OLD DOMINION UNIVERSITY 2010-2011
MATHEMATICS MAJOR (includes education)
with VCCS equivalencies in (parentheses)
(* indicates not automatically waived with transferrable associates degree, C or better required for transfer)

Lower Division General Education

A. Skills

Written Communication
ENGL 110C _____3(ENG 111)
ENGL 211C, 221C, or 231C _____3(See transfer guide)

Oral Communication
COMM 101R, 103R, or 112R _____3(See transfer guide)

Mathematics
MATH 162M and 163 _____6(MTH 163, 164)*

Language and Culture
Proficiency through 102F _____0-6(See transfer guide)

Information Literacy and Research
CS 121G _____3_____

B. Ways of Knowing

Human Creativity _____3(See transfer guide)
ARTH 121A, ARTS 122A, MUSC 264A, DANC 185A, THEA 241A, COMM/THEA 270A

Interpreting the Past _____3(See transfer guide)
HIST 100H, 101H, 102H, 103H, 104H, or 105H

Literature _____3(See transfer guide)
ENGL 112L, 114L, or FLET 100L

Philosophy & Ethics _____3(See transfer guide)
PHIL 120P recommended

The Nature of Science
BIO 108N-109N, CHEM 105N/106N-107N/108N, PHYS 101N-102N, 103N-104N, OEAS 106N-107N, OEAS 110N- 111N-112N. PHYS 231-232N recommended for applied mathematics option. Either BIO 108N-109N or 115N-116 recommended for statistics/biostatistics option.
_____4 _____4(See transfer guide)

Human Behavior _____3(See transfer guide)
ANTR 110S; COMM 200S; CRJS 215S; ECON 200S, 201S, 202S; FIN 210S, GEOG 100S, 101S; POLS 100S, 101S, 102S; PSYC 201S, 203S; SOC201S; WMST 201S

Impact of Technology _____3(See transfer guide)
COMM 372T, CS 300T, DNTH 440T, or ENGL 307T, GEOG 306T, HIST 300T, 304T, 386T, 389T, IT 360T, MUSC 335T, OEAS 302K, PHIL 383T, POLS 350T, STEM 110T, 370T, or WMST 390T

Other Required Courses
CS 150 Problem Solving & Programming I _____4(CS 201, ER 126)*

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: Intro Analysis	_____3	_____
STAT 310 or 431 Intro Data Analysis or Theory of Stat (Statistics/Biostatistics majors take both)	_____3	_____
STAT 330 or 331 Intro Probability and Stat or Theory of Probability (Statistics and Biostatistics majors take STAT 331)	_____3	_____

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 (At most 3 credits from MATH 400, 404, 406)	_____9

Statistics/Biostatistics

STAT 310 or 431 Intro Data Analysis or Theory of Statistics	_____3
STAT 405 SAS: An Introduction to Data Handling	_____1
STAT 400-level electives	_____12

Math Teaching Licensure

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:

TLED 301 Foundations and Assessment of Ed	_____3
TLED 360 Classroom Management and Discipline	_____3
TLED 408 Reading and Writing in Content Area	_____3
TLED 430 PK-12 Instructional Technology	_____3
STEM 453 Developing Instructional Strategies: Math	_____3
TLED 483Practicum Seminar in Education	_____1
TLED 485 Student Teaching	_____12
SPED 313 Human Growth and Development*	_____3
SPED 406 St w/Diverse Learning Needs	_____3

(PSY 241 and 242 together will transfer as SPED 313)*

Admission. Students applying for admission to the teacher education programs must have a 2.75 grade point average overall, in the major, and in the professional education core and overall with no grade less than C- in Math/Statistics content area and in the professional education core, and a passing score on PRAXIS I or achieved State Board of Education approved scores on the SAT or ACT scores. 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.

The Praxis II Mathematics Content Examination and the Virginia Communications Literacy Assessment (VCLA) must be passed before the candidate may begin the teacher internship. Passing Praxis II and VCLA scores must be on file in the Office of Teacher Education Services and Advising prior to student teaching. Please consult the Department of Mathematics and Statistics for information on a Praxis II Math tutorial that runs each semester. There is a charge for this tutorial.

Continuance. Student must maintain an overall grade point average of 2.75 and 2.75 in the academic major and the professional education core and complete all degree requirements for the major and in the professional education core with no grade less than a C- for continuance in the College of Education. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate Praxis II specialty area test. A list of the passing scores established by the Virginia Department of Education is available on the Virginia Department of Education website or the Office of Teacher Education Services and Advising, Education 152.

Graduation. Requirements for graduation include passage of the Exit Examination of Writing Proficiency; completion of the Senior Assessment; a minimum 2.75 grade point average overall, in the major and in the professional education core, with no grade less than a C- in the major and professional education core; and completion of a minimum of 134 credit hours. Passage of the Praxis II exam is required for teacher education licensure.

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.

UPPER DIVISION GENERAL EDUCATION

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

Option B. Interdisciplinary Minor (specifically12 hours, 3 of which may be in the major)

Option C. International Business and Regional Courses or an approved Certification Program such as teaching licensure

Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

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.