

**BACHELOR OF SCIENCE–Physics Major Track A (Research)**  
2004–2006 Old Dominion University Catalog

NAME \_\_\_\_\_

Student ID# \_\_\_\_\_

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. **(AS=Associate degree)**

**Entrance Writing Sample Placement Test:** \_\_\_\_\_

**Entrance Math Placement Test:** \_\_\_\_\_

**LOWER DIVISION GENERAL EDUCATION REQUIREMENTS**

**A. Skills** grade/credit VCCS transfer equivalent

Composition–6 hours

ENGL 110C English Composition I \_\_\_\_\_ 3 AS/ENG 111

ENGL 111C, 131C, HIST 111C,

PHIL 111C \_\_\_\_\_ 3 AS/ENG 210, 115, or 131

Oral Communication–3 hours

COMM 101R, 103R, 112R \_\_\_\_\_ satisfied in the major by

Phys 499W

Mathematics-3 hours

MATH 162M \_\_\_\_\_ satisfied in the major

Foreign Language Skills–0-6 hours \_\_\_\_\_ AS/HS/TOEFL

BS students’ competence must be at the 102 level.

Consult transfer guide for all equivalencies.

Computer Skills–3 hours

CS 149D or higher \_\_\_\_\_ satisfied in the major by

CS 150 or 155

**B. Perspectives**

Fine and Performing Arts--3 hours

ART 121A, 122A, DANC 185A, \_\_\_\_\_ 3 AS/ART 101, 102, 111,

MUSC 264A, THEA 241A

112, 113, 114, 115;

MUS 121, 122; SPD130,

141, or 142

History--6 hours

HIST 101H, 102H, 103H, 104H \_\_\_\_\_ 3 AS/Choose two from

HIS 101, 102, 111, 112,

121, 122, 201, 202, 203,

204, 231, 232, 251, 252,

253, or 254

Literature--3 hours

ENGL 112L, 144L, FLET 100L \_\_\_\_\_ 3 AS/ENG 112, 235, 237,

241, 242, 246, 267, or

268

Philosophy–3 hours

PHIL 110P, 120P, 150P \_\_\_\_\_ 3 AS/PHI 100, 101, 102,

211, 212, 220, REL 230,

231, or 232

Natural Science and Technology–11 to 12 hours

Eight credit hours of Natural Science with labs in sequence. Additionally,

3-4 credit hours of Natural Science or Technology are required.

See transfer guide for specific transfer equivalencies.

AS \_\_\_\_\_ AS \_\_\_\_\_ Met in the major

Social Science–6 hours

I. Social Science \_\_\_\_\_ 3 AS

Must be two separate disciplines \_\_\_\_\_ 3 AS

(Consult Transfer Guide for equivalencies)

<u>Physics Course Requirements</u>	<u>grade/credit</u>	<u>Transfer</u>
MATH 211 Calculus I	_____ 4	_____
MATH 212 Calculus II	_____ 4	_____
MATH 312 Calculus III	_____ 4	_____
MATH 307 Differential Equations	_____ 3	_____
MATH 316 or 401 or 421 or 422	_____ 3	_____
CHEM 115N College Chemistry I	_____ 4	<u>CHM 111 or 113</u>
CHEM 116N College Chemistry II	_____ 4	<u>CHM 112 or 114</u>
CS 150 Intro to Programming	_____ 4	_____
PHYS 231N University Physics I	_____ 4	_____*
PHYS 232N University Physics II	_____ 4	_____*
PHYS 323 Modern Physics	_____ 3	_____
PHYS 319 Analytical Mechanics	_____ 3	_____
PHYS 320 Electricity & Magnetism	_____ 3	_____
PHYS 352 Intro. Quantum Mechanics	_____ 3	_____
PHYS 303 or 403 Laboratory	_____ 3	_____
PHYS 413 Methods of Exp. Physics	_____ 3	_____
PHYS 404 or 414 or 420	_____ 3	_____
PHYS 453 Radiation & Optics	_____ 3	_____
PHYS 454 Thermal Physics	_____ 3	_____
PHYS 456 Inter. Quantum Mech.	_____ 3	_____
PHYS 499W Senior Thesis	_____ 3	_____
Approved Physics Seminar	_____ 1	_____
Two courses from:		
PHYS 313, 350, 411, 415, 416	_____ 3	_____
with at least three credits 4xx	_____ 3	_____

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

**UPPER DIVISION GENERAL EDUCATION**

Satisfied by any University approved 2<sup>nd</sup> major, minor, or cluster.

**120 HOURS AND A 2.0 GRADE POINT AVERAGE IN THE MAJOR, MINOR, AND OVERALL ARE NEEDED TO GRADUATE.**

**Additional Graduation Requirements:**

Passage of Exit Writing Exam \_\_\_\_\_

Application for Graduation \_\_\_\_\_

Physics Exit Exam \_\_\_\_\_

Senior Assessment \_\_\_\_\_

**PHYSICS MINOR: (12 credits at 300-400 level)**

PHYS 231-232 \_\_\_\_\_ 8 \_\_\_\_\_

PHYS 319 \_\_\_\_\_ 3 \_\_\_\_\_

PHYS 320 \_\_\_\_\_ 3 \_\_\_\_\_

Six additional credits at 300-400 level

\_\_\_\_\_ 3 \_\_\_\_\_

\_\_\_\_\_ 3 \_\_\_\_\_