

# BIOLOGY: BIOMEDICAL SCIENCES OPTION

## Bachelor of Science (BS)

This is a guide based on the 2024-2025 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

### CURRICULUM CHECKLIST

"Critical Courses" are **italicized and bolded**. Data shows that students who have completed this course in the first two years and have earned the noted grade are most likely to complete this program of study.

#### 50-52 Hour Major – No minor required

- \_\_\_ BI163 Evolution & Ecology (4)
- \_\_\_ BI173 Cell & Organismal Biology (4)
- \_\_\_ **BI283 Genetics (4)**
- \_\_\_ BI389 Career Development in Biology (2)
- \_\_\_ CH184 General Chemistry I Lab (1)
- \_\_\_ CH185 General Chemistry I (3)

#### Choose one math course:

- \_\_\_ MA116 Precalculus A (3)
- \_\_\_ MA137 Precalculus (5)
- \_\_\_ MA139 Applied Calculus (3)
- \_\_\_ MA140 Analytical Geometry & Calculus I (5)

#### Choose one additional math course:

- \_\_\_ MA155 Statistical Reasoning (3)
- \_\_\_ Mxxxx Additional math (for which MA116 is a prerequisite) (3)

#### Experiential Learning Requirement: 2 hours

- \_\_\_ BI551-553 Biology Field Studies (2)
- \_\_\_ BI563-565 Experience in Museum Curation (1-3)
- \_\_\_ BI570 Development of Instructional Materials (1-3)
- \_\_\_ BI582 Internship in Biology (1-3)

#### Biomedical Sciences Option Required Courses:

- \_\_\_ BI310 General Microbiology (4)
- OR
- \_\_\_ ZO310 Zoology (4)
- \_\_\_ ZO331 Animal Physiology (3)

#### Biology Electives: Choose 17 Hours

\_\_\_ Any BI, BO, ZO, BT courses. At least 10 credit hours must be at the 300-599 level.

#### Non-Biology Requirements – 19 hours:

- \_\_\_ CH 186 General Chemistry II (3)
- \_\_\_ CH 187 General Chemistry II Lab (1)
- \_\_\_ **CH341 Foundations of Organic Chemistry (4)**
- \_\_\_ CH342 Organic Chemistry Lab I (1)
- \_\_\_ PH120 Introductory Physics I (5)
- \_\_\_ PH121 Introductory Physics II (5)

**General Education Requirements** – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

#### Professional School Admissions

Students seeking to attend professional schools in the biomedical sciences will be required to take an admissions test as specified below:

- Medical school: Medical College Admission Test (MCAT)
- Dental school: Dental Admission Test (DAT)
- Optometry School: Optometry Admission Test (DAT)

The curriculum for this degree is aligned to prepare students to be competitive applicants to biomedical professional schools and to perform well on the admissions tests. Students are advised to complete a substantial portion of the degree curriculum prior to attempting these admissions tests, typically after the third year of studies. Students should consult with their Biomedical Scholars advisor regarding preparation for these tests. The Biomedical Scholars advisors will advise students on the admissions process and timeline. Students should be aware that admission to these professional programs is very competitive, and their GPA will need to be substantially higher than the minimum required for graduation

### SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
<b>FIRST YEAR</b>	UI100	1	BI173	4
	BI163	4	CH186	3
	CH184/CH185	4	CH187	1
	MA116/137/39/140	3-5	EN100	3
	General Education	3	Additional Math course	3
	<b>Total</b>	<b>15-17</b>	<b>Total</b>	<b>14</b>
Milestone: achieve a target cumulative GPA of 3.2				
<b>SECOND YEAR</b>	<b>BI283</b>	<b>4</b>	BI310 or ZO310	4
	<b>CH341</b>	<b>4</b>	CH343*	3
	CH342	1	CH344*	2
	General Education	3	Biology elective	3
	General Education	3	General Education	3
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>
Milestone: achieve a target cumulative GPA of 3.2				
<b>THIRD YEAR</b>	PH120/020	5	BI389	2
	ZO331	3	PH121/021	5
	Biology elective	3	Biology elective	3
	Experiential Learning Req	2	General Education	3
	Elective	3	General Education	3
	<b>Total</b>	<b>16</b>	<b>Total</b>	<b>16</b>
Milestone: take admission test and apply to professional program				
<b>FOURTH YEAR</b>	Biology electives	4	Biology electives	4
	General Education	3	General Education	3
	General Education	3	Elective	3
	Elective	3	Elective	3
	Elective	3		
	<b>Total</b>	<b>16</b>	<b>Total</b>	<b>13</b>
Milestone: achieve a target cumulative GPA of 3.2				

A "Milestone" signifies a significant stage for a student in the completion of a degree.

**Degree requirements for all students:** a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

A minimum 2.0 GPA in the major and overall are required to graduate with a BS degree.

Revised  
7/29/2024

# 2024-2025 degree map

