Mathematics

MATH 447  **Real Variables**  credit: 3 OR 4 hours.
Careful development of elementary real analysis for those who intend to take graduate courses in Mathematics. Topics include 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. Credit is not given for both MATH 447 and either Math 424 or MATH 444. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 241 or equivalent; junior standing; MATH 347 or MATH 348, or equivalent experience; or consent of instructor.

<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>32136</td>
<td>Lecture-Discussion</td>
<td>C13</td>
<td>10:00 AM - 10:50 AM</td>
<td>MWF</td>
<td>243 - Altgeld Hall</td>
<td>Zhang, X</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Class is restricted to Mathematics until business hours on the morning of April 17, 2017.

| 32137  | Lecture-Discussion    | C14     | 10:00 AM - 10:50 AM | MWF  | 243 - Altgeld Hall | Zhang, X   |

Credit Hours: 4 hours
Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.
Departmental approval forms will be available in 313 Altgeld Hall beginning on the first day of the semester until the 8th week of the semester

| 32138  | Lecture-Discussion    | D13     | 11:00 AM - 11:50 AM | MWF  | 445 - Altgeld Hall | Erdogan, M |

Credit Hours: 3 hours
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| 32139  | Lecture-Discussion    | D14     | 11:00 AM - 11:50 AM | MWF  | 445 - Altgeld Hall | Erdogan, M |

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