

Degree Pathway

A.S. in Biology – Catalog Year 2021-22

The number of credits you take each year will determine when you graduate. To graduate on time, you are strongly encouraged to enroll in at least 30 credits toward your degree during the calendar year, including fall and spring semesters and winter and summer sessions. This Degree Pathway is designed for students who place into **MA-119 and ENGL-101**. Additional Degree Pathways in Biology are available for students who place into other levels of English and mathematics. Please see the degree website or your advisor for more information.

Courses in **Bold Text** are prerequisites for later courses or only offered in the Fall or Spring semester and should be taken where indicated in the sequence.

Fall Semester #1

| Courses | Credits | Prerequisites and Corequisites ¹ |
|---|-----------|--|
| ENGL-101 English Composition I (Required Core 1A - English Composition) | 3 | Prerequisite: Complete developmental requirements in English |
| MA-119 College Algebra | 3 | Prerequisite: Placement or complete developmental requirements in math |
| MA-121 Trigonometry | 1 | Corequisite: MA-119 |
| BI-201 General Biology I (Required Core 1C – Life & Physical Sciences) | 4 | Prerequisite: Complete developmental requirements in English |
| SP-211 Speech Communication ² (Required for Flexible Core 2B – U.S. Experience & Its Diversity) | 3 | None |
| One credit course in PE-400, PE-500, or DAN-100 series | 1 | Check individual courses for prerequisites and corequisites |
| Total credits for the term | 15 | |

Spring Semester #1

| Courses | Credits | Prerequisites and Corequisites ¹ |
|--|--------------|---|
| ENGL-102 English Composition II (Required Core 1A - English Composition) | 3 | Prerequisite: ENGL-101 or placement |
| MA-440 Pre-Calculus Mathematics | 4 | Prerequisites: MA-119 and MA-121 (C or better in both) |
| BI-202 General Biology II (Required for major) | 4 | Prerequisite: BI-201 |
| One course from Flexible Core 2A, 2C, or 2D ² | 3 | Check individual courses for prerequisites and corequisites |
| HE-101 Personal Health and Wellness or HE-102 Health, Behavior and Society | 1-2 | Prerequisite: None |
| Total credits for the term | 15-16 | |

Fall Semester #2

| Courses | Credits | Prerequisites and Corequisites ¹ |
|---|-------------|---|
| MA-441 Analytic Geometry and Calculus I (Required Core 1B - Mathematical & Quantitative Reasoning) | 4 | Prerequisite: MA-440 (C or better) |
| BI-203 Cell Biology (Required for major) | 3 | Prerequisite: BI-201 |
| CH-151 General Chemistry I² (Required for Flexible Core 2E – Scientific Word) | 4.5 | Prerequisite: MA-119 and MA-121 or placement |
| One course from Flexible Core 2A, 2C, or 2D ² | 3 | Check individual courses for prerequisites and corequisites |
| Total credits for the term | 14.5 | |

Spring Semester #2

| Courses | Credits | Prerequisites and Corequisites ¹ |
|---|------------------|---|
| CH-152 General Chemistry II ² (Required for Additional Flexible Core Course) | 4.5 | Prerequisite: CH-151 |
| Major Elective Biology Courses – Select 7-8 credits from the table below ³ | 7-8 | See table below |
| One course from Flexible Core 2A, 2C, or 2D ² | 3 | Check individual courses for prerequisites and corequisites |
| Total credits for the term | 14.5-15.5 | |
| Total credits required for the A.S. degree | 60 | |

Notes:

1. Prerequisites for a course must be passed before taking the course. Corequisites must be passed before taking the course or taken in the same term as the course.
2. Students must complete one course from Flexible Core categories 2A, 2C, and 2D. The course from Flexible Core 2B is required to be SP-211. The course from Flexible Core 2E is required to be CH-151 and the additional flexible core course is required to be CH-152.
3. Students placed into MA-119 must take a total of 7-8 credits of Major Elective courses selected from the table below.

All students must complete two (2) WI designated classes to fulfill degree requirements.

Major Elective Courses

| Major Elective Courses | Credits | Prerequisites and Corequisites |
|---|---------|---|
| BI-235 Human Anatomy | 4 | Prerequisite: BI-201 |
| BI-356 Principles of Genetics | 4 | Prerequisite: BI-201 (C or better) |
| BI-357 Bioinformatics/Computational Biology | 3 | Prerequisite: BI-201 (C or better) |
| BI-421 Human Physiology | 4 | Prerequisites: BI-201 and either BI-202 or BI-235 |
| BI-453 Biotechnology | 5 | Prerequisites: BI-201 and permission of instructor |
| BI-456 Introduction to Biological Research | 4 | Prerequisite: BI-201; Corequisites: BI-202 and permission of the instructor |
| BI-461 Microbiology | 4 | Prerequisite: BI-201 |
| BI-554 Research Laboratory Internship | 2 | Prerequisites: BI-201 and permission of the instructor |