Applied Statistics & Econometrics II
Econ 8840
Wednesday, 7:15-9:45pm
Aderhold Learning Center 203
Spring Semester 2018
CRN:15829

Instructor: Dr. Rachana Bhatt
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Office Hours: Wednesday, 6:00-7:00pm and by appointment

Course Description & Objectives
This course will continue to develop the knowledge and skills acquired in Economics 8740. The course will focus on data management and selected topics in microeconometrics. This course will cover how to manage data, including challenges presented by large data sets and complex data structures. You will learn about working with cross-sectional data, longitudinal data, panel data, clustered samples, and issues related to missing data and imputations. The course will cover econometric techniques such as discrete choice models, instrumental variables models, fixed effects models, and program evaluation methods. These techniques will be applied to various topics, such as public finance, health, education, labor, and economic development.

Textbook
Website: academic.cengage.com/economics/Wooldridge
Note: All chapters and homework assignments refer to the 4th edition of the book.

Lectures Outline:
Homework:
Some components of homework assignments will require using data and the statistical software STATA. Data sets necessary for homework can be found on the textbook’s website, but will also be posted on the class Desire2Learn site for download. You must work in groups of two for the homework assignments. Turn in only one homework assignment (with both students’ names) per group. Please append your “log” file to any assignments that involve STATA.

Week 1.................................................................Introduction, Chapter 9
Week 2.................................................................Chapter 9
Week 3.................................................................Chapter 10
Week 4.................................................................Chapter 10
Week 5................................................................. Exam 1 (Background, Ch. 9, 10)
Week 6................................................................. Chapter 13
Week 7................................................................. Chapter 13, Lab
Week 8................................................................. Chapter 14
Week 9................................................................. Chapter 14
Week 10............................................................... Spring Break-No Class
Week 11............................................................... Exam 2 (Ch. 13, 14)
Week 12............................................................... Chapter 15, Lab
Week 13………………………………………………………………... Chapter 15
Week 14………………………………………………………………... Chapter 17
Week 15………………………………………………………………...Exam 3 (Ch. 15, 17)

Important Dates:

Homework
HW 1 ................................................................. Wednesday, January 17th, 2018
HW 2 ................................................................. Wednesday, January 24th, 2018
HW 3 ................................................................. Friday, February 2nd, 2018 (via email by 5pm)
HW 4 ................................................................. Wednesday, February 28th, 2018
HW 5 ................................................................. Wednesday, March 14th, 2018 (via email by 5pm, Spring Break Week)
HW 6 ................................................................. Friday, April 6th, 2018 (via email by 5pm)
HW 7 ................................................................. Friday, April 13th, 2018 (via email by 5pm)

Exams
Exam 1............................................................................ Wednesday, February 7th, 2018
Exam 2............................................................................ Wednesday, March 21st, 2018
Exam 3............................................................................ Wednesday, April 18th, 2018

Attendance:
Class attendance is highly recommended. Material for exams and the homework will come from both class lectures as well as the book. The only acceptable excuses for missing a test are medical reasons or family emergencies, and an official doctor’s note or excuse must be provided. If you have legitimate excuse, a make-up exam will be issued soon after the date of the original exam. Any issues should be discussed with me before the actual exam takes place.

Grading Policy:
Homework is due at the beginning of the class period on the appropriate due date. Late homework will not be accepted. Homeworks, class participation, and exams will count for the following percentages of your final grade:

Homework (7).................................................................20%
Exam 1............................................................................25%
Exam 2............................................................................25%
Exam 3............................................................................25%
Class Participation.........................................................5%
Course Software:
There are several statistical packages for analyzing data. In this course, we will be using STATA. This software is available for use in the AYSPS building Room 720, 7th floor. Please note that access to the AYSPS building and computer lab are restricted to the following days and hours: Monday-Friday, 7:00 AM to 7:00 PM. The doors of the AYSPS building lock at 7:00 PM and you will not have access after that. However, if you are already in the building you can continue to work. If you leave any time after 7:00 PM you will not be able to re-enter. In order to enter the computer lab, you MUST have your GSU Panther card for the door swipe.

There are a number of learning resources online for STATA which may be helpful:

UCLA Academic Technology Services:
http://www.ats.ucla.edu/stat/stata/default.htm
>STATA>Starter Kit>Learning Modules

Carolina Population Center:
http://www.cpc.unc.edu/research/tools/data_analysis/statatutorial

Data and Statistical Services, Princeton University:
http://dss1.princeton.edu/online_help/stats_packages/stata/stata.htm

Other:
http://www.stata.com/links/resources1.html

Additional Information:
All students are responsible for knowing GSU’s Policy on Academic Honesty as publish in On Campus: The Undergraduate Co-Curricular Affairs Handbook. If you require special accommodations for exams, you must provide documentation from GSU Disability Services and make arrangements with me prior to the exam dates.

Prerequisites:
Economics 2105, 2106, a course in introductory statistics, and Economics 8740.

Note:
The course syllabus provides a general plan for the course; deviations may be necessary.