# **Biology Education (404)**

## **ASSOCIATE OF SCIENCE**

## **About Our Program**

This program is intended to provide the first two years of a 4-year baccalaureate program. This program studies the science of life and life processes by investigating the origin, evolution, ecology, structure, distribution, and reproductive functions of plants and animals. Biology Education majors intend to teach, usually at the secondary level.

## **Program Outcomes**

- Students should be able to understand and employ aspects of scientific methodologies.
- Students should practice proper lab technique in compliance with relevant safety standards.
- Students should understand the fundamental uncertainties in experimental measurements inherent in different laboratory techniques and instrumentation.
- Students should be able to analyze data sets and communicate information in a clear and organized manner with presentations and properly cited written reports.
- Students should utilize peer-reviewed scientific literature effectively.
- Students should be able to work with peers in a team setting.
- Students should be able to relate contemporary societal and global issues to the physical and life sciences.

# **Nature of Work and Employment**

The three most common jobs entered into after completion of their Bachelor's degree in this major are secondary teacher, biological technician, and health technician.

# **Special Considerations**

Students considering this major should have a strong interest in nature, science, animals, and people. This career area requires the ability to collect and analyze data. The listed coursework is a recommendation only. Students should check with a student advisor for HCC graduation requirements, and specific university requirements in this major. Students must meet with an advisor to ensure that the special requirements of the department and institution to which they plan to transfer are met.

## **Program Contacts**

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Brendan Dutmer, Dean, Natural Science and Mathematics
- Karla Giuffre, Biology Faculty
- Tony Grahame, Biology Faculty
- Juliet Moderow, Biology Faculty
- · Alan Nowicki, Biology Faculty
- · Beth Groshans, Student Advisor

### **Recommended Courses**

The following are recommended courses for this major only. Students must still meet all requirements for the Associate of Science degree (see page 58) in order to graduate from Highland Community College. For more information, please see your student advisor.

#### Biology

| *         | BIOL | 208 | Biology I: Cell & Molecular Biology           | 4 |
|-----------|------|-----|---|---|
| *         | BIOL | 209 | Biology II: Biodiversity, Evolution & Ecology | 4 |
| Chemistry |      |     |   |   |

| * | CHEM | 123 | General College Chemistry I  | 5 |
|---|------|-----|------------------------------|---|
| * | CHEM | 124 | General College Chemistry II | 5 |
| * | CHEM | 221 | Organic Chemistry I          | 4 |
| * | CHEM | 222 | Organic Chemistry II         | 4 |
|   |      |     |                              |   |

### Education

| EDUC | 224  | Introduction to Special Education | 3 |
|------|------|-----------------------------------|---|
|      | and  |                                   |   |
| EDUC | 221  | The American Public School        |   |
|      | -or- |                                   | 3 |
| EDUC | 222  | Education as an Agent for Change  |   |
| EDUC |      | Education as an Agent for Change  | 3 |

#### **Physics**

| *         | PHYS | 141  | Introductory Physics I  | 4 |  |
|-----------|------|------|-------------------------|---|--|
| *         | PHYS | 142  | Introductory Physics II | 4 |  |
|           |      | -or- |                         |   |  |
| *         | PHYS | 143  | General Physics I       | 4 |  |
| *         | PHYS | 144  | General Physics II      | 4 |  |
| Develople |      |      |                         |   |  |

#### Psychology

| * | PSY | 161 | Introduction to Psychology | 3 |
|---|-----|-----|----------------------------|---|
| * | PSY | 261 | Educational Psychology     | 3 |

<sup>\*</sup> Course has a prerequisite. See course description.