Statistics

STAT 431  **Applied Bayesian Analysis**  credit: 3 OR 4 hours.
Introduction to the concepts and methodology of Bayesian statistics, for students with fundamental knowledge of mathematical statistics. Topics include Bayes’ rule, prior and posterior distributions, conjugacy, Bayesian point estimates and intervals, Bayesian hypothesis testing, noninformative priors, practical Markov chain Monte Carlo, hierarchical models and model graphs, and more advanced topics as time permits. Implementations in R and specialized simulation software. Same as ASRM 453. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410 and knowledge of R.

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<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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</thead>
<tbody>
<tr>
<td>67116</td>
<td>Lecture</td>
<td>1GR</td>
<td>11:00 AM - 12:20 PM</td>
<td>TR</td>
<td>1000 - Lincoln Hall</td>
<td>Park, T</td>
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</tbody>
</table>

Credit Hours: 4 hours
Restricted to students in the Statistics department.
Restricted to Graduate - Urbana-Champaign.
For Statistics course registration information: go.illinois.edu/StatisticsRegistration

| 67117 | Lecture  | 1UG     | 11:00 AM - 12:20 PM | TR   | 1000 - Lincoln Hall | Park, T    |

Credit Hours: 3 hours
Restricted to Undergrad - Urbana-Champaign.
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