# Mathematics

**MATH 447  Real Variables**  credit: 3 OR 4 hours.

(MATH 347) Careful development of elementary real analysis including such topics as completeness property of the real number system; basic topological properties of n-dimensional space; convergence of numerical sequences and series of functions; properties of continuous functions; and basic theorems concerning differentiation and Riemann integration. 3 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Credit is not given for both MATH 447 and MATH 444. Prerequisite: MATH 242 or MATH 243 or equivalent, and junior standing; MATH 347 or MATH 348 or equivalent experience; or consent of instructor.

This course satisfies the General Education Criteria for a:  
Quantitative Reasoning II

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>38030</td>
<td>Lecture-Discussion</td>
<td>N13</td>
<td>10:30 AM - 11:50 AM</td>
<td>TR</td>
<td>154 - Henry Administration Bldg</td>
<td>Hundertmark, D</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours  
Quant Reasoning II course.  
Open to both undergraduate and graduate students.

| 38031| Lecture-Discussion    | N14     | 10:30 AM - 11:50 AM | TR   | 154 - Henry Administration Bldg | Hundertmark, D |

Credit Hours: 4 hours  
Quant Reasoning II course.  
Instructor Approval Required  
Not intended for Undergrad - Urbana-Champaign.  
Instructor approval forms available in 221 Altgeld Hall beginning January 13, 2005.