Mathematics

MATH 441  **Differential Equations**  credit: 3 OR 4 hours.
Basic course in ordinary differential equations; topics include existence and uniqueness of solutions and the general theory of linear differential equations; treatment is more rigorous than that given in MATH 285. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 441 and any of MATH 284, MATH 285, MATH 286. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or MATH 348 is recommended.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>57915</td>
<td>Lecture-Discussion</td>
<td>B13</td>
<td>09:00 AM - 09:50 AM</td>
<td>MWF</td>
<td>147 - Altgeld Hall</td>
<td>La Nave, G</td>
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<tr>
<td>57920</td>
<td>Lecture-Discussion</td>
<td>B14</td>
<td>09:00 AM - 09:50 AM</td>
<td>MWF</td>
<td>147 - Altgeld Hall</td>
<td>La Nave, G</td>
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<td>61553</td>
<td>Lecture-Discussion</td>
<td>E13</td>
<td>01:00 PM - 01:50 PM</td>
<td>MWF</td>
<td>241 - Altgeld Hall</td>
<td>Tzirakis, N</td>
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<tr>
<td>61554</td>
<td>Lecture-Discussion</td>
<td>E14</td>
<td>01:00 PM - 01:50 PM</td>
<td>MWF</td>
<td>241 - Altgeld Hall</td>
<td>Tzirakis, N</td>
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<td>54416</td>
<td>Lecture-Discussion</td>
<td>F13</td>
<td>02:00 PM - 02:50 PM</td>
<td>MWF</td>
<td>141 - Altgeld Hall</td>
<td>Xu, S</td>
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<tr>
<td>54417</td>
<td>Lecture-Discussion</td>
<td>F14</td>
<td>02:00 PM - 02:50 PM</td>
<td>MWF</td>
<td>141 - Altgeld Hall</td>
<td>Xu, S</td>
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<tr>
<td>39478</td>
<td>Lecture-Discussion</td>
<td>G13</td>
<td>03:00 PM - 03:50 PM</td>
<td>MWF</td>
<td>137 - Henry Administration Bldg</td>
<td>Xu, S</td>
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</table>
### Course 1: 39479
- **Credit Hours:** 3 hours
- **Lecture-Discussion:** G14
- **Time:** 03:00 PM - 03:50 PM
- **Days:** MWF
- **Location:** 137 - Henry Administration Bldg
- **Instructor:** Xu, S

Major restrictions will be removed during the day of December 2, 2014. Students not in those majors are welcome to register after restrictions have been lifted.

### Course 2: 38014
- **Credit Hours:** 4 hours
- **Instructor Approval Required**
- **Not intended for Undergrad - Urbana-Champaign.**
- **Instructor approval forms available in 313 Altgeld Hall beginning on the first day of Spring semester.**
- **Lecture-Discussion:** S13
- **Time:** 02:00 PM - 03:20 PM
- **Days:** TR
- **Location:** 1 - Illini Hall
- **Instructor:** Zharnitsky, V

### Course 3: 38016
- **Credit Hours:** 3 hours
- **Major restrictions will be removed during the day of December 2, 2014. Students not in those majors are welcome to register after restrictions have been lifted.**
- **Lecture-Discussion:** S14
- **Time:** 02:00 PM - 03:20 PM
- **Days:** TR
- **Location:** 1 - Illini Hall
- **Instructor:** Zharnitsky, V

### Course 4: 38016
- **Credit Hours:** 4 hours
- **Instructor Approval Required**
- **Not intended for Undergrad - Urbana-Champaign.**
- **Instructor approval forms available in 313 Altgeld Hall beginning on the first day of Spring semester.**
- **Lecture-Discussion:** S14
- **Time:** 02:00 PM - 03:20 PM
- **Days:** TR
- **Location:** 1 - Illini Hall
- **Instructor:** Zharnitsky, V