

## Bachelor of Arts in Biological Sciences

**Fully Online Program**

PLEASE READ COURSE DESCRIPTIONS in the UNDERGRADUATE COURSE CATALOG (catalog.fiu.edu). Most elective courses have prerequisites that must be taken BEFORE you take the elective course. To see your own progress, you can view your Panther Degree Audit from your My FIU. If you need assistance or have any questions, you are encouraged to see an advisor prior to each registration period by making an appointment via the Panther Success Network. All Science and Math courses must be completed with a grade of "C" or better to satisfy the requirements. ***The Biological Sciences BA has enrollment and completion success markers that will be used to monitor your progress in the major. In cases where students are not making good progress, a change of major may be required.***

### LOWER DIVISION PROGRAM (27 cr)

| Course            |                                                                                                                                                                                                                                                                                                                                                    | Credits Hours |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| BSC 2010 & 2010L  | General Biology I and Lab                                                                                                                                                                                                                                                                                                                          | 3 + 1         |
| BSC 2011 & 2011L  | General Biology II and Lab                                                                                                                                                                                                                                                                                                                         | 3 + 1         |
| CHM 1045 & 1045L  | General Chemistry I and Lab                                                                                                                                                                                                                                                                                                                        | 3 + 1         |
| CHM 1046 & 1046L  | General Chemistry II and Lab                                                                                                                                                                                                                                                                                                                       | 3 + 1         |
| General Physics I | <b>Choose 1 course:</b><br>PHY2053 – Physics without Calculus I ( <i>Uses Algebra and Trigonometry</i> )<br>PHY2048 – Physics with Calculus II ( <i>Uses Calculus I and II</i> ) **                                                                                                                                                                | 4             |
| Mathematics       | <b>Choose 1 option:</b><br>MAC 1147 – Pre-Calculus Algebra and Trigonometry (4 cr)<br>MAC 2311 – Calculus I (4 cr)<br><i>Students should take MAC 1147. Only students who have started the MAC1114/MAC1140 sequence at their previous institution may request permission from the Math Department to get into the next course in the sequence.</i> | 4             |
| Statistics        | <b>Choose 1 course:</b><br>STA 2023 – Statistical Methods<br>*Consult with your academic advisor to discuss the possibility of substituting this course with another approved Statistics course.                                                                                                                                                   | 3             |

### Upper Division Program (45 cr)

| Course                         | Prerequisites (Grades of C or higher in) |                                                                                                                                                                                                                                                                                                                               | Credits Hours |
|--------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Required Courses (13 credits): |                                          |                                                                                                                                                                                                                                                                                                                               |               |
| BSC 3848                       | Science and Career Literacy              | N/A<br><br><i>Course designed for biology majors in their junior year, this course prepares students for research, advanced coursework, and post-graduation pathways.</i><br><br>For students who took and successfully passed BSC 4931, this course will be used to substitute BSC 3848. Discuss with your Academic Advisor. | 1             |
| PCB 3043                       | Ecology                                  | BSC2010 and BSC2011                                                                                                                                                                                                                                                                                                           | 3             |
| PCB 3063                       | Genetics                                 | BSC2010                                                                                                                                                                                                                                                                                                                       | 3             |
| PCB 4674                       | Evolution                                | PCB3043 and PCB3063                                                                                                                                                                                                                                                                                                           | 3             |
| BCH 3034                       | Cellular Chemistry                       | BSC2010, CHM1045 and CHM1045L                                                                                                                                                                                                                                                                                                 | 3             |

| Upper Division Biology Elective – Consult with advisor for course options (12 credits)                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Upper Division Lectures                                                                                                                                                                              | <p>Biology Electives<br/>Students must complete 4 lecture courses from the acceptable Upper Division Biology Electives maintained by the Biology Department. The 4 lecture courses may be chosen at the student's discretion from courses in any of the distribution areas.</p> <p>The following courses are not allowed as Biology BA Electives: Forensic Veterinary courses (BSC4480, BSC4481, BSC4482); Student Research Labs (BSC3915 and BSC4914); Cooperative Education credits; Biology of Women; Research Methods in Biological Sciences (BSC3910); and courses for non-science majors (BOT1010, MCB2000, BSC2023, EVR3013, OCB2000, and OCE3014). Biology students are unable to enroll in BSC 2085+L and BSC 2086+L.</p> | 12 |
| Laboratory Requirement (2 credits)                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |
| Upper Division Labs                                                                                                                                                                                  | <b>Choose two</b> upper-division labs ( <i>Note: 2-cr. labs count for one lab</i> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2  |
| Upper Division General Electives (18)                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |
| Consult with advisor to choose upper division (3000-4000 level) elective options that will fulfill remaining requirements ( <i>Ex. Global Learning, 45-credit upper-division requirement, etc.</i> ) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 18 |

**Fall 2026 Online Biology Electives:**

| Course    | Course Name                                                                                           | Prerequisites (Grades of C or higher in)                      | Credits Hours |
|-----------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------|
| BSC 4303  | Biogeography                                                                                          | PCB3043, PCB4674                                              | 3             |
| MCB 3020  | General Microbiology                                                                                  | CHM2210, BSC2010 and BSC2011, or permission of the instructor | 3             |
| MCB 4503  | Virology                                                                                              | CHM2210 and PCB3063                                           | 3             |
| OCB 4633  | Marine Community Ecology                                                                              | PCB3043                                                       | 3             |
| PCB 3702  | Intermediate Human Physiology                                                                         | BSC2010 or BSC2011                                            | 3             |
| PCB 4023  | Cell Biology                                                                                          | PCB3063 and CHM1046                                           | 3             |
| PCB 4232  | The Biology of Acquired Immune Deficiency Syndrome (AIDS)                                             | BSC2010, BSC2011, CHM1045, CHM1046                            | 3             |
| PCB 4233  | Immunology                                                                                            | PCB3063                                                       | 3             |
| PCB 4467C | Marine Protected Areas<br><i>*This course will satisfy 1 Upper Division Biology Elective and Lab.</i> | BSC2010 and BSC2011                                           | 4             |
| PCB 4663  | General Human Genetics                                                                                | PCB3063                                                       | 3             |
| PCB 4810  | Biology of Stress                                                                                     | BSC2010 and BSC2011                                           | 3             |

**Fall 2026 Online Biology Labs:**

| Course    | Course Name                       | Prerequisites (Grades of C or higher in) | Credits Hours |
|-----------|-----------------------------------|------------------------------------------|---------------|
| BSC 3456L | Python for Biologist Lab          | BSC2010 and BSC2011                      | 1             |
| PCB 3043L | Ecology Lab                       | PCB3043 (co or pre-requisite)            | 1             |
| PCB 3702L | Intermediate Human Physiology Lab | PCB3702 (co or pre-requisite)            | 1             |

**Other Graduation Requirements:**

**University Requirements**

- |                                                                                                                                                                                               |                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> UCC –University Core Curriculum (Note: Transfer students with an AA degree from a Florida College System or other Florida State University are exempt from the UCC). | <input type="checkbox"/> semester                        |
| <input type="checkbox"/> FLENT/FLEX Foreign Language requirement                                                                                                                              | <input type="checkbox"/> Civic Literacy Requirement      |
| <input type="checkbox"/> Summer Enrollment: Students entering the University with fewer than 60 hours must complete 9 hours of coursework during the summer                                   | <input type="checkbox"/> 120 Total credit hours required |

For more information on these requirements, please visit: <https://transfer.fiu.edu/transfer-101/guides-resources/graduation-requirements/index.html>

**College of Arts, Sciences & Education Requirements**

- ☐ 45 Upper Division hours required
- ☐ 9 Credit hours of courses outside the major required within the last 60 hours of enrollment

**Success Markers:** The Biological Sciences Department has identified important courses in the major that indicate you are on track for successful degree completion. ***In cases where students are not making good progress, a change of major may be required.***

- 30 credits- Complete MAC 1105 (or higher) with a C or better
- 30 credits- Complete CHM 1045/CHM 1045L with a C or better
- 45 credits- Enroll in MAC 1147 (or higher)
- 45 credits- Complete BSC 2010/2010L or BSC 2011/2011L with a C or better
- 45 credits- Complete CHM 1046/1046L with a C or better
- 60 credits- Enroll in PHY 2048 or PHY 2053
- 75 credits- Complete PHY 2048 or PHY 2053 with a C or better