Class Schedule - Spring 2020

Statistics

STAT 578  Topics in Statistics  credit: 4 hours.
May be repeated if topics vary. Prerequisite: Consent of instructor.

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<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
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<th>Location</th>
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<tr>
<td>45000</td>
<td>Online</td>
<td>DSO</td>
<td>ARRANGED -</td>
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Applied Bayesian Modeling
Restricted to Graduate - Urbana-Champaign.
Restricted to online MCS-DS students. Additional ID Verification Coursera and ProctorU fees may apply. For more details on this course section, please see http://engineering.illinois.edu/online/courses/. Non-Degree seeking students may enroll on a space-available basis with consent. To request enrollment, please complete the “Non-Degree Enrollment Request Form” here: https://illinois.edu/fb/sec/9478165 Equivalency: CS 598 section DSO (CRN 65866) is equivalent to STAT 578 section DSO (CRN 45000).

36204  Lecture-Discussion  SDZ  10:00 AM - 10:50 AM  MWF  205 - Gregory Hall  Zhao, S

Compound Decision Theory
Restricted to Graduate - Urbana-Champaign.
For Statistics course registration information: go.illinois.edu/StatisticsRegistration TOPIC: Compound decision theory and empirical Bayes methods Prerequisites: Description: Compound decision problems underlie many problems in statistics, from nonparametric regression to multiple hypothesis testing. This course will introduce compound decision problems and empirical Bayes methods for solving them. Theoretical and methodological aspects of seminal developments in the field will be discussed, starting from the classical Gaussian sequence problem. Connections to modern applications will also be drawn, with an emphasis on genomics. Students will be expected to complete a research project based on the course topics.

69104  Lecture-Discussion  XS  09:30 AM - 10:50 AM  TR  137 - Henry Administration Bldg  Shao, X

Sufficient Dimension Reduction
Restricted to Graduate - Urbana-Champaign.
For Statistics course registration information: go.illinois.edu/StatisticsRegistration Dimension reduction has always been a central statistical concept, and is a rapidly developing research field that has wide applications in data visualization, machine learning, signal/imaging processing, compressed sensing, functional and longitudinal data. Broadly speaking, dimension reduction techniques can be applied to essentially any large datasets with a large number of variables. In this course we will study some fundamental techniques in the 30-year old area of sufficient dimension reductions. Students will read and report on key papers in the literature and carry out a limited research project. R will be employed for computing.