

# BIOLOGY (B.S.) (COMBINED B.S./M.B.A. BUSINESS ADMINISTRATION)

A Combined Degree program enables undergraduate students to enroll in graduate courses in their senior year, which can be counted towards the completion of both their Bachelor's and Master's degree requirements.

The ability to take these "swing courses" allows students to earn both their Bachelor's and Master's degrees in a shortened period of time, typically within five years. Undergraduate students interested in this option can find more information regarding program requirements on the University's Combined Programs website (<https://www.montclair.edu/combined-programs/programs-of-study/>).

Certain pre-qualified students may be accepted into the major; others will need to complete the following:

3.00 overall GPA required

Please note: The Biology and Molecular Biology majors have retention policies. By the end of their second semester in the major (i.e. spring), students must maintain a minimum 2.00 GPA and have completed the following courses: BIOL 112 and/or BIOL 113, CHEM 106 and/or CHEM 120, and MATH 111. These criteria do not apply to students entering in the Fall in the <https://www.montclair.edu/university-college/stem-pioneers/STEM-Pioneers-Program>

Successfully complete one semester of a math, biology and chemistry course in the major with a C- or higher

Departmental advising meeting required.

Contact: Dr. Dirk Vanderklein, Science Hall, Room 116, 973-655-5265

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

## Program Requirements

Students in this combined degree program must complete the requirements for:

Biology Major (B.S.) (<http://catalog.montclair.edu/programs/biology-bs/>)

Business Administration (M.B.A.) (<http://catalog.montclair.edu/programs/mba/>)

## Graduate Swing Courses

A combined degree program allows students to complete 6-12 graduate credits ("graduate swing courses") while enrolled as an undergraduate. These courses count for both their bachelor and master's degrees. Graduate swing courses will count toward undergraduate free electives, unless noted otherwise.

The Graduate Swing Courses for this program:

M.B.A. Graduate Swing Courses (<http://catalog.montclair.edu/programs/mba-graduate-swing-courses-combined-programs/>)

## Recommended Roadmap to Degree(s)

This recommended five-year plan is provided as an outline for students to follow in order to complete their degree requirements within five years. This plan is a recommendation and students should only use it in consultation with their academic advisor.

Fifth year courses are taken at the graduate level, after matriculation into the graduate portion of this combined degree program.

## General Biology Track

### First Year

Fall	Credits	Spring	Credits
New Student Seminar		1 SEEDS: Effective Writing II	3
SEEDS: Effective Writing I		3 SEEDS: Interactive Communication	3
SEEDS: Exploration 1		3 SEEDS: Political and Civic Life	3
BIOL 112 (Fulfills SEEDS: Exploration 2 - Scientific Reasoning)		4 BIOL 113	4
MATH 122 (Fulfills SEEDS: Quantitative Reasoning)		4 STAT 230	3
		<b>15</b>	<b>16</b>

### Second Year

Fall	Credits	Spring	Credits
SEEDS: Exploration 3		3 SEEDS: Exploration 4	3
BIOL 230		4 BIOL 213	4
CHEM 120		4 CHEM 121	4
PHYS 193		4 PHYS 194	4
		SEEDS: Exploration 4	3
		<b>15</b>	<b>18</b>

### Third Year

Fall	Credits	Spring	Credits
CHEM 230		3 CHEM 231	3
BIOL 380		4 BIOL 417	3
Major Elective		4 Major Elective	4
Major Elective		3 Major Elective	4
		<b>14</b>	<b>14</b>

### Fourth Year

Fall	Credits	Spring	Credits
SEEDS: World Language 1		3 SEEDS: World Language 2 or Free Elective	3
Major Elective		3 Major Elective	3
Free Elective		4 Free Elective	3
Free Elective		3 MBA Graduate Swing Courses	6
Free Elective			
		<b>13</b>	<b>15</b>

**Total Credits 120**

## Research Track

### First Year

Fall	Credits	Spring	Credits
New Student Seminar		1 SEEDS: Effective Writing II	3
SEEDS: Effective Writing I	3	SEEDS: Interactive Communication	3
SEEDS: Exploration 1	3	SEEDS: Political and Civic Life	3
BIOL 112 (Fulfills SEEDS: Exploration 2 - Scientific Reasoning)	4	BIOL 113	4
MATH 122 (Fulfills SEEDS: Quantitative Reasoning)	4	STAT 230	3
<b>15</b>		<b>16</b>	

### Second Year

Fall	Credits	Spring	Credits
SEEDS: Exploration 3	3	SEEDS: Exploration 4	3
BIOL 230	4	BIOL 213	4
CHEM 120	4	CHEM 121	4
PHYS 193	4	PHYS 194	4
<b>15</b>		<b>15</b>	

### Third Year

Fall	Credits	Spring	Credits
CHEM 230	3	CHEM 231	3
BIOL 380	4	BIOL 417	3
BIOL 418	4	BIOL 418	4
Major Elective	3	Major Elective	4
<b>14</b>		<b>14</b>	

### Fourth Year

Fall	Credits	Spring	Credits
SEEDS: World Language 1	3	SEEDS: World Language 2 or Free Elective	3
Major Elective	3	Major Elective	3
Free Elective	4	Free Elective	3
Free Elective	3	MBA Graduate Swing Courses	6
Free Elective	3		
<b>16</b>		<b>15</b>	

**Total Credits 120**

## Pre-Medical Professions Track

### First Year

Fall	Credits	Spring	Credits
New Student Seminar		1 SEEDS: Effective Writing II	3
SEEDS: Effective Writing I	3	SEEDS: Interactive Communication	3
SEEDS: Exploration 1	3	SEEDS: Political and Civic Life	3

BIOL 112 (Fulfills SEEDS: Exploration 2 - Scientific Reasoning)	4	BIOL 113	4
MATH 122 (Fulfills SEEDS: Quantitative Reasoning)	4	STAT 230	3
<b>15</b>		<b>16</b>	

### Second Year

Fall	Credits	Spring	Credits
SEEDS: Exploration 3	3	BIOL 213	4
BIOL 230	4	CHEM 121	4
CHEM 120	4	PHYS 194	4
PHYS 193	4	SEEDS: Exploration 4	3
<b>15</b>		<b>15</b>	

### Third Year

Fall	Credits	Spring	Credits
CHEM 230	3	CHEM 231	3
BIOL 380	4	BIOL 417	3
BIOL 340	4	BIOL 341	4
PSYC 101	3	BIOL 350	4
<b>14</b>		<b>14</b>	

### Fourth Year

Fall	Credits	Spring	Credits
SEEDS: World Language 1	3	SEEDS: World Language 2 or Free Elective	3
CHEM 370	3	Major Elective	3
Free Elective	4	Free Elective	3
Free Elective	3	MBA Graduate Swing Courses	6
Free Elective	3		
<b>16</b>		<b>15</b>	

**Total Credits 120**

## Graduate Roadmap

### Fourth Year

Summer	Credits
First Half	
MBA Core course	1.5
MBA Core course	1.5
MBA Elective course	1.5
Second Half	
MBA Core course	3
MBA Core course	1.5
MBA Core course	1.5

**10.5**

**Fifth Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
First Half		First Half	
MBA Core course	1.5	MBA Core course	3
MBA Flexible Core course	1.5	MBA Elective course	1.5
MBA Flexible Core course	1.5	Second Half	
MBA Elective course	1.5	MBA Core course	1.5
Second Half		MBA Core course	1.5
MBA Core course	1.5	MBA Core course	1.5
MBA Core course	1.5		
MBA Elective	1.5		
	<b>10.5</b>		<b>9</b>

**Total Credits 30**