Statistics

STAT 432  Basics of Statistical Learning  credit: 3 OR 4 hours.
Topics in supervised and unsupervised learning are covered, including logistic regression, support vector machines, classification trees and nonparametric regression. Model building and feature selection are discussed for these techniques, with a focus on regularization methods, such as lasso and ridge regression, as well as methods for model selection and assessment using cross validation. Cluster analysis and principal components analysis are introduced as examples of unsupervised learning. Same as ASRM 451. 3 undergraduate hours, 4 graduate hours. Prerequisite: STAT 400, and either STAT 420 or STAT 425.

<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>70220</td>
<td>Lecture-Discussion</td>
<td>1GR</td>
<td>08:00 AM - 08:50 AM</td>
<td>MWF</td>
<td>103 - Transportation Building</td>
<td>Zhu, R</td>
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</tbody>
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Credit Hours: 4 hours
Restricted to Graduate - Urbana-Champaign.

| 70221| Lecture-Discussion    | 1UG     | 08:00 AM - 08:50 AM | MWF  | 103 - Transportation Building | Zhu, R     |

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

| 70222| Lecture-Discussion    | 2GR     | 09:00 AM - 09:50 AM | MWF  | 112 - Transportation Building | Zhu, R     |

Credit Hours: 4 hours
Restricted to Graduate - Urbana-Champaign.

| 70223| Lecture-Discussion    | 2UG     | 09:00 AM - 09:50 AM | MWF  | 112 - Transportation Building | Zhu, R     |

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

CRN Type Section Time Days Location Instructor
70220 Lecture-Discussion 1GR 08:00 AM - 08:50 AM MWF 103 - Transportation Building Zhu, R

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70222 Lecture-Discussion 2GR 09:00 AM - 09:50 AM MWF 112 - Transportation Building Zhu, R

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70223 Lecture-Discussion 2UG 09:00 AM - 09:50 AM MWF 112 - Transportation Building Zhu, R

Credit Hours: 3 hours
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