Program Requirements

General Ed: Satisfactory completion of all general education requirements.
Major: Satisfactory completion of a major in Biology (41-43 credits for B.A. degree as described below) plus coursework in related sciences (23 credits) for a total of 64-66 credits in the sciences.

For students seeking a B.S., see the current academic catalog for courses required beyond what is listed below.

Education: Satisfactory completion of a minor in education (36 credits) as described below. Prior to being admitted to the Teacher Education Program, the student must demonstrate Math competency by earning a grade of C- or higher in a 4-credit course that fulfills the general education quantitative reasoning requirement (course designated with a “Q”).

Requirements for AYA Licensure

All courses must be passed with a grade of C- or above. See the Academic Catalog for additional requirements for admission and continuation in the program. Courses may not be offered every year. Check the department schedules for course offerings.

Students are required to complete a capstone assessment, the edTPA (Education Teacher Performance Assessment), during their Student Teaching Seminar (EDUC 496) and earn a C- or higher in the course.

Required in Education

Entry-Level Courses  (Taken prior to application for teacher candidacy)

____ EDUC 103S Sociological Perspectives in Education (4)*
or EDUC 104R Philosophical Perspectives in Education (4)*
____ EDUC 105 Educational Psychology (2)
____ EDUC 120 Introduction to Students with Special Needs (2)  (Taken concurrently with EDUC 105)
____ EDUC 213 Adolescent Development and Education (4)*

Advanced Courses  (Taken following admission to teacher candidacy)

____ EDUC 312 Reading & Writing in the Content Areas (3)*   (Spring Only)
____ EDUC 313 Practicum: Literacy (1)
____ EDUC 332 Assessment and Inclusion (4)
____ EDUC 348 Teaching Science in Secondary Schools (3)   (Fall Odd Years)
____ EDUC 388 Science Practicum (1)  (Fall Odd Years)

Student Teaching

Application for permission to student teach must be submitted early spring term of junior year. Other coursework, if taken, must be scheduled for late afternoon or evenings during the term.

____ EDUC 495 Student Teaching (10)
____ EDUC 496 Student Teaching Seminar (2)*

Additional Requirement for Adolescent Young Adult Licensure

____ Successful completion of the required licensure examinations.

*These courses are Writing Intensive.

Required in Biology (41-42 credits)
Note: Any change(s) in this program of study must be approved by the Chairperson of the major and the Director of Assessment and Licensure, Wittenberg University.

### AREA I: Foundational Courses in Biology

- Biol 170/171 Concepts of Biology: Biological Information (5)
- Biol 180/181 Concepts of Biology: Energy & Resources in Biology (5)
  (Note: 170 & 180 can be taken in either order)
- Biol 201 Biological Literacy (2)
- Biol 202 Evolution (2)

### AREA II: Breadth of the Biological Experience

**Experience**: A minimum of 4 credits each from Groups 1, 2, and 3

#### Group 1: Cellular/Developmental/Molecular Bio

- Biol 210 Molecular Neurobiology (5)
- Biol 212 Cell Biology (5)
- Biol 214 Developmental Biology (5)
- Biol 215 Genetics (5)
- Biol 219 Immunology (4)
- Biol 310 Molecular Biology (5)
- Biol 316 Molecular Genetics (5)

#### Group 2: Physiology

- Biol 325 Human Anatomy and Physiology I (5)

#### Group 3: Ecology/Organismal Biology

- Biol 230 The Woody Plants of Ohio (4)
- Biol 232 Herpetology (5)
- Biol 233 Ornithology (5)
- Biol 235 Morphology & Taxonomy of Vascular Plants (5)
- Biol 238 Entomology (5)
- Biol 239 Marine Invertebrates (5)
- Biol 241 Freshwater Ecology (5)
- Biol 242 Behavioral Ecology (5)
- Biol 244 Conservation Biology (5)
- Biol 245 Wildlife Management (5)
- Biol 247 Marine Ecology (5)
- Biol 248 Compar Comm: Bahamas (5)
- Biol 346 Ecology (5)

### AREA III: Biological Electives (10 cr)

This requirement is satisfied by choosing any 10 credits from Area II or any other Biology courses, including Group 2 courses not listed above.

- Biol 
- Biol 
- Biol 

### AREA IV: Capstone Experience

- Biol 406 Senior Capstone Seminar (4)

### Required in Related Sciences (23 credits)

The following courses in "related sciences" are **required** for purposes of teacher licensure.

### AREA V: Chemical Foundations (required)

- Chem 121 Models of Chem. Systems (5)
- Chem 162 Chem Struc. & Analysis (5)

### AREA VI: Supporting Science (BA degree)

From Geology, 5 credits from the following

- Geol 150 Physical Geology (5)
- Geol 160 Environmental Geology (5)

From Physics, 8 credits

- Phys 100 Concepts in Physics (4)
- Phys 107 Astronomy (4)

Alternately, students may receive a BS in Biology by substituting Phys 200, Mechanics and Waves (5 cr) for Phys 100, and adding a statistics course (Math 127 or 227, or Busn 210 or Psyc 201)