OLD DOMINION UNIVERSITY 2012-2013 Catalog

Bachelor of Science—Physics Major with Teacher Education Licensure

with VCCS equivalencies in (parentheses)

(*) indicates not automatically awarded with transferrable associates degree, C or better required for transfer. For specific science equivalencies for the various emphasis areas, please see transfer guide.

LOWER DIVISION GENERAL EDUCATION

A. Skills

Written Communication
ENGL 110C 3 (ENG 111)
ENGL 211C or 231C 3 (See transfer guide)

Oral Communication
COMM 101R, 103R or 112R 3 (See transfer guide)

Mathematics (satisfied in major)
Proficiency through 102F 0-6 (See transfer guide)

Information Literacy and Research
CS 120G or CS 121G 3

B. Ways of Knowing

Human Creativity 3 (See transfer guide)

Interpreting the Past 3 (See transfer guide)

Literature 3 (See transfer guide)

Human Behavior 3 (See transfer guide)

AART 100S; ANTR 110S; COMM 200S; CRJS 215S; ECON 200S, 201S, 202S; FIN 210S; GEOG 100S, 101S; POLS 100S, 101S, 102S; PSYC 201S, 203S; SOC 201S; WMST 201S

Impact of Technology
(satisfied by TLED 430 for teacher education)

Departmental Requirements

MATH 211 Calculus I 4 (MTH 173, 273)*
MATH 212 Calculus II 4 (MTH 174, 274)*
Chemistry 121N/122N-123N/124N 8 (CHM 111 and 112)*

*CHEM 137N-138N Accelerated General Chemistry I & II may be taken instead

Physics 103N Intro Astronomy 4 (NAS 131)*

Physics 231N-232N University Physics 8 (PHY 231, 241 and PHY 232, 242)*

PHYS 323 Modern Physics 3 (PHY 243)*

PHYS 319 Analytical Mechanics 3

PHYS 303 Laboratory 3

PHYS 120 or 309 Seminar 1

PHYS 355 Math. Methods of Physics 3

PHYS 425 Electromagnetism 3

PHYS 413 Methods of Exp Physics 3

PHYS 417W Senior Thesis 3

Or 489W/490W

Professional Education Core:

TLED 301 Foundations and Assessment of Ed 3

TLED 360 Classroom Management and Discipline 2

SPED 406 St w/Diverse Learning Needs 3

TLED 408 Reading and Writing in Content Area 3

TLED 430 PK-12 Instructional Technology 3

STEM 454 Devel. Instructional Strategies: Science 3

TLED 483 Practicum Seminar in Education 1

TLED 485 Student Teaching 12

SPED 313 Human Growth and Development 3

(PSY 231-232 at the VCCS will transfer for SPED 313 credit)

Admission

Students must first declare the physics (Track 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).

Virginia Board of Education prescribed assessments:

- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments, visit the Teacher Education Services website, http://education.odu.edu/tes/

Required Grade Point Averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all physics courses and all other science content courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved physics teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Teacher Education Services.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Physics courses must be passed with a grade of C- or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Virginia Communication and Literacy Assessment (VCLA) and the PRAXIS II Physics Content examination prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Virginia Board of Education Prescribed Assessments

Virginia Communication and Literacy Assessment (VCLA) – a passing composite score of 470 is required on this reading and writing assessment

PRAXIS II Physics: Content Knowledge (test code: 0265) – passing score of 147 is required

Registration

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, http://education.odu.edu/tes/.

Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or 221C, 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.