

**Biology BA**

**12** Required Core Credits

**18** Flexible Core Credits

**12** College Option Credits

**55** Major Credits

**23** Elective Credits

This 4-year academic plan is designed to help freshmen entering Queens College in Fall 2023. Our 4-year academic plans are illustrative examples of integrated degree requirements and course sequencing for each of the College's programs of study which are designed to ensure degree completion in a timely manner. Students are advised to meet with professional and faculty advisors to tailor their degree maps to their individual interests (academic and career goals), as well as other considerations including course offerings and the incorporation of winter and summer sessions. Course pre-requisite/s and co-requisite/s are strictly enforced, as are entrance and maintenance criteria (if applicable) for the successful completion of the degree.

# Biology BA

## Freshman

### FALL

|  |                   |
|--|-------------------|
| English Composition I (EC1)                              | 3 credits         |
| MATH 132, or MATH 142, or MATH 151 or BIOL 230 †‡ (MQR)  | 4 credits         |
| Calculus/Differentiation & Integration<br>BIOL 105# (SW) | 4 credits         |
| General Biology I<br>College Option Language (LANG)      | 4 credits         |
| <b>Fall total credits</b>                                | <b>15 credits</b> |

### SPRING

|   |                   |
|---|-------------------|
| English Composition II (EC2)<br>(BIOL 13 recommended) | 3 credits         |
| BIOL 106# (SCI)                                       | 4 credits         |
| CHEM 1134+1131 (LPS)                                  | 5 credits         |
| General Chemistry I<br>Creative Expression (CE)       | 3 credits         |
| <b>Spring total credits</b>                           | <b>15 credits</b> |

## Sophomore

### FALL

|  |                   |
|--|-------------------|
| BIOL 285 Principles of genetics<br>OR BIOL 286, or 287 (choose 2 of 3) | 4/3 credits       |
| Biology Electives*   | 4 credits         |
| Laboratory course or Lecture course<br>CHEM 1144 +1141 (SW)            | 5 credits         |
| General Chemistry II<br>Individual & Society (IS)                      | 3 credits         |
| <b>Fall total credits</b>  | <b>15 credits</b> |

### SPRING

|  |                   |
|--|-------------------|
| BIOL 285 Principles of genetics<br>OR BIOL 286, or 287 (choose 2 of 3)   | 4/3 credits       |
| Biology Electives*   | 4 credits         |
| Laboratory course or Lecture course<br>Major or non-major Electives***<br>(non-major electives MATH 152‡<br>or PHYS 121 recommended) | 4/5 credits       |
| Major or non-major Electives***  | 3 credits         |
| <b>Spring total credits</b>  | <b>15 credits</b> |

† Please speak to the math department or a biology advisor if you are not eligible to take Math 132, or Math 142, or Math 151 in your first semester.

\* 20 or 21 Biology credits must be 200-level courses & above, of which at least three of the advanced courses, not including BIOL 344, 381, 390, 391, 395, or 396, must be at the 300 level, and at least four must be laboratory courses.

\* Course selection must be made in consultation with a departmental advisor.

\*\* If a Literature course is taken with a W, it will count towards Literature and one Writing Intensive Unit.

# BIOL 105 and BIOL 106 can be taken out of sequence. Students can be registered into BIOL 106 by the department if they cannot get BIOL 105 first.

‡ Students who fail or withdraw from this course multiple times may be prohibited from majoring in the sciences or mathematics; see your department for questions.

# Biology BA

## Junior

### FALL

|                                       |             |
|---------------------------------------|-------------|
| Biology Electives*                    | 3/4 credits |
| Laboratory course or Lecture course   |             |
| CHEM 2514 + 2511 (SCI)                | 4/5 credits |
| Organic Chemistry I                   |             |
| OR CHEM 1023+1021                     |             |
| World Cultures & Global Issues (WCGI) | 3/4 credits |
| Major or non-major Electives***       | 3/4 credits |

**Fall total credits 15 credits**

### SPRING

|                                       |           |
|---------------------------------------|-----------|
| Biology Electives*                    | 4 credits |
| Laboratory course or Lecture course   |           |
| College Option Literature (LIT+W)     | 3 credits |
| With Writing Intensive Unit**         |           |
| US Experience in Its Diversity (USED) | 3 credits |
| Major or non-major Electives***       | 4 credits |
| Colloquium in Biology                 |           |

**Spring total credits 15 credits**

## Senior

### FALL

|                                     |             |
|-------------------------------------|-------------|
| Biology Electives*                  | 3 credits   |
| Laboratory course or Lecture course |             |
| One Writing Intensive Unit (W)      | 3 credits   |
| Major or non-major Electives***     | 3/4 credits |
| Major or non-major Electives***     | 3/4 credits |
| Major or non-major Electives***     | 3/4 credits |

**Fall total credits 15 credits**

### SPRING

|                                 |             |
|---------------------------------|-------------|
| Biology Electives*              | 3 credits   |
| Major or non-major Electives*** | 3/4 credits |
| Major or non-major Electives*** | 3/4 credits |
| Major or non-major Electives*** | 3/4 credits |
| Major or non-major Electives*** | 3 credits   |

**Spring total credits 15 credits**

\*\*\*General Electives: Students may complete general electives by taking courses in (most) department/s or programs they choose; however, depending on the course/program, students may need department permission and/or prerequisite course/s. Electives may be used to supplement the chosen major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a different area (a Music major may be interested in the physics of sound). Students are encouraged to use available electives to complete a dual major, minor, pre-requisites for graduate or professional school, or complete and internship, experiential learning and/or study abroad. Students are encouraged to use their available general electives wisely and focus on coursework that will assist them personally, academically and professionally.