

B. S. Mathematics

Math Secondary School Teacher Option Curriculum Sheet

| I LOWER DIVISION REQUIREMENTS | | | | |
|--------------------------------------|--------|----|-------|---|
| Subj | Course | Cr | Grade | Comments *See notes overleaf |
| Engl | C | 3 | | English Composition 110C |
| Engl | C | 3 | | English 211C, 221C, or 231C |
| Engl | L | 3 | | Literature 112L or 114L or FLET 100L |
| Hist | H | 3 | | 100H, 101H, 102H, 103H, 104H, 105H |
| | G | 3 | | Information Literacy and Research CS 121G |
| Phil & Ethics | P E | 3 | | Philosophy 110P, 120P, 140P, 230E, 250E, 303E, 344E, 345E, 441E, 442E |
| | A | 3 | | See Note 2. Human Creativity |
| | N | 4 | | Nature of Science |
| | N | 4 | | Sequence. See Note 3 Encouraged to take Phys 231N-232N |
| | T | 3 | | TLED 430 will satisfy. |
| Comm | R | 3 | | Communications 101R, 103R, 112R, 126R |
| | S | 3 | | Human Behavior See Note 4. |
| | F | 3 | | Foreign Language Requirement. See Note 5. for details. |
| | F | 3 | | |
| Math | M | 3 | | Math 162 or Math 166 |
| Math | 163 | 3 | | Precalculus II |
| C.S. | 150 | 4 | | Introduction to Programming |

| II CORE COURSES | | | | |
|--|--------|----|-------|-----------------------------------|
| A grade of C+ or better is required in each core course | | | | |
| Subj | Course | Cr | Grade | Comments |
| Math | 211* | 4 | | Calculus I |
| Math | 212 | 4 | | Calculus II |
| Math | 307 | 3 | | Ordinary Differential Equations |
| Math | 311UW | 3 | | Abstract Algebra I |
| Math | 312 | 4 | | Calculus III |
| Math | 316 | 3 | | Introductory Linear Algebra |
| Math | 317 | 3 | | Calculus IV Introductory Analysis |
| Stat | | 3 | | Stat 330 OR 331 |
| Stat | | 3 | | Stat 310 OR 431 |

* prerequisites: Math 162M and Math 163 or Math 166

| III SENIOR MATH COURSES | | | | |
|--------------------------------|--------|----|-------|---|
| Subj | Course | Cr | Grade | Comments |
| Math | 400 | 3 | | Mathematics to the Time of Newton and Leibniz |
| Math | 404 | 3 | | Geometry |
| Math | 406 | 3 | | Number Theory & Discrete Math |
| Math | | 3 | | Math 417 or 422 |
| | | 3 | | Two Math or |
| | | 3 | | Statistics electives |

[Computer Science Add-On is possible]

Math Advisor: _____

Meet with Teacher Education Advisor: _____

Room 152 Educ. Bldg. Tel: 683-3348

| IV EDUCATION COURSES | | | | |
|-----------------------------|--------|----|-------|--|
| Subj | Course | Cr | Grade | Comments |
| TLED | 301* | 3 | | Social and Cultural Foundations of Education |
| TLED | 430 | 3 | | Educational Applications of Technology |
| SPED | 313 | 3 | | Human Growth and Development |
| TLED | 360 | 2 | | Classroom Management and Discipline |
| SPED | 406 | 3 | | The Special Needs Student |
| TLED | 408 | 3 | | Reading and writing in Content Area |
| STEM | 453** | 3 | | Developing Instructional Strategies, Mathematics in Grades 6 - 12 |
| TLED | 483 | 1 | | Practicum Seminar |
| TLED | 485 | 12 | | Student Teaching (Take PRAXIS II) |
| | | | | Admission, continuance, and exit requirement for teacher ed is a 2.75 GPA overall and 2.75 in the academic major. |
| | | | | No courses in the academic major and professional education courses in which the student has made below a C- will be accepted for admission, continuance, and exit requirements in the College of Education. |
| | | | | See Darden College of Education to learn more about Education Core courses. Darden College of Education phone: 683-3283 |

** Must apply to Teacher Education prior to enrolling in STEM 453.

**Must pass Praxis I and have scores turned into Teacher Ed Services (683-3348, EDUC 152) prior to enrolling in STEM 453.

* You are required to take Praxis I during TLED 301.

Overleaf for Applied Math / Math Secondary Options

Please refer to the catalog for more detailed information.

I LOWER DIVISION REQUIREMENTS

- 1 Students enrolled in the Academic Honors Program are eligible to enroll in other courses that satisfy Lower Division General Education requirements. See the catalog for more details.
- 2 One of the following courses must be selected:
ART 121A, ART 122A
MUSC 264A
DANC 185A
THEA 241A
COMM/THEA 270A
- 3 Two courses in different sciences can be chosen, but two first halves of sequences in the same science cannot be chosen
BIOL 105N-106N, 108N-109N, 115N-116N
CHEM 105N-106N, 107N-108N, 121N-122N, 123N-124N, 137N-138N
OEAS 106N-107N, 110N or 111N, 112N
PHYS 101N-102N, 103N-104N, 111N-112N, 231N-232N
- 4 One course from:
ANTR 110S GEOG 100S, 101S
COMM 200S POLS 100S, 101S, 102S
CRJS 215S PSYC 201S, 203S
ECON 200S, 201S, 202S SOC 201S
FIN 210S WMST 201S

5 Students who complete three high school credits in one foreign language or two high school credits in each of two languages are exempt from this requirement. Students who have some foreign language experience but are not exempt from this requirement, may only need to take one course if a score on the CEEB Foreign Language Achievement Test so indicates. All others must take a 101F-102F sequence in any available foreign language.

Any student who graduated from high school prior to June, 1986 is exempt from this requirement. Non-native speakers of English who were required to meet University TOEFL requirements are also exempt from this requirement.

Please consult the catalog for complete details.

II CORE COURSES

- 1 MATH 211-212 is the freshman calculus sequence. It is a prerequisite to **all** other math courses.
- 2 MATH 307, 312 may be taken in either order or at the same time.
- 3 STAT 331-431 is a two-semester statistics sequence. STAT 331 is only offered in the Fall semester, and is a prerequisite for STAT 431. STAT 431 is only offered in the Spring semester. This sequence should be started immediately after completion of MATH 312, or concurrently with MATH 312. Students can get an earlier start in their Stat requirements by taking the sequence STAT 310-330.

Virginia Community College Transfer Guide

A student who has been awarded an associates degree (A.A., A.S., or A.A. & S.) from a Virginia community college will be considered to have met Old Dominion University's lower-division general education requirements. Otherwise, Math courses from a community college transfer in according to the following table.

MATHEMATICS (MTH)

TRANSFERABLE COURSES AT 2000-2002 OLD DOMINION VIRGINIA COMMUNITY COLLEGES/UNIVERSITY EQUIVALENTS

| | |
|-------------|---------------|
| MTH 146 | STAT 130M |
| MTH 157 | STAT 130M |
| MTH 158 | MATH 102M |
| MTH 163-164 | MATH 162M-163 |
| MTH 166 | MATH 166 |
| MTH 173-174 | MATH 211-212 |
| MTH 240 | STAT 130M |
| MTH 241 | STAT 130M |
| MTH 270 | MATH 200 |
| MTH 271 | MATH 200 |

NOTE: All other 100 and 200 level MTH courses are transferable as lower level math electives. Students should be aware that community college mathematics courses will not transfer to Old Dominion University at or above the 300 level and, in particular, will not convey upper-division General Education mathematics credit.