

# 2017 - 2018 Old Dominion University Catalog

## Bachelor of Science in Physics (Concentration A - Research)

*Sample four year curriculum with a suggested ordering of courses. A specific program should be made in consultation with a Physics Advisor.*

YEAR 1 - FRESHMAN (26 CREDITS)			
FALL SEMESTER (14 credits)		SPRING SEMESTER (12 credits)	
<u>General Education and Major Coursework:</u>		<u>General Education and Major Coursework:</u>	
MATH 211	4	MATH 212	4
ENGL 110C	3	PHYS 261N	4
CHEM 121N/122N*	4	CHEM 123N/124N*	4
Oral Communication	3		
YEAR 2 - SOPHOMORE (30 CREDITS)			
FALL SEMESTER (14 credits)		SPRING SEMESTER (16 credits)	
<u>General Education and Major Coursework:</u>		<u>General Education and Major Coursework:</u>	
ENGL 211C or 231C	3	Human Creativity	3
MATH 312 or 285	4	Interpreting the Past	3
PHYS 262N	4	PHYS 319	3
Information Literacy and Research: CS 120G or CS 121G	3	PHYS 313+309	4
		MATH 307 or 280	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>	
PHYS 355	3	MATH 316, 401, 421 or 422	3
Literature	3	CS 150	4
PHYS 303	3	PHYS 413	3
PHYS 323	3	Human Behavior	3
Impact of Technology	3	PHYS 454	3
YEAR 4 - SENIOR (33 CREDITS)			
FALL SEMESTER (16 credits)		SPRING SEMESTER (17 credits)	
<u>General Education and Major Coursework:</u>		<u>General Education and Major Coursework:</u>	
PHYS 425	3	PHYS 453	3
PHYS 452	3	PHYS 456	3
PHYS 420	3	Select one of the following: PHYS 411, 415, 416 or 417	3
PHYS 489W	1	PHYS 490W	2
Philosophy and Ethics	3	Elective**	3
<u>Upper Division Gen. Ed. Coursework:</u>		<u>Upper Division Gen. Ed. Coursework:</u>	
300-/400-level course (Option D)	3	300-/400-level course (Option D)	3

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

\*\*Consult with Advisor.

Language and Culture is not included in this sample (6 credits). This requirement may be waived, see catalog for details.

Note: Upper division general education (minor) has other options, see catalog for requirements.

Concentration A ( Research) is designed primarily for students preparing to do graduate study in physics and related fields or for students preparing to work professionally upon completion of the B. S. degree in various technical fields requiring the strongest preparation in physics.

Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major, a grade of C or better in all courses required for the major, including prerequisite courses, 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, completion of ENGL 110C, ENGL 211C or 221C or 231C, and a writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.