Statistics

STAT 430  **Topics in Applied Statistics**  credit: 3 OR 4 hours.
Formulation and analysis of mathematical models for random phenomena; extensive involvement with the analysis of real data; and instruction in statistical and computing techniques as needed. Same as MATH 468. 3 undergraduate hours. 4 graduate hours. May be repeated with approval. prerequisite: STAT 410 or STAT 420; or consent of instructor.

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<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>60247</td>
<td>Lecture-Discussion</td>
<td>M1G</td>
<td>12:00 PM - 12:50 PM</td>
<td>MWF</td>
<td>161 - Noyes Laboratory</td>
<td>Park, T</td>
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</tbody>
</table>

Credit Hours: 4 hours
Applied Bayesian Analysis
Restricted to Graduate - Urbana-Champaign.
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 OpenBUGS. Prerequisites: STAT 410 and knowledge of R. Restricted to students majoring in Statistics or Statistics & Computer Science until November 25, 2013.

| 60249  | Lecture-Discussion     | M1U     | 12:00 PM - 12:50 PM| MWF  | 161 - Noyes Laboratory | Park, T    |

Credit Hours: 3 hours
Applied Bayesian Analysis
Restricted to Undergrad - Urbana-Champaign.
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 OpenBUGS. Prerequisites: STAT 410 and knowledge of R. Restricted to students majoring in Statistics or Statistics & Computer Science until November 25, 2013.

| 36200  | Lecture-Discussion     | S1G     | 01:00 PM - 01:50 PM| MWF  | G27 - Foreign Languages Building | Glosemeyer, D |

Credit Hours: 4 hours
Professional Statistics Skills
Restricted to Graduate - Urbana-Champaign.
This project-based course emphasizes written, visual, and oral communication of statistical results and conclusions. An introduction to statistical consulting is also provided. Additional topics may include introductions to statistical methodologies in industry and aspects of careers in statistics. Prerequisite: STAT 420. Restricted to students majoring in Statistics or Statistics & Computer Science until November 25, 2013.

| 36199  | Lecture-Discussion     | S1U     | 01:00 PM - 01:50 PM| MWF  | G27 - Foreign Languages Building | Glosemeyer, D |

Credit Hours: 3 hours
Professional Statistics Skills
Restricted to Undergrad - Urbana-Champaign.
This project-based course emphasizes written, visual, and oral communication of statistical results and conclusions. An introduction to statistical consulting is also provided. Additional topics may include introductions to statistical methodologies in industry and aspects of careers in statistics. Prerequisite: STAT 420. Restricted to students majoring in Statistics or Statistics & Computer Science until November 25, 2013.