### Bachelor of Science in Biology-Secondary Education Concentration (w/ VCCS Equivalencies)

**YEAR 1 - FRESHMAN (31 CREDITS)**

**FALL SEMESTER (14 credits)**
- **General Education Coursework:**
  - ENGL 110C*
  - Oral Communication
  - MATH 162M*
  - BIOL 121N & 122N*

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Eng 111
- VCCS Equivalency: Eng 231C*
- VCCS Equivalency: Mth 163
- VCCS Equivalency: Biol 123N & 124N*

**SPRING SEMESTER (17 credits)**
- **General Education Coursework:**
  - ENGL 211C or 221C or 231C*
  - Oral Communication
  - MATH 162M*
  - BIOL 121N & 122N*

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Eng 211C or 221C or 231C
- VCCS Equivalency: Eng 231C*
- VCCS Equivalency: Mth 163
- VCCS Equivalency: Biol 123N & 124N*

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**YEAR 2 - SOPHOMORE (32 CREDITS)**

**FALL SEMESTER (16 credits)**
- **Information Literacy and Research:**
  - STAT 130M*
  - BIOL 291

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Biol 292

**SPRING SEMESTER (16 credits)**
- **Major Coursework:**
  - CHEM 121N & 122N (4 credits)*

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Chem 111
- VCCS Equivalency: Chem 123N & 124N (4 credits)*

**Professional Education Coursework:**
- STEM 101 (1 credit)*

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Tran Guide

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**YEAR 3 - JUNIOR (32 CREDITS)**

**FALL SEMESTER (15 credits)**
- **Major Coursework:**
  - OEAS 110N or OEAS 111N** (4 credits)*
  - CHEM 211 & 212 (5 credits)*
  - BIOL 293

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Biol 303

**SPRING SEMESTER (17 credits)**
- **Major Coursework:**
  - PHYS 111N** (4 credits)*
  - CHEM 211 & 212 (5 credits)*
  - BIOL 293

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Tran Guide

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**YEAR 4 - SENIOR (32 CREDITS)**

**FALL SEMESTER (17 credits)**
- **Major Coursework:**
  - BIOL 405W
  - 300 level Biology Elective**

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Tran Guide

**SPRING SEMESTER (15 credits)**
- **Major Coursework:**
  - BIOL 405W
  - 300 level Biology Elective**

**SUGGESTED EQUIVALENTS:**
- VCCS Equivalency: Tran Guide
- VCCS Equivalency: Tran Guide

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**Notes:**
- Does not include the University's General Education Language and Culture Requirement. Additional Hours may be required. See catalog for details.

*Students must choose 16 elective hours at the 300 level or above from the courses offered by the Department of Biological Sciences. Three of the courses must have a laboratory or field component (see individual course descriptions). Students may use four credits at the 200 level to satisfy the elective requirement. Elective courses must include one approved course each in botany, zoology, microbiology, and human anatomy and physiology (consult with advisor).

Please refer to the catalog for Teacher Preparation requirements.

Professional Education Coursework satisfies the Upper Division General Education Coursework.

Requirements for graduation include completion of ENGL 110C, ENGL 211C or 221C or 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Biology and Senior Assessments, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 125 credit hours, which must include both a minimum of 32 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Note that a C (2.0) must be earned in all biology courses used to satisfy departmental requirements.