MATHEMATICS, B.S.

Requirements for a Major in Mathematics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 1321</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 1322</td>
<td>Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 2311</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MTH 2321</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>MTH 3300</td>
<td>Foundations of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MTH 3323</td>
<td>Introduction to Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 4326</td>
<td>Advanced Calculus I</td>
<td></td>
</tr>
<tr>
<td>MTH 3312</td>
<td>Foundations of Combinatorics and Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 4314</td>
<td>Abstract Algebra</td>
<td></td>
</tr>
<tr>
<td>MTH 3325</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 4312</td>
<td>Cryptology</td>
<td></td>
</tr>
<tr>
<td>or MTH 4322</td>
<td>Numerical Analysis</td>
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</tbody>
</table>

Fifteen semester hours of 3000-4000 level MTH or STA courses

A grade of "C" or better in thirty-nine hours of MTH and STA courses used for the major.

Subtotal 39

Required Courses in Other Fields

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSI 1401</td>
<td>Introduction to Programming I</td>
<td>4</td>
</tr>
<tr>
<td>or CSI 1430</td>
<td>Introduction to Computer Science I with Laboratory</td>
<td></td>
</tr>
<tr>
<td>or STA 2450</td>
<td>Introduction to Computing for the Mathematical and Statistical Sciences</td>
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</tbody>
</table>

Eight semester hours of science courses with appropriate labs (with no more than 4 hours from GEO) selected from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIO 1305 &amp; BIO 1105</td>
<td>Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIO 1306 &amp; BIO 1106</td>
<td>Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHE 1301 &amp; CHE 1101</td>
<td>Basic Principles of Modern Chemistry I and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHE 1302 &amp; CHE 1102</td>
<td>Basic Principles of Modern Chemistry II and General Chemistry Laboratory II</td>
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<tr>
<td>ENV 1301 &amp; ENV 1101</td>
<td>Exploring Environmental Issues and An Introduction to Environmental Analysis (Lab)</td>
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<tr>
<td>GEO 1306 &amp; GEO 1106</td>
<td>The Earth Through Time and The Earth Through Time, Laboratory</td>
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<tr>
<td>or GEO 1307 &amp; GEO 1106</td>
<td>Evolution and Extinction and The Earth Through Time, Laboratory</td>
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<tr>
<td>GEO 1401</td>
<td>Earthquakes and Other Natural Disasters</td>
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<tr>
<td>GEO 1402</td>
<td>World Oceans</td>
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<tr>
<td>GEO 1403</td>
<td>Environmental Geology</td>
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<tr>
<td>GEO 1405</td>
<td>The Dynamic Earth</td>
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<tr>
<td>GEO 1408</td>
<td>Earth Science</td>
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</tbody>
</table>

Total Hours 51

1 Excluding: MTH 3318 Data and Chance, MTH 3340 Mathematics through Technology, and MTH 4343 Topics in Mathematics for Prospective Teachers