

# SECONDARY EDUCATION: SCIENCE/BIOLOGY (9-12) MAJOR

## Important Notes

- 40% of major requirements must be completed at Judson.
- 40% of major requirements must be upper division.
- No grade lower than C- in any education or major coursework is allowed. A minimum Major GPA (including transfer work) of 2.75 is required.
- Students must formally apply and be accepted into the program prior to the Junior year; this process is in addition to University admission.
- All students must pass the applicable ISBE Content Area Exam(s) for licensure. This must be done prior to taking EDU411 Student Teaching (12 c.h.).
- All students must receive a passing score on the edTPA - ISBE for licensure.

## Additional Notes

- Bilingual, ESL and LBS1, Middle Grades, and Physical Education endorsements are available with this major. Endorsements will make the candidates more marketable for employment by learning more about specific high-needs areas.

## Pre-Requisites Required by Major

- PSY111 Introduction to Psychology (3 c.h.) (fulfills Gen Ed Social Science Requirement)
- BIO177 Environmental Science w/Lab (4 c.h.) (fulfills Gen Ed Science Requirement)
- EDU301 Reflecting on the Conversation (1 c.h.) recommended (fulfills Gen Ed GEN301 Requirement)

## Major Requirements

| Code                       | Title                                     | Hours |
|----------------------------|---|-------|
| <b>Education Component</b> |   |       |
| EDU101                     | Explorations in Education                 | 3     |
| EDU102                     | Day of Assessments                        | 0     |
| EDU131                     | Practicum I, Diversity                    | 0     |
| EDU201                     | Strategic Education                       | 2     |
| EDU202                     | Development and Learning                  | 3     |
| EDU214                     | Foundation of Language Minority Education | 3     |
| EDU231E                    | Practicum II, Tchr Aid:Elgin Area         | 1     |
| EDU231H                    | Practicum II, Tchr Aid:Hometown           | 0     |
| EDU313                     | Cross-Cultural Education                  | 3     |
| EDU325                     | Literacy Across the Curriculum            | 3     |
| EDU331                     | Practicum III, Instr Asst                 | 1     |
| EDU337                     | Educational Assessments                   | 3     |
| EDU340                     | Intro to Secondary Methods                | 3     |
| EDU346                     | Science Methods - Secondary               | 3     |
| EDU411                     | Student Teaching <sup>1</sup>             | 12    |
| EDU491                     | Senior Seminar                            | 3     |
| SPE328                     | Exceptional Child                         | 3     |

### Science Core

|        |                             |   |
|--------|-----------------------------|---|
| BIO171 | Principles of Biology w/Lab | 4 |
| BIO177 | Environmental Science w/Lab | 4 |
| CHM153 | General Chemistry I w/Lab   | 4 |
| CHM154 | General Chemistry II w/Lab  | 4 |
| PHS241 | Earth Science I w/Lab       | 4 |
| PHS245 | Astronomy w/Lab             | 4 |
| PHY237 | General Physics I w/Lab     | 4 |
| PHY238 | General Physics II w/Lab    | 4 |

### Biology Designation

|        |                                 |   |
|--------|---------------------------------|---|
| BIO273 | Anatomy and Physiology I w/Lab  | 4 |
| BIO274 | Anatomy and Physiology II w/Lab | 4 |
| BIO371 | Microbiology w/Lab              | 5 |
| BIO376 | Evolutionary Theory/W Lab       | 4 |
| BIO378 | Human Genetics w/Lab            | 4 |

### Biology Elective

|           |                              |   |
|-----------|------------------------------|---|
| BIO372    | Cell Biology w/Lab           | 4 |
| or BCM358 | General Biochemistry I w/Lab |   |

**Total Hours** **103**

- 1 EDU411 Student Teaching (12 c.h.) consists of 2 7-week sessions, and should be taken for a total of 12 credit hours.

## Bachelor of Arts in Secondary Education (9-12): Biology Major (Four-Year Plan)

Academic planning is the student's responsibility. This Graduation Plan is designed to be a guide to assist students as they plan their course selections. This is only a suggested schedule, and is not a substitute for a student's Degree Audit, nor the Program Requirements in the Judson University Catalog. Actual course selections should be made with the advice and approval of an academic advisor. Students should become familiar with the catalog in effect at the time at which they entered the institution. Course requirements and sequencing may vary with AP courses, transfer courses, English/math placement, or other conditions.

A full-time course load for undergraduate students is 12-18 credits per semester. Illinois residents receiving state aid should register for 15 hours per semester.

| Course                 | Title   | Hours        |
|------------------------|---|--------------|
| <b>First Year</b>      |   |              |
| <b>First Semester</b>  |   |              |
| ENG101                 | Expository Writing (or ACT/SAT placement)                                       | 3            |
| GEN101<br>or ESS101    | Questions of Life: Entering the Judson Conversation <sup>1</sup><br>or Wellness | 1            |
|                        | Physical Activity course  | 1            |
| MAT211<br>or MAT215    | Functions and Calculus I<br>or Calculus w/Analytic Geometry I                   | 3-5          |
| BIO171                 | Principles of Biology w/Lab   | 4            |
| CHM153                 | General Chemistry I w/Lab   | 4            |
|                        |   | <b>Hours</b> |
|                        |   | <b>16-18</b> |
| <b>Second Semester</b> |   |              |
| PSY111                 | Introduction to Psychology  | 3            |
| ENG102                 | Critical Thinking and Writing (or ACT/SAT placement)                            | 3            |
| SPC120                 | Foundations of Speech   | 3            |
| EDU101                 | Explorations in Education   | 3            |
| EDU102                 | Day of Assessments  | 0            |

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|              |                            |           |
|--------------|----------------------------|-----------|
| EDU131       | Practicum I, Diversity     | 0         |
| CHM154       | General Chemistry II w/Lab | 4         |
| <b>Hours</b> |                            | <b>16</b> |

<sup>2</sup> GEN301 equivalent

<sup>3</sup> HIS261 History of Civilization I (3 c.h.) recommended

**Second Year**

**First Semester**

|                     |   |           |
|---------------------|---|-----------|
| EDU202              | Development and Learning                              | 3         |
| EDU214              | Foundation of Language Minority Education             | 3         |
| HIS262              | History of Civilization II                            | 3         |
| PHY237              | General Physics I w/Lab                               | 4         |
| BI0372<br>or BCM358 | Cell Biology w/Lab<br>or General Biochemistry I w/Lab | 4         |
| <b>Hours</b>        |   | <b>17</b> |

**Second Semester**

|              |                                  |           |
|--------------|----------------------------------|-----------|
| BST110       | Intro to the Christian Bible     | 3         |
| EDU201       | Strategic Education              | 2         |
| EDU231H      | Practicum II, Tchr Aid:Hometown  | 0         |
| EDU231E      | Practicum II,Tchr Aid:Elgin Area | 1         |
| EDU313       | Cross-Cultural Education         | 3         |
| BI0371       | Microbiology w/Lab               | 5         |
| PHY238       | General Physics II w/Lab         | 4         |
| <b>Hours</b> |                                  | <b>18</b> |

**Summer Semester**

|  |                 |          |
|--|-----------------|----------|
| PHS245                                 | Astronomy w/Lab | 4        |
| Gen Ed Upper Division English Elective |                 | 3        |
| <b>Hours</b>                           |                 | <b>7</b> |

**Third Year**

**First Semester**

|              |  |           |
|--------------|--|-----------|
| THS110       | Christian Faith: Understanding and Application | 3         |
| EDU301       | Reflecting on the Conversation <sup>2</sup>    | 1         |
| EDU337       | Educational Assessments                        | 3         |
| EDU340       | Intro to Secondary Methods                     | 3         |
| BI0273       | Anatomy and Physiology I w/Lab                 | 4         |
| BI0378       | Human Genetics w/Lab                           | 4         |
| <b>Hours</b> |  | <b>18</b> |

**Second Semester**

|              |                                 |           |
|--------------|---------------------------------|-----------|
| EDU325       | Literacy Across the Curriculum  | 3         |
| EDU346       | Science Methods - Secondary     | 3         |
| SPE328       | Exceptional Child               | 3         |
| PHS241       | Earth Science I w/Lab           | 4         |
| BI0274       | Anatomy and Physiology II w/Lab | 4         |
| <b>Hours</b> |                                 | <b>17</b> |

**Summer Semester**

|              |                           |          |
|--------------|---------------------------|----------|
| EDU331       | Practicum III, Instr Asst | 1        |
| <b>Hours</b> |                           | <b>1</b> |

**Fourth Year**

**First Semester**

|  |                  |           |
|--|------------------|-----------|
| EDU411                                     | Student Teaching | 12        |
| EDU491                                     | Senior Seminar   | 3         |
| Gen Ed Visual and Performing Arts Elective |                  | 3         |
| <b>Hours</b>                               |                  | <b>18</b> |

**Second Semester**

|                                      |  |           |
|--------------------------------------|--|-----------|
| Gen Ed History Elective <sup>3</sup> |  | 3         |
| Gen Ed Biblical Studies Elective     |  | 3         |
| GEN401                               | The Good Life: Continuing the Conversation | 3         |
| BI0177                               | Environmental Science w/Lab                | 4         |
| BI0376                               | Evolutionary Theory/W Lab                  | 4         |
| <b>Hours</b>                         |  | <b>17</b> |

**Total Hours 145-147**

<sup>1</sup> First-time students (those entering college directly from high school) should take GEN101; transfer students should take ESS101