Economics 4650 – Principles of Econometrics

Section - 001, Spring 2014 Monday & Wednesday, 11:50 PM-01:10 PM, OSH 277 Instructor: Dr. Haimanti Bhattacharya Office: OSH 339B, Office Hours: By Appointment Email: <u>haimanti.bhattacharya@economics.utah.edu</u> 3 Credit Hours, Quantitative Intensive (QI) course

Objective

The objective of this class is to learn to use the basic econometric tools for empirical analysis. Prerequisite for this class is Econ 3640 or equivalent. This is an applied class that aims to prepare you to work with data in a job environment or in graduate school. At the end of the semester you should be able to

- Conduct multivariate regression analysis using cross-section and pooled data
- Detect and deal with violations of classical model assumptions
- Collect, summarize and analyze data using an econometric package like STATA

Suggested Textbook

Wooldridge, Jeffrey M. Introductory Econometrics – A Modern Approach. ISBN-10:0-324-58162-9

Course evaluation components and their weights

- 1. *Class participation* (10% weight): You will be required to work in groups in the class and discuss or debate your interpretations.
- 2. *Home Assignments* (20% weight): You can expect about 4 or 5 home assignments for the course.
- 3. Exams (50% weight): There will be two exams for this course.
- 4. *Project* (20% weight): You are required to work in groups to apply the tools learnt in the course in a context of your choice.

Course grade criterion

 $\begin{array}{l} A \geq 93\%, \ 93\% > A - \geq 90\%, \\ 90\% > B + \geq 87\%, \ 87\% > B \geq 83\%, \ 83\% > B - \geq 80\% \\ 80\% > C + \geq 77\%, \ 77\% > C \geq 73\%, \ 73\% > C - \geq 70\% \\ 70\% > D \geq 50\%, \ 50\% > E \end{array}$

Late assignments lose points. The exams must be taken at the scheduled time. When a student has a legitimate reason (documented emergency) for missing the first exam, the weight of the exam will be transferred to the second exam. Absolutely no make-up exams are given. Incompletes are not generally given for non-medical reasons.

Americans with Disabilities Act (ADA) Statement

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make

arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services. (www.hr.utah.edu/oeo/ada/guide/faculty/)

Wellness Statement

Personal concerns such as stress, anxiety, relationship difficulties, depression, crosscultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness www.wellness.utah.edu; 801-581-7776.

Topics

- 1. Introduction to simple linear regression model
- 2. Multiple regression model
- 3. Multiple regression inference
- 4. Dealing with qualitative explanatory variables
- 5. Specification issues
- 6. Detecting and remedying heteroskedasticity
- 7. Instrumental variable for addressing endogeneity
- 8. Qualitative explained variable
- 9. Pooled cross-section data analysis