BACHELOR OF SCIENCE—Physics Major Track C (Education)
2010-2011 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 "C-" or below were earned will not transfer. Therefore Community College degree holders may require additional credits to meet the 120 credit hour graduation minimum.

**Lower Division General Education Requirements**

### A. Skills

<table>
<thead>
<tr>
<th>Subject</th>
<th>Grade/Credit</th>
<th>VCCS Transfer Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication–6 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 110C English Composition I</td>
<td>3</td>
<td>AS/ENG 111</td>
</tr>
<tr>
<td>ENGL 211C, 231C</td>
<td>3</td>
<td>AS/ENG 210, 115, or 131</td>
</tr>
</tbody>
</table>

### Oral Communication–3 hours

Satisfied in the major by

Phys 499W

### Mathematics–3 hours

MATH 162M

Satisfied in the major

### Language and Culture –0-6 hours

AS/HS/TOEFL

BS students’ competence must be at the 102 or 111 level.

Consult transfer guide for all equivalencies.

### Information Literacy–3 hours

Satisfied by TLED 430

### B. Ways of Knowing

#### Human Creativity–3 hours

ARTh 121A, ARTS122A, 3 AS/ART 101, 102, 111

DANC 185A, MUSC 264A, 3

THEA 241A, COMM/THEA 270A

MUS 121, 122; SPD130, 141, or 142

#### History–3 hours

HIST 100H, 101H, 102H, 103, 104H, 105H 3

HIS 101, 102, 111, 112, 121, 122, 201, 202, 203, 204, 231, 232, 251, 252, 253, or 254

#### Literature–3 hours

ENGL 112L, 114L, FLET 100L 3

AS/ENG 112, 235, 237, 241, 242, 246, 267, or 268

#### Philosophy and Ethics–3 hours

PHIL 110P, 120P, 140P, 230E, 250E, 303E, 344E, 441E, 442E 3

AS/PHI 100, 101, 102 211, 212, 220, REL 230, 231, or 232

#### Natural Science and Technology–8 hours

Met in the major

Human Behavior–3 hours 3 AS


The Impact of Technology–3 hours 3 AS


### Higher Division General Education

Entrance Writing Sample Placement Test: _____________________

Entrance Math Placement Test: _____________________

### Lower Division General Education Requirements

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade/Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 103N Introductory Astronomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 231N University Physics I*</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232N University Physics II*</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 323 Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 319 Analytical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 320 Electricity &amp; Magnetism</td>
<td>3</td>
</tr>
<tr>
<td>Approved Physics Elective 300-400</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 303 Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 413 Methods of Exp. Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 499W Senior Thesis</td>
<td>3</td>
</tr>
<tr>
<td>Approved Physics Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

*Physics majors must earn a grade of “C” or better in PHYS 231 and PHYS 232.

**(CHEM 137N/138N) or (CHEM 121N/122N/123N/124N)

### Professional Education Requirements:

**TLED 301 Found. Assessment and Educ.** 3

**TLED 430 Instructional Technology** 3

**SPED 313 Human Development** 3

**TLED 360 Management & Discipline** 2

**SPED 406 The Special Needs Student** 3

**TLED 408 Reading & Writing** 3

**STEM 454 Strategies for Teaching Sci.** 3

**TLED 483 Practicum Seminar (on-line)** 1

**TLED 485 Student Teaching** 12

**Upper Division General Education**

Satisfied by Secondary Education Endorsement.

**120 Hours and a 2.75 Grade Point Average in the Major, Education, and Overall Are Needed to Graduate.**

**No Course With a Grade of Less Than C- Can Be Used to Satisfy Graduation Requirements.**

### Additional Graduation Requirements:

Passage of Exit Writing Exam

Application for Graduation

Passage of Physics Exit Exam

Senior Assessment

**edited: 5/22/10**