Econ 838

Econometrics II
Department of Economics, George Mason University
Fall 2016

Class: Thursday 4:30 -7:10 pm
Location: Robinson Hall A243

Instructor:

Daniel Houser

Tel: 703-993-4856

Office: Mason Hall D154, Fairfax

Website: http://mason.gmu.edu/~dhouser/

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Office Hour: Thursday after class

                 or by appointment

TA:

Weiwei Zheng

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Office Hour: Thursday 3:30-4:30 pm

                at Mason Hall

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:
1. Box, Hunter and Hunter. (2rd Edition) Statistics for Experimenters. Wiley.
2. Sidney Siegel and N. John Castellan Jr. (2rd edition) Nonparametric Statistics for the Behavioral Science.

Recommended:
Cox, D. R. (1958) Planning of Experiments. Wiley.

Grades

Homework	25%
Presentation	10%
Quiz- on Sep 22, Oct 13, Nov 24	5%
Midterm – on Oct. 27	20%
Final exam – on Dec 15	25%
Final Paper – before Dec 19	15%

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, 5% on the quizzes (drop one with the lowest grade), 20% on the midterm exam, 25% on the final 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.

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

1. Kosfeld, Michael, Heinrichs, Markus, Zak, Paul J., Fischbacher Urs, and Fehr, Ernst, 2005, "Oxytocin increases trust in humans", Nature, Vol. 435

2. Brosnan, Sarah F. and Waal, Frans B.M. de, 2003, "Monkeys Reject Unequal Pay", Nature, Vol. 425

3. Cox, James C., 2004, "How to Identify Trust and Reciprocity", Games and Economic Behavior, 46:2, 260-281

4. Houser, Daniel and Robert Kurzban, 2002, "Revisiting Kindness and Confusion in Public Goods Experiments", American Economics Review, 92:4, 1062-1069

5. List, John A. and David Lucking-Reiley, 2002, "The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign". Journal of Political Economy, 110:1, 215-233

6. Fehr, Ernst and Bettina Rockenbach, 2003, "Detrimental effects of sanctions on human altruism", Nature, Vol. 422

7. Schotter, Andrew, 2003, "Decision Making with Naïve Advice", American Economics Review, Vol. 93, No. 2, 196-201

8. Cox, James and Oaxaca, Ronald, 1999, "Can Supply and Demand Parameters be Recovered from Data Generated by Market Institutions?" , Journal of Business and Economic Statistics, 17

9. Charness, Gary and Martin Dufwenberg, 2006, "Promises and Partnership", Econometrica, 74: 6, 1579-1601

10. Chen, Yan and Sherry Xin Li, 2009, "Group Identity and Social Preferences", American Economic Review, 99:1, 431-457

11. Gneezy, Uri, 2005, "Deception: The Role of Consequences", American Economic Review, 95: 1, 384-394

12. Cox, James C. and Oaxaca, Ronald L. 1989, "Laboratory Experiments with a Finite-Horizon Job-Search Model", Journal of Risk and Uncertainty, 2:301-330

13. Duffy, John and Ochs, Jack, 1999 "Emergence of Money as a Medium of Exchange: An Experimental Study", American Economic Review 89, 847-877.

14. Venon, Smith, Suchanek, Gerry and Williams, Arlington, 1988 "Bubbles, Crashes, and Endogenous Expectation in Experimental Spot Asset Markets", Econometrica, 56:5, 1119-1151
15. Gneezy, Uri and List, John A, 2006, "Putting Behavioral Economics to Work: Testing for Gift Exchange in Labor Markets Using Field Experiments", Econometrica, 74:5, 1365-1384
16. Chen, Yan and Tayfun Sonmez, 2006, "School Choice: An Experimental Study", Journal of Economic Theory 127:1, 202-231

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.