

2015 - 2016 Old Dominion University Catalog

Bachelor of Science in Physics

(Concentration C: Teacher Education Licensure)

Sample four year curriculum with a suggested ordering of courses. Students may re-order as needed. Consult with Advisor.

| YEAR 1 - FRESHMAN (32 CREDITS) | | | |
|---|---|--|---|
| FALL SEMESTER (15 credits) | | SPRING SEMESTER (17 credits) | |
| <u>General Education and Major Coursework:</u> | | <u>General Education and Major Coursework:</u> | |
| MATH 211 | 4 | ENGL 211C or 231C | 3 |
| ENGL 110C | 3 | Human Creativity | 3 |
| Language and Culture I (May be waived, see catalog for details) | 3 | Language and Culture II (May be waived, see catalog for details) | 3 |
| CS 150 | 4 | MATH 212 | 4 |
| | | Human Behavior | 3 |
| <u>Professional Education Coursework:</u> | | <u>Professional Education Coursework:</u> | |
| STEM 101 | 1 | STEM 102 | 1 |
| YEAR 2 - SOPHOMORE (31 CREDITS) | | | |
| FALL SEMESTER (17 credits) | | SPRING SEMESTER (14 credits) | |
| <u>General Education and Major Coursework:</u> | | <u>General Education and Major Coursework:</u> | |
| CHEM 121N/122N* | 4 | CHEM 123N/124N* | 4 |
| Literature | 3 | Interpreting the Past | 3 |
| Philosophy and Ethics | 3 | PHYS 232N | 4 |
| PHYS 231N | 4 | | |
| <u>Professional Education Coursework:</u> | | <u>Professional Education Coursework:</u> | |
| STEM 201 | 3 | STEM 202 | 3 |
| YEAR 3 - JUNIOR (31 CREDITS) | | | |
| FALL SEMESTER (15 credits) | | SPRING SEMESTER (16 credits) | |
| <u>General Education and Major Coursework:</u> | | <u>General Education and Major Coursework:</u> | |
| Oral Communication | 3 | Information Literacy and Research: CS 120G or CS 121G | 3 |
| <u>Major Coursework:</u> | | <u>Major Coursework:</u> | |
| MATH 307 or 280 | 3 | PHYS 355 | 3 |
| PHYS 303 | 3 | PHYS 413 | 3 |
| PHYS 319 | 3 | PHYS 103N or 104N | 4 |
| PHYS 323 | 3 | <u>Professional Education Coursework:</u> | |
| | | SCI 468 | 3 |
| YEAR 4 - SENIOR (26 CREDITS) | | | |
| FALL SEMESTER (13 credits) | | SPRING SEMESTER (13 credits) | |
| <u>General Education and Major Coursework:</u> | | <u>Professional Education Coursework:</u> | |
| PHYS 425 | 3 | STEM 485 | 9 |
| PHYS 499W or 489W & 490W (C or better required) | 3 | STEM 402 | 3 |
| PHYS 120 or 309 | 1 | Elective ** | 1 |
| Impact of Technology | 3 | | |
| <u>Professional Education Coursework:</u> | | | |
| STEM 401 | 3 | | |

*CHEM 137N/CHEM 138N may be taken instead of CHEM 121N/CHEM 122N and CHEM 123N/124N.

**Please consult with your ODU advisor for elective coursework.

Language and Culture I and II may be waived, see ODU catalog for exemptions.

The Professional Education satisfies the upper division general education requirement.

Concentration C (Education) is designed for students who are preparing to be high school physics teachers. This curriculum provides a solid foundation in both contemporary physics and in education pedagogy.

Students must first declare the physics Concentration C) teacher preparation track as their major with the physics departmental advisor. All students must apply for and be admitted into the approved physics teacher preparation program. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required grade point averages (GPA). Please see catalog for details.

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 Senior Assessment, completion of the Physics Exit Exam with a minimum score of 20th percentile, 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 the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.