### Mathematics BS in Mathematics
Applied Mathematics Concentration
2005-2006

#### CORE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 21: Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 22: Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 121: Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 124: Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 230: Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 237: Introduction to Numerical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CS 21: Programming in Java</td>
<td>4</td>
</tr>
<tr>
<td>PE: Physical Education</td>
<td>1</td>
</tr>
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<td>1</td>
</tr>
<tr>
<td>RACE &amp; CULTURE*: Race &amp; Culture</td>
<td>1</td>
</tr>
</tbody>
</table>

* A 3 credit approved race & culture course may be used.

**Credits**: 18

#### MAJOR COURSES:

A minimum of 18 credit hours of MATH, STAT or CS numbered 100 or above. Of these 18 credit hours, at least 6 must be in MATH or STAT, and at least 12 must be numbered 200 or above.

**Credits**: 18

#### ALLIED FIELD:

24 credit hours with at least 7 courses with a concentrated focus in a specific allied field. At most 3 courses can overlap with the ‘major courses’ above.

1. Physical Sciences
2. Biological Sciences
3. Medical Sciences
4. Engineering
5. Computer Science (26 or higher)
6. Agricultural Sciences
7. Business Administration
8. Psychology
9. Economics
10. Environmental Sciences/Studies
11. Natural Resources

**Credits**: 24

#### HUMANITIES & SOCIAL SCIENCE:

English 1 plus 21 credit hours of HSS from categories I, II, & III. At least 6 credit hours must be taken in at least 2 different categories.

**Category I**: Language & Literature

- Chinese, Classics, English, French, General Literature, German, Greek, Hebrew, Italian, Linguistics, Russian, Spanish, World Literature.

**Category II**: Fine Arts, Philosophy & Religion

- Art, Film, Music, Philosophy, Religion, Speech, Theater.

**Category III**: Anthropology, Area & International Studies, Communication Sciences, Economics, Geography, History, Political Science, Psychology, Sociology, Vermont Studies, Women’s Studies.

**Category I: Language & Literature**

- Written Expression

**Category II: Fine Arts, Philosophy & Religion**

**Category III: Social Sciences**

**Credits**: 24

#### ADDITIONAL CREDITS:

94 credits are defined above. Total credits required for graduation is 120 + 2 PE. Check to be sure that this requirement has been met.