Education Department

Adolescent Young Adult Life Science (7-12)

Program Requirements

General Ed: Satisfactory completion of all general education requirements.
Major: Satisfactory completion of a major in Biology (41 or 42 sem hrs for B.A. degree as described below) plus coursework in related sciences (24 sem hrs) for a total of 66 sem hrs in the sciences. For students seeking a B.S. degree, see the current academic catalog for courses required beyond what is listed below.
Education: Satisfactory completion of a minor in education (36 sem hrs) 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.

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 (3)
____ EDUC 214 Practicum: Middle/Secondary (1)

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 342 Including Students w/Special Needs Middle/Secondary (2)  Fall/Spring Even Years
____ EDUC 348 Teaching Language Science in Secondary Schools (3)  Fall Odd Years
____ EDUC 388 Practicum: Science (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 (12)
____ EDUC 496 Student Teaching Seminar (2)

Additional Requirement for Adolescent Young Adult Licensure

____ Successful completion of the required licensure examinations.
Note: Any change(s) in this program of study must be approved by the Chairperson of the major department and the Director of Teacher Licensure, Wittenberg University.

Required in Biology  41-42 sem hrs

**AREA I: Fundamental Courses in Biology**

___ Biol 170/171  Concepts of Biology: Biological Information (5)
___ Biol 180/181  Concepts of Biology: Energy & Resources in Biology (5)
(Courses can be taken in either order)
___ Biol 255  Biological Literacy (4)

**Group 1: Molecules, Organelles, Cells**

___ Biol 210  Molecular Neurobiology (5)
___ Biol 214  Developmental Biology (5)
___ Biol 215  Genetics (5)
___ Biol 310  Molecular Biology (5)
___ Biol 312  The Cell (5)
___ Biol 316  Molecular Genetics (5)

**Group 2: Tissues, Organs, Systems**

___ Biol 235  Morphology & Taxonomy of Vascular Plants (5)
___ Biol 236  Morphology & Taxonomy of Vascular Plants (5)
___ Biol 237  Microbiology (5)
___ Biol 238  Entomology (5)
___ Biol 239  Marine Invertebrates (5)

**Group 3: Organisms**

___ Biol 230  Woody Plants (4)
___ Biol 231  Vertebrate Zoology (5)
___ Biol 232  Herpetology (5)
___ Biol 233  Ornithology (5)
___ Biol 234  Morphology of Nonvase Plants (5)
___ Biol 235  Morphology & Taxonomy of Vascular Plants (5)
___ Biol 237  Microbiology (5)
___ Biol 238  Entomology (5)
___ Biol 239  Marine Invertebrates (5)

**Group 4: Populations, Communities, Ecosystems**

___ Biol 347  Evolution (4)

Plus one from the following courses:
___ Biol 241  Freshwater Ecology (5)
___ Biol 242  Behavioral Ecology (5)
___ Biol 245  Wildlife Management (5)
___ Biol 247  Marine Ecology (5)
___ Biol 248  Compar Comm: Bahamas (5)
___ Biol 342  Stream Ecology (5)
___ Biol 346  Ecology (5)

**AREA II: A minimum of 4 ours each from Groups 1, 2& 3 and 9 hours from Group 4.**

Two of these upper level courses must fulfill the botanical/zoological requirement of the Biology major by examining both plant and non-human animal life.

**AREA III: This requirement is satisfied by the two courses completed in Area II,**

**AREA IV: Senior Capstone**

___ Biol 406  Senior Capstone Seminar (4)

Required in Related Sciences  (24 sem hrs)

The following courses in “related sciences” are Required for purposes of teacher licensure.

**AREA V: Required in Chemistry**

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

**AREA VI: Supporting Science**

Geology 5 sem hrs from the following:
___ Geol 150  Physical Geology (5)
___ Geol 160  Environmental Geology (5)

Physics 9 sem hrs from the following:
___ Phys 107  Astronomy (4)
___ Phys 200  Mechanics and Waves (5)