

OLD DOMINION UNIVERSITY 2006-2008 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

Written Communication

ENGL 110C _____ 3 _____

ENGL 111C or 131C _____ 3 _____

Oral Communication _____ 3 _____

(Met in the major by MATH 317)

Mathematics _____ 6 _____ *

(Math 162M-163)

Foreign Language Skills _____ 3 _____

(Competence must be at the 102 level)

Computer Skills _____ 3 _____ *

(requires CS 150)

B. Perspectives

Fine and Performing Arts _____ 3 _____

ARTH 121A, ARTS 122A, MUSC 264A, DANC 185A, THEA 241A, COMM/THEA 270A, or GEN 101

History _____ 3 _____

HIST 101H, 102H, 103H, 104H, _____ 3 _____

or 105H or GEN 101

Literature _____ 3 _____

ENGL 112L, 144L, or FLET 100L or GEN 101

Philosophy _____ 3 _____

PHIL 110P, 120P, or 150P or GEN 101

(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. GEN 101 may be

used for the third requirement.) _____ 4 _____

_____ * _____ 4 _____ *

Technology Requirement _____ 3-4 _____

(GEN 101 may be used)

Social Sciences _____ 3 _____

_____ 3 _____

ANTR 110S; COMM 200S; CRJS 215S; ECON 200S, 201S, 202S

GEOG 100S, 101S; POLS 100S, 101S; PSYC 201S, 203S; SOC

201S; WMST 201S (GEN 101 may be used for one social science).

Mathematics Course Requirements

MATH 211 Calculus I _____ 4 _____ *

MATH 212 Calculus II _____ 4 _____ *

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 _____

STAT 310W or 431 Intro Data _____ 3 _____

Analysis or Theory of Stat

(statistics/biostatistics majors take both)

STAT 330 or 331 Intro Probability _____ 3 _____

and Stat or Theory of Probability (Statistics and Biostatistics majors

take STAT 331)

A grade of C+ or higher is required in the courses listed above.

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 _____ 9

(at most three hours from MATH 400, 404, 406)

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 wanting to be admitted to the teacher education program must have a 2.75 grade point average in the major and overall, no grade less than a C- in the Math/Statistics content area and the professional education core, and a passing score on PRAXIS I or achieved State Board of Education-approved SAT or ACT scores. Although students may enroll in a limited number of education courses, a passing PRAXIS I score or approved equivalent test score must be on file with the Office of Teacher Education Services and Advising prior to enrollment in any education practicum course or courses in developing instructional strategies. It is recommended that students take the PRAXIS I exam prior to, or during, enrollment in ECI 301.

The PRAXIS II Mathematics Content Examination must be passed before the candidate may begin the teacher internship. Passing PRAXIS II scores must be on file in the Office of Teacher Education Services and Advising and attached to the internship application. Please consult the Department of Mathematics and Statistics for information on PRAXIS II Math tutorial that runs each semester. There is a charge for this tutorial.

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 Variables	_____3
MATH 400-level electives (2 courses)	_____6
Professional Education core:	
ECI 301 Social and Cultural Foundations	_____3
ECI 304 Educational Applications of Technology	_____3
ESSE 406 St w/Diverse Learning Needs	_____3
ESSE 413 Human Growth and Development	_____3
ECI 360 Classroom Management and Discipline	_____3
ECI 408 Reading and Writing in Content Area	_____3
ECI 453 Developing Instructional Strategies: Math	_____4
ECI 485 Student Teaching	_____12

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.