# B. S. Mathematics

## Statistics/Biostatistics Option Curriculum Sheet

### I LOWER DIVISION REQUIREMENTS

<table>
<thead>
<tr>
<th>Subj</th>
<th>Course</th>
<th>Cr</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL</td>
<td>C 3</td>
<td>English Composition 110C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL</td>
<td>C 3</td>
<td>English 211C, 221C or 231C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL</td>
<td>L 3</td>
<td>Literature 112L or 144L or FLET 100L</td>
<td></td>
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<tr>
<td>HIST</td>
<td>H 3</td>
<td>100H, 101H, 102H, 103H, 104H, 105H</td>
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<tr>
<td>G 3</td>
<td>Information Literacy and Research CS 105H</td>
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<tr>
<td>PHIL</td>
<td>P 3</td>
<td>Philosophy 110P, 120P, 140P, 230E, 250E, 303E, 344E, 345E, 441E, 442E</td>
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</tr>
<tr>
<td>A 4</td>
<td>See Note 2 Human Creativity</td>
<td></td>
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</tr>
<tr>
<td>N 4</td>
<td>Nature of Science Sequence See Note 3 Encouraged to take Phys 231N-232N</td>
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<tr>
<td>T 3</td>
<td>See Note 6</td>
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<td></td>
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<tr>
<td>S 3</td>
<td>Human Behavior See Note 4</td>
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<tr>
<td>F 3</td>
<td>Foreign Language Requirement See Note 5 for details</td>
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<td></td>
</tr>
<tr>
<td>MATH</td>
<td>M 3</td>
<td>Math 162 or Math 166</td>
<td></td>
<td></td>
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<tr>
<td>MATH</td>
<td>163 3</td>
<td>Precalculus II</td>
<td></td>
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<tr>
<td>CS 150 4</td>
<td>Introduction to Programming</td>
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### II CORE COURSES

A grade of C+ or better is required in each core course

<table>
<thead>
<tr>
<th>Subj</th>
<th>Course</th>
<th>Cr</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td>211* 4</td>
<td>Calculus I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td>212 4</td>
<td>Calculus II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td>307 3</td>
<td>Ordinary Differential Equations</td>
<td></td>
<td></td>
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<tr>
<td>MATH</td>
<td>311W 3</td>
<td>Abstract Algebra I</td>
<td></td>
<td></td>
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<tr>
<td>MATH</td>
<td>312 4</td>
<td>Calculus III</td>
<td></td>
<td></td>
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<tr>
<td>MATH</td>
<td>316 3</td>
<td>Introductory Linear Algebra</td>
<td></td>
<td></td>
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<tr>
<td>MATH</td>
<td>317 3</td>
<td>Calculus IV Introductory Analysis</td>
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<tr>
<td>STAT</td>
<td>331 3</td>
<td>Theory of Probability</td>
<td></td>
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<tr>
<td>STAT</td>
<td>3</td>
<td>Stat 310 or 431</td>
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*prerequisites: MATH 162M and MATH 163 or MATH 166

### III STATISTICS/BIOSTATISTICS OPTION

<table>
<thead>
<tr>
<th>Subj</th>
<th>Course</th>
<th>Cr</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT</td>
<td>405 3</td>
<td>Intro to Data Handling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT</td>
<td>431 OR 310 3</td>
<td>Theory of Statistics OR Intro Data Analysis</td>
<td></td>
<td></td>
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<tr>
<td>STAT</td>
<td>3</td>
<td>12 hours of 400 level Stat courses</td>
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<td></td>
</tr>
<tr>
<td>STAT</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT</td>
<td>3</td>
<td></td>
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</tbody>
</table>

### IV UPPER DIVISION REQUIREMENTS

<table>
<thead>
<tr>
<th>Subj</th>
<th>Course</th>
<th>Cr</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Second degree or major; B. Minor C. Approved focus area cluster (See catalog for more details) D. International certificate, 12 hours (see catalog for more details)</td>
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</table>

### PRACTICUM

Practicum: Any student who wishes to receive a practicum or internship may do so as an integral part of the degree program. All students are strongly advised to utilize the CAP facility each year. Make an appointment by calling 683-4388.
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:
   - ARTH 121A, ARTS 122A
   - MUSC 264A
   - DANC 185A
   - THEA 241A
   - COMM/THEA 270A

3. Two courses in difference sciences can be chosen, but two first halves of sequences in the same science cannot be chosen.
   - 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-232

4. Two courses from different subject areas must be selected:
   - ANTR 110S
   - COMM 200S
   - CRJS 215S
   - ECON 200S
   - FIN 210S
   - GEOG 100S
   - POLS 100S, 101S, 102S
   - PSYC 201S
   - SOC 201S
   - 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.

6. One of the following courses:
   - COMM 372T, CS 300T, DNTH 440T, ENGL 307T
   - GEOG 306T, IST 304T, 389T, HIST/SCI 386T, IT 360T
   - MUSC 335T, PHIL 383T, POLS 350T, STEM 110T, 370T, WMST 390T

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 STAT 310.

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)

<table>
<thead>
<tr>
<th>TRANSFERABLE COURSES AT VIRGINIA COMMUNITY COLLEGES</th>
<th>UNIVERSITY EQUIVALENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 146</td>
<td>STAT 130M</td>
</tr>
<tr>
<td>MTH 157</td>
<td>STAT 130M</td>
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<tr>
<td>MTH 158</td>
<td>MATH 102M</td>
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<tr>
<td>MTH 163-164</td>
<td>MATH 162M-163</td>
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<tr>
<td>MTH 166</td>
<td>MATH 166</td>
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<tr>
<td>MTH 173-174</td>
<td>MATH 211-212</td>
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<tr>
<td>MTH 240</td>
<td>STAT 130M</td>
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<tr>
<td>MTH 241</td>
<td>STAT 130M</td>
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<tr>
<td>MTH 270</td>
<td>MATH 200</td>
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<tr>
<td>MTH 271</td>
<td>MATH 200</td>
</tr>
</tbody>
</table>

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.