Mathematics

MATH 461  **Probability Theory**  credit: 3 OR 4 hours.
Introduction to mathematical probability; includes the calculus of probability, combinatorial analysis, random variables, expectation, distribution functions, moment-generating functions, and central limit theorem. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 461 and either MATH 408 or ECE 313. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or equivalent.

<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>38050</td>
<td>Lecture-Discussion</td>
<td>B13</td>
<td>09:00 AM - 09:50 AM</td>
<td>MWF</td>
<td>140 - Burrill Hall</td>
<td>Kirkpatrick, K</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Open to both undergraduate and graduate students.

| 38052| Lecture-Discussion  | B14     | 09:00 AM - 09:50 AM| MWF  | 140 - Burrill Hall | Kirkpatrick, K |

Credit Hours: 4 hours
Instructor Approval Required
Not intended for Undergrad - Urbana-Champaign.
Graduate students requesting the 4 credit hour section must first register for the 3 hour section. If the instructor is willing to offer extra work to graduate students for the 4-hour section, students can get an approval form from 313 Altgeld Hall between the first day of the semester and the 8th week of the semester.

| 38063| Lecture-Discussion  | C13     | 10:00 AM - 10:50 AM| MWF  | 140 - Burrill Hall | Kirkpatrick, K |

Credit Hours: 3 hours
Open to both undergraduate and graduate students.

| 38064| Lecture-Discussion  | C14     | 10:00 AM - 10:50 AM| MWF  | 140 - Burrill Hall | Kirkpatrick, K |

Credit Hours: 4 hours
Instructor Approval Required
Not intended for Undergrad - Urbana-Champaign.
Graduate students requesting the 4 credit hour section must first register for the 3 hour section. If the instructor is willing to offer extra work to graduate students for the 4-hour section, students can get an approval form from 313 Altgeld Hall between the first day of the semester and the 8th week of the semester.

| 40671| Online              | XGR     | ARRANGED -         | -    | -                 | Carpenter, B |

Credit Hours: 3 hours
Restricted to MS: Civil Engr - Online - UIUC, MCS:Computer Sci Online -UIUC, MS:Mechanical Engineerng -UIUC, MS:Env Engr CivEngr ONL-UIUC, MS:Industrial Engr Online-UIUC, MS: Aerospace Engr-Online-UIUC, or MENG:Mech Engineering Onl-UIUC. Restricted to online MCS, online MSME, online MSAE and online MSCE students only. Online non-degree and campus undergraduates are not eligible to register for this section. For more details on this course section, please see http://engineering.illinois.edu/online/courses/. Center for Innovation in Teaching & Learning (CITL) restrictions and assessments apply, see http://online.illinois.edu. This section is restricted to Engineering online graduate degree-seeking students only. Non-degree students please register for MATH 461 M16 section.