**Econ 838**  
**Econometrics II**

Class: Thursday 4:30 - 7:10 pm  
Location: IN 323

**Instructor**  
Daniel Houser  
Tel: 703-993-4856  
Office: Mason Hall D154, Fairfax  
Website: http://mason.gmu.edu/~dhouser/  
Email: dhouser@gmu.edu

**Co-instructor**  
Siyu Wang  
Tel: 703-989-4844  
Office: ICES, 5th floor, Metropolitan building, Arlington  
Website: http://mason.gmu.edu/~swang14/  
Email: swang14@masonlive.gmu.edu

**Course Description**  
This class provides an introduction to the design and analysis of economics experiments. The topics covered will be useful to anybody interested in running scientific experiments, but will be primarily geared toward behavioral experiments as conducted by economists and psychologists.

**Textbooks**  
**Required:**  

**Recommended:**  

**Grades**

<table>
<thead>
<tr>
<th>Graduates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm – on Oct. 22&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>25%</td>
</tr>
<tr>
<td>Final exam – on Dec 17&lt;sup&gt;th&lt;/sup&gt;</td>
<td>25%</td>
</tr>
<tr>
<td>Final Paper – before Dec. 19&lt;sup&gt;th&lt;/sup&gt;</td>
<td>15%</td>
</tr>
</tbody>
</table>
Your course grade will be based 25% on the problem sets (drop one with lowest grade, the rest equally weighted), 10% on the presentation of one of the reading assignments, 25% on the midterm exam and 15% on a final paper. Good class participation can improve your evaluation. We do not give make-up exams. Homework must be turned in on time. Late homework won’t be accepted.

Office Hours
Professor Houser will hold office hours in our classroom after class on Thursday, or by appointment. Siyu Wang will hold office hour every Thursday at Mason Hall D150 Tutoring Room, 3:30-4:30 pm. You can also reach Siyu by phone 703-989-4844 or email at swang14@masonlive.gmu.edu.

Outlines
Notes are available at http://mason.gmu.edu/~dhouser/courses.htm
1. Science and Experiments
    Box, Hunter & Hunter, Chapter 1; Cox, Chapter 1; Houser website, Lecture 1
2. Review of Basic Statistics
    Probability distributions, parameters, statistics
    Box, Hunter & Hunter, Chapter 2; Houser website, Lecture 2
3. Comparing Two Entities
    a. Relevant reference sets and distributions
    b. Randomized Paired Comparison Design
    c. Blocking and Randomization
    Box, Hunter & Hunter, Chapter 3; Houser website, Lecture 3
4. Comparing k treatment means
    a. Completely Randomized Design - One-way ANOVA
    b. Randomized Block Design - Two-way ANOVA
    Box, Hunter & Hunter, Chapter 4; Houser website, Lecture 4
5. Designs with more than one blocking variable
    a. Latin squares
    b. Greaco and hyper-graecolatin squares
    c. Balanced incomplete block designs
    Houser website, Lecture 5
6. Repeated Measures
    a. Introduction
    b. Standard ANOVA for repeated measures without order dependencies
    c. Comments on repeated measures designs that address order and sequencing effects
    Houser website, Lecture 6

Reading Articles

**Students with disabilities**

Students with Faculty Contact Sheets for this class need to present them to the instructor as soon as possible. Other students requiring reasonable accommodations, as covered under the Americans with Disabilities Act, should contact the Disability Resource Center (DRC) to open up a DRC file and discuss needed accommodations. Questions and requests for reasonable accommodations should be directed to DRC, 234 SUB I, phone (703) 993.2474 or email dwyne@gmu.edu.

**Honor code**

George Mason University is an honor code university. Students pledge not to cheat, lie, plagiarize or steal in academic matters.