

# Saint Joseph's University

## BA Biology - Secondary Education Major Curriculum Requirements *(Updated February 2023)*

Name \_\_\_\_\_

ID# \_\_\_\_\_

### General Education Program (GEP)

#### Signature Core (19 credits)

- |    |                      |   |  |
|----|----------------------|---|--|
| 1. | <input type="text"/> | EDU 150: Schools in Society (First Year Seminar)  |  |
| 2. | <input type="text"/> | PHL 154 Moral Foundations   |  |
| 3. | <input type="text"/> | Theology Signature Core (THE 153, THE 154, or THE 155 will fulfill the req.)                    |  |
| 4. | <input type="text"/> | ENG 102 Texts and Contexts (pre-req: ENG 101)   |  |
| 5. | <input type="text"/> | HIS 154 Forging the Modern World  |  |
| 6. | <input type="text"/> | <a href="#">Faith and Reason Course</a> (pre-reqs: <input type="text"/><br>THE 154 and PHL 154) |  |
|    | <input type="text"/> | INT 151 Inequality in American Society<br>(Required for students entering Fall 2023 and later)  |  |

#### Variable Courses (# of credits varies, depending on language and math placement)

- |     |                      |  |  |
|-----|----------------------|--|--|
| 7.  | <input type="text"/> | ENG 101 Craft of Language  |  |
| 8.  | <input type="text"/> | <a href="#">Art, Music/Theatre/Film, or Lit</a>                            |  |
| 9.  | <input type="text"/> | <a href="#">Math (Beauty)</a> (MAT 155, MAT 161, or higher level calculus) |  |
| 10. | <input type="text"/> | EDU 157: Adolescent Development (Social/Behavioral Science)                |  |
| 11. | <input type="text"/> | BIO 101 & 101L Bio: I Cells + Lab  |  |
| 12. | <input type="text"/> | <a href="#">Non-Native Language I</a>                                      |  |
| 13. | <input type="text"/> | <a href="#">Non-Native Language II</a>                                     |  |
| 14. | <input type="text"/> | Philosophical Anthropology (pre-req: PHL 154)                              |  |
| 15. | <input type="text"/> | <a href="#">Religious Difference</a> (THE or REL)                          |  |

#### Integrative Learning Courses (9 credits)

- |     |                      |  |  |
|-----|----------------------|--|--|
| 16. | <input type="text"/> | SPE 160 Intro to Special Education w/field (pre-req:PHL 154) |  |
| 17. | <input type="text"/> | SPE 205 Inclusive classrooms w/ Field                        |  |
| 18. | <input type="text"/> | MAT 128 Applied Statistics                                   |  |

**Overlays-** All Students complete 3 overlays (EI, WI, DGNW) that may be combined with other GEP, major, or elective courses. Class of 2025 forward must also complete the additional Diversity Overlay.

- |                      |   |                      |
|----------------------|---|----------------------|
| <input type="text"/> | Writing-Intensive (pre-req: ENG 101)  | <input type="text"/> |
| <input type="text"/> | Ethics-Intensive (pre-req: PHL 154)<br>SPE 160: Intro to Special Education    | <input type="text"/> |
| <input type="text"/> | Diversity/Globalization/Non-Western)<br>EDU 150 or EDU 160 Schools in Society | <input type="text"/> |
| <input type="text"/> | Diversity (class of 2025 forward only) EDU 246 w/field fulfills this overlay  | <input type="text"/> |

### Major Requirements

- |     |                      |  |
|-----|----------------------|--|
| 19. | <input type="text"/> | BIO 102 & 102L Bio II: Genetics + Lab                      |
| 20. | <input type="text"/> | BIO 201 & 201L Bio III: Organismic Biology + Lab           |
| 21. | <input type="text"/> | <a href="#">Group 1:</a> BIO 400, 406, BIO 415, or BIO 417 |
| 22. | <input type="text"/> | <a href="#">Group 2:</a> BIO 416, BIO 419, 422, or 372     |
| 23. | <input type="text"/> | <a href="#">Group 3:</a> BIO 401, 409 423, or 429          |
| 24. | <input type="text"/> | <a href="#">Group 4:</a> BIO 220, 336, 413 or 414          |
| 25. | <input type="text"/> | CHM 120 & 120L General Chemistry I + Lab                   |
| 26. | <input type="text"/> | CHM 125 & 125L General Chemistry II + Lab                  |
| 27. | <input type="text"/> | CHM 210 & 210L Organic Chemistry I + Lab                   |
| 28. | <input type="text"/> | PHY 101 & 101L General Physics I + Lab                     |
| 29. | <input type="text"/> | PHY 102 & 102L General Physics II + Lab                    |
| 30. | <input type="text"/> | ENV 106 & 106L Exploring the Earth + Lab                   |

#### BIO 290 and 390 (required non-credit seminar)

A non-credit BIO seminar is required each semester for Sophomores, Juniors and Seniors.

\* BIO 290 is taken in the fall of sophomore year.

\* BIO 390 is taken in soph spring & both semesters junior & senior year

### Education Major Requirements.

- |             |                      |   |
|-------------|----------------------|---|
| (1.)        | <input type="text"/> | EDU 150 Schools in Society w/field                    |
| 31.         | <input type="text"/> | EDU 157: Adolescent Development w/field               |
| 32.         | <input type="text"/> | EDU 230 Assessment & Eval: Grades 7-12                |
| 33.         | <input type="text"/> | EDU 246: Language and Culture w/field                 |
| 34.         | <input type="text"/> | EDU 247: Literacy in the Content Areas                |
| (16.)       | <input type="text"/> | SPE 160: Intro to Special Education w/field           |
| (17.)       | <input type="text"/> | SPE 205 Inclusive Classrooms w/ Field                 |
| 35.         | <input type="text"/> | EDU 418: Instructional Techniques for Science         |
| 36.-<br>39. | <input type="text"/> | EDU 491: Student Teaching 7-12 (12 credits/4 courses) |

### Electives

The number of Electives will vary. 120 credits are required for graduation. Complete enough electives fulfill this requirement. Because of the double major, there is no minimum elective credit requirement.

<input type="text"/>	Free Elective	<input type="text"/>
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## Overlays

Overlays may be combined with other GEP requirements, major courses, or electives. All Students must complete the Writing-Intensive, Ethics-Intensive, and Diversity/Globalization/Non-Western Overlays. Class of 2025 forward must also complete the additional Diversity Overlay. Except for the Writing-Intensive Overlay, all overlays are fulfilled by Education major requirements.

- Writing-Intensive (pre-req: ENG 101)
- Ethics-Intensive (pre-req: PHL 154) - SPE 160 Intro to Special Education w/field
- Diversity/Globalization/Non-Western - EDU 150 or EDU 160 Schools in Society w/field
- Diversity (Class of 2025 forward only) - EDU 246 Literacy, Language & Culture w/field

## Major Requirements

**Important Note:** *Students can only receive the BA in Biology if they also complete the Secondary Education major requirements. If they do not complete the secondary education major then they will have to fulfill the requirements for the BS in Biology to graduate.*

**Biology Major Upper Division Courses - Students must complete one course from each group below**

*\*BIO 101, 102, 201 and CHM 120, 125 are prerequisites for all Group 1 - 4 (see below) BIO courses*

### Group 1:

- BIO 400 Developmental Genetics or
- BIO 406 Comparative Anatomy or
- BIO 415 Immunology
- BIO 417 Systemic Physiology

### Group 2:

- BIO 416 Microbiology or
- BIO 419 Invertebrate Zoology or
- BIO 422 Applied & Environmental Microbiology or
- BIO 372 Aquatic Biology

### Group3:

- BIO 401 Animal Behavior
- BIO 409 Ecology
- BIO 423 Evolution
- BIO 429 Environmental Science

### Group 4:

- BIO 220 Plant Diversity and Morphology
- BIO 336 Plant Therapeutics
- BIO 413 Plant Physiological Ecology
- BIO 414 Plant Systematics

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# Typical Course Sequence

**Important Note:** Students can only receive the BA in Biology if they also complete the Secondary Education major. If they do not complete the secondary education major then they will have to fulfill the requirements for the BS in Biology to graduate.

	Fall	Spring
<b>Freshman Year</b>	BIO 101/101L CHM 120/120L EDU 150 w/field (First Year Seminar) Non-Native Language I ENG 101	BIO102/102L CHM 125/125L EDU 246 w/field Non-Native Language II MAT 155 or MAT 161
<b>Sophomore Year</b>	BIO 201/201L CHM 210/210L ENG 102 MAT 128 SPE 160 w/field BIO 290*	BIO 4xx/4xxL GEP Art/Literature Theology Signature Core (THE 153, 154, or 155) PHL 154 SPE 205 w/field BIO 390*
<b>Junior Year</b>	BIO 4xx/4xxL PHY 101/101L EDU 157 w/field HIS 154 GEP Religious Difference BIO 390*	BIO 4xx/4xxL PHY 102/102L EDU 247 w/field EDU 230 Assessment & Eval: Grades 7-12 GEP Phil Anthropol. BIO 390*
<b>Senior Year</b>	BIO 4xx/4xxL ENV 106 GEP Faith and Reason EDU 418 w/field Elective	EDU 491 Student Teaching

**\*BIO 290 (sophomore year) and BIO 390 Seminar.** In addition to the courses listed above, this BIO seminar is required each semester for Sophomores and Juniors. **This is a non-credit bearing course.**