

OLD DOMINION UNIVERSITY 2008-2009 Catalog

Bachelor of Science-Mathematics Major

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)

LOWER DIVISION GENERAL EDUCATION

A. Skills *VCCS Equivalents*

Written Communication

ENGL 110C	_____3	See Transfer Guide
ENGL 111C or 131C	_____3	See Transfer Guide

<u>Oral Communication</u>	_____3	_____
(Met in the major by MATH 317)		

<u>Mathematics</u>	_____6	MTH 163*
(Math 162M-163)		MTH 164*

<u>Foreign Language Skills</u>	_____3	_____
(Competence must be at the 102 level)		

<u>Computer Skills</u>	_____3	CSC 201, EGR 126*
(requires CS 150)		

B. Perspectives

<u>Fine and Performing Arts</u>	_____3	See Transfer guide
ARTH 121A, ARTS 122A, MUSC 264A, DANC 185A, THEA 241A, COMM/THEA 270A		

<u>History</u>	_____3	See Transfer guide
HIST 101H, 102H, 103H, 104H, or 105H	_____3	

<u>Literature</u>	_____3	See Transfer guide
ENGL 112L, 144L, or FLET 100L		

<u>Philosophy</u>	_____3	See Transfer guide
PHIL 110P, 120P, or 150P		

(recommend PHIL 120P)
Natural Science and Technology
 (Eight credit hours of Natural Science with labs in sequence. Additionally, 3-4 credit hours of Natural Science or Technology are required. PHYS 231N-232N are advised for the applied Mathematics option; either BIOL 108N-109N or BIOL 115N-116N are advised for the statistics/biostatistics option.)

_____4 (Choose 2 from Transfer Equivalent Sheet)*		
_____4		

Technology Requirement	_____3-4	_____
<u>Social Sciences</u>	_____3	See Transfer guide
	_____3	_____

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

Mathematics Course Requirements

MATH 211 Calculus I	_____4	MTH 173, 273*
MATH 212 Calculus II	_____4	MTH 174, 274*

MATH 307 Ordinary Differential Equations	_____3	_____
MATH 311W Modern Algebra I	_____3	_____

MATH 312 Calculus III	_____4	_____
MATH 316 Intro Linear Algebra	_____3	_____

MATH 317 Calculus IV: Into Analysis	_____3	_____
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STAT 310W or 431 Intro Data Analysis or Theory of Stat	_____3	_____
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(statistics/biostatistics majors take both)

STAT 330 or 331 Intro Probability and Stat or Theory of Probability (Statistics and Biostatistics majors take STAT 331)	_____3	_____
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A grade of C+ or higher is required in the courses listed above. In

addition, a grade of C or better is required in mathematics and statistics prerequisite courses to advance to the next course.

All students are required to choose one of the following options:

Applied Mathematics

MATH 401 Partial Differential Equations	_____3
MATH 408 Applied Numerical Methods I	_____3
MATH 422 Applied Complex Variables	_____3
MATH 400-level electives	_____3

(choose from MATH 400, 404, 406, 457)

Statistics/Biostatistics

STAT 310W or 431 Intro Data Analysis or Theory of Statistics	_____3
STAT 405 SAS: An Introduction to Data Handling	_____1
STAT 400-level electives	_____15

Math Teaching Licensure

Admission. Students applying for admission to the teacher education programs must (1) complete at least one semester at Old Dominion University, (2) have a 2.75 grade point average overall, in the major, and in the professional education core with no grade less than C- in all courses taken in the major and in the professional education core, (3) have passed PRAXIS I or achieved State Board of Education approved scores on the SAT or ACT, (4) present written recommendations from two faculty members from the Occupational and Technical Studies Department, and (5) have an interview with the program leader. Although students may enroll in a limited number of education courses, admission into the teacher education program and passing PRAXIS I scores or approved equivalent test scores must be on file in the Teacher Education Services Office prior to students enrolling in any professional education practicum course.

Continuance. Student in education licensure programs must (1) satisfy University requirements, (2) continue to maintain a 2.75 grade point average overall, in the major, and in the professional education core with no earned grade less than C- in all courses taken in the major and in the professional education core, and (3) successfully complete a student teaching interview.

Assessments required for teacher education programs and licensure. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure exams. Students who complete their programs after December 1, 2006 are required to take the Virginia Communication and Literacy Assessment (VCLA) to be eligible for licensure. The VCLA should be taken during the semester of student teaching. It is recommended that the VCLA be taken after students have completed their English and reading course requirements. In addition, all students must take and pass the Exit Examination of Writing Proficiency to be eligible for student teaching. The University recommends that students take this exam in their junior year. All students will take and attain a passing score on the appropriate PRAXIS II specialty test in order to be eligible for student teaching and licensure. Score reports of all examinations must be on file in the Teacher Education Services Office in room 152 of the Education Building.

Exit. Students in marketing education and technology education licensure programs must have (1) a 2.75 grade point

average overall, in the major, and in the professional education core, (2) earned a passing grade in student teaching, and (3) completed the senior assessment.

NOTE: Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education are under constant revision. Any changes resulting from these factors supersede the program requirements described here or in the University catalog. Students should obtain current program information from their academic advisor and the Darden College of Education website at <http://www.education.odu.edu>.

MATH 400 History of Mathematics

_____3

MATH 404 Fundamental Concepts of Geometry _____3

MATH 406 Number Theory _____3

MATH 417 or 422 Inter. Real Analysis or Applied

Complex Variable _____3

MATH 400-level electives (2 courses) _____6

Professional Education core:

ECI 301 Foundations and Assessment of Ed _____3 EDU 200*

ECI 360 Classroom Management and Discipline_____3

ECI 408 Reading and Writing in Content Area _____3

ECI 430 PK-12 Instructional Technology _____3 EDU 280*

ECI 453 Developing Instructional Strategies: Math_____3

ECI 483 Practicum Seminar in Education _____1

ECI 485 Student Teaching _____12

ESSE 313 Human Growth and Development _____3 PSY 230*

ESSE 406 St w/Diverse Learning Needs _____3

UPPER DIVISION GENERAL EDUCATION

Option A. Approved Minor, 12-24 hours; second degree or second major. (**Professional Education core satisfies this requirement.**)

Option B. Cluster, 9 hours (3 hours may be in the major area of study.)Requirements for graduation (non-teacher education tracks) include a minimum cumulative grade point average of 2.00 overall and in the major, 120 credit hours, passage of the Exit Examination of Writing Proficiency, and completion of Senior Assessment.