. If pre-requisite coursework is needed, students may have additional requirements to fulfill which do not appear on the plan.

<b>First Year</b>			
Fall	Credits	Spring	Credits
FYS 100		3 WRT 109 (Fulfills SEEDS Effective Writing 2)	3
WRT 105A (Fulfills SEEDS Effective Writing 1)	4	MTH 221C (Fulfills SEEDS: Quantitative Reasoning)	4
MTH 161	4	BIO 121	4

BIO 111B (Fulfills SEEDS Exploration 1 -Scientific Reasoning)	4 SEEDS: Interactive Communication	3
	<b>15</b>	<b>14</b>

**Second Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
CHM 111		4 CHM 112	4
BIO 213A		4 BIO 200	4
PHY 105		4 PHY 106	4
SEEDS: Political and Civic Life		3 SEEDS: Exploration 2	3
	<b>15</b>		<b>15</b>

**Third Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
BIO 205		4 BIO 206	4
CHM 301		3 CHM 302	3
BIO Elective BIO 401 or BIO 402		3 MTH 200	4
SEEDS: Exploration 3		3 SEEDS: Exploration 4	3
Free Elective		2 Free Elective (CHM 303, CHM 304, BIO 403, BIO 404 are encouraged)	2
	<b>15</b>		<b>16</b>

**Fourth Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
BIO 320		4 BIO 450A	4
BIO 309A		4 BIO 317	4
SEEDS: World Language 1		3 SEEDS: World Language 2 or Free Elective	3
Free Elective		3 Free Elective	3
Free Elective		2	
	<b>16</b>		<b>14</b>

**Total Credits 120**