

## Bachelor of Science-Biology Major

### 2004-2006 Old Dominion University Catalog

Students earning the AS, AA, or AA&S (or university parallel) degree from a Virginia Community College automatically satisfy the lower division general education requirements. **Courses marked with \* require a grade of C or better to transfer, even with the AS degree. The remaining lower division courses are automatically satisfied by the AS (including foreign language), regardless of the grade earned.** Additionally, courses in which a grade of AC-A or below were earned will not transfer. Therefore Community College degree holders may require additional credits to meet the 120 credit hour graduation minimum. (AS=Associate degree)

#### LOWER DIVISION GENERAL EDUCATION

##### A. Skills

###### Written Communication

ENGL 110C \_\_\_\_\_ 3 \_\_\_\_\_  
 ENGL 111C, 131C, PHIL 111C, or \_\_\_\_\_ 3 \_\_\_\_\_  
 HIST 111C \_\_\_\_\_

Oral Communication \_\_\_\_\_ 3 \_\_\_\_\_  
 (Satisfied by BIOL 405W)

Mathematics \_\_\_\_\_ 3 \_\_\_\_\_\*  
 (MATH 162M required)

Foreign Language Skills \_\_\_\_\_ 3 \_\_\_\_\_  
 (Competence must be at the 102F level)

Computer Skills \_\_\_\_\_ 3 \_\_\_\_\_\*  
 (CS 149D or higher required for Biology and Marine Biology;  
 teacher education satisfied in the Professional Education core by  
 ECI 304)

##### B. Perspectives

Fine and Performing Arts \_\_\_\_\_ 3 \_\_\_\_\_  
 ARTH 121A, ARTS 122A, MUSC 264A, DANC 185A, THEA 241A

History \_\_\_\_\_ 3 \_\_\_\_\_  
 HIST 101H, 102H, 103H, 104H, \_\_\_\_\_ 3 \_\_\_\_\_  
 or 105H

Literature \_\_\_\_\_ 3 \_\_\_\_\_  
 ENGL 112L, 144L, or FLET 100L

Philosophy \_\_\_\_\_ 3 \_\_\_\_\_  
 PHIL 110P, 120P, or 150P

Natural Science and Technology  
 PHYS 111N-112N \_\_\_\_\_ 4 \_\_\_\_\_\*  
 or GEOL 111N-112N \_\_\_\_\_ 4 \_\_\_\_\_\*  
 Technology Requirement  
 (Satisfied in the major) \_\_\_\_\_ 3-4 \_\_\_\_\_

Social Sciences \_\_\_\_\_ 3 \_\_\_\_\_  
 \_\_\_\_\_ 3 \_\_\_\_\_  
 ANTR 110S; COMM 200S; CRJS 215S; ECON 200S, 201S, 202S  
 GEOG 100S, 101S; POLS 100S, 101S; PSYC 201S, 203S; SOC  
 201S; WMST 201S

#### Departmental Requirements

BIOL 115N-116N must be passed with a C or better to continue in the program

Students may not have a grade lower than a C in any biology course counted toward the major.

BIOL 115N General Biology I \_\_\_\_\_ 4 \_\_\_\_\_\*  
 BIOL 116N General Biology II \_\_\_\_\_ 4 \_\_\_\_\_\*  
 BIOL 332 Genetics \_\_\_\_\_ 3 \_\_\_\_\_  
 BIOL 405W Biology Seminar \_\_\_\_\_ 2 \_\_\_\_\_

One course must be selected from each of the following areas with a grade of C or better earned to apply towards degree:

**Molecular/Cellular** \_\_\_\_\_ 3-5 \_\_\_\_\_  
 BIOL 270, 312, 314, 315, 407, 409, 410, 412, 416, 423, 424, 425,  
 426, 427, 430, 439, 449, 478, 479, 480, 485, or 486

**Organismal/evolutionary** \_\_\_\_\_ 3-5 \_\_\_\_\_  
 BIOL 203, 209, 220, 221, 300, 301, 307, 314, 400, 401, 417, 420,  
 421, 422, 431, 433, 441, 473, or 484

**Ecological** \_\_\_\_\_ 3-5 \_\_\_\_\_  
 BIOL 205, 246, 316, 331, 400, 404, 415, 417, 419, 442, 443, 444,  
 445, 448, 450, 473, or 478

##### Non-biology degree requirements:

CHEM 115N College Chemistry I \_\_\_\_\_ 4 \_\_\_\_\_\*  
 CHEM 116N College Chemistry II \_\_\_\_\_ 4 \_\_\_\_\_\*  
 CHEM 311 \_\_\_\_\_ 3 \_\_\_\_\_  
 CHEM elective 200-level or higher \_\_\_\_\_ 5 \_\_\_\_\_

GEOL 111N-112N or PHYS 111N-112N satisfy Natural Science

MATH 200 \_\_\_\_\_ 3 \_\_\_\_\_\*  
 STAT 130M \_\_\_\_\_ 3 \_\_\_\_\_\*

**Biology electives.** Students must choose 16 elective hours at or above the 200 level, excluding BIOL 317. Course work in Biology must include three laboratory courses at or above the 200 level with two laboratory courses from one subdiscipline area above and one lab course from a different subdiscipline area. The laboratory courses may be selected from those listed in the areas above or from electives.

BIOL 200-400 level electives \_\_\_\_\_ 3-5 \_\_\_\_\_  
 \_\_\_\_\_ 3-5 \_\_\_\_\_  
 \_\_\_\_\_ 3-5 \_\_\_\_\_  
 \_\_\_\_\_ 3-5 \_\_\_\_\_  
 \_\_\_\_\_ 3-5 \_\_\_\_\_

##### Biology Major with Teaching Licensure in Biology

The course work must include one course each in botany, ecology, microbiology, physiology, and human anatomy.

\_\_\_\_\_ 4 \_\_\_\_\_  
 \_\_\_\_\_ 4 \_\_\_\_\_  
 \_\_\_\_\_ 4 \_\_\_\_\_  
 \_\_\_\_\_ 4 \_\_\_\_\_

**Admission.** Students wanting to be admitted to the teacher education program must have a 2.75 grade point average in the major and overall, with no grade less than C- in the content area and the professional education core as well as having passed PRAXIS I.

Although students may enroll in a limited number of education courses, passing PRAXIS I scores must be on file with the Office of Teacher Education Services prior to enrollment in any education practicum course or courses in developing instructional strategies. It is recommended that students take the PRAXIS I exam prior to, or during, enrollment in ECI 301.

**Continuance.** Students must maintain a general grade point average of 2.75 in the academic major and complete all degree requirements for the major and in the professional education core with no grade less than a C- for continuance in the College of Education.

**Graduation.** Requirements for graduation include passage of the Exit Examination of Writing Proficiency; completion of the Senior Assessment; a minimum 2.75 grade point average overall and in the major, with no grade less than a C- in the major, minor, and professional education core; and completion of a minimum of 134 credit hours. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate PRAXIS II specialty area tests. A list of the passing scores established by the Virginia Department of Education is available on the Virginia Department of Education website or the Office of Teacher Education Services, Education Building room 152.

**Continuance.** Students must maintain a general grade point average of 2.75 in the academic major and complete all degree requirements for the major and in the professional education core with no grade less than a C- for continuance in the College of Education.

**Graduation.** Requirements for graduation include passage of the Exit Examination of Writing Proficiency; completion of the Senior Assessment; a minimum 2.75 grade point average overall and in the major, with no grade less than a C- in the major, minor, and professional education core; and complete a minimum of 128 credit hours. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate Praxis II specialty area tests. A list of the passing scores established by the Virginia Department of Education is available on the Virginia Department of Education website or the Office of Teacher Education Services, Education Building room 152.

The Professional Education core courses are as follows:

ECI 301 Social Cultural Foundations of Education	3	_____
ECI 304 Technology Applications in Education (satisfies computer skills requirement)	3	_____
ECI 360 Class Mgmt and Discipline	2	_____
ECI 408 Read/Write in Content	3	_____
ECI 454 Developing Instructional Strategies: Science	4	_____
ECI 485 Student Teaching	12	_____
ESSE 406 Special Needs Children	3	_____
ESSE 413 Fundamentals-Human Growth and Development	3	_____

## UPPER DIVISION GENERAL EDUCATION

Teacher Education Core satisfies this requirement.

Option A. Approved Minor, 12-24 hours; also second degree or second major.

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Option B. Cluster, 9 hours (3 hours may be in the major area of study.)

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Requirements for graduation (non-teacher education tracks) include a minimum cumulative grade point average of 2.00 overall and in the major, 120 credit hours, passage of the Exit Examination of Writing Proficiency, and completion of Senior Assessment.