Principles of Econometrics – Fall 2012

3 Credits

Pre-requisite – Econ 3620 or Econ 3640

Time – Monday/Wednesday 11:50 AM-1:10 PM

Location – M LI 1160

Instructor – Jason Flurer

Email – j.flurer@utah.edu

Office Location & Hours – By Appointment (Contact through email)

**Course Overview**

This class has the potential for being one of the most rewarding classes you can take as an undergraduate. During the semester, you should learn a lot about statistical modeling and learn to use software packages to perform econometric analysis. The will be very applied and should prepare you for working with data in a job environment or in graduate school. The class builds on Econ 3640 and we will review basic probability and statistics as we move through the material. No experience with computers is assumed. You will work in small groups throughout the semester.

**Course Objectives**

In this course, students will be prepared to:

1. To become familiar with multivariate regression analysis
2. To become fluent in using Excel software
3. To become acquainted with R software
4. Learn how to detect violations of classical model assumptions (CLRM)
5. Learn how to deal with violations of the CLRM
6. Learn how to collect, summarize, and analyze cross-sectional, time series, and mixed cross-sectional/time series data
7. Learn about data visualization using Excel and R
8. To write a statistical report that presents a hypothesis, a data description, an analysis, and a conclusion
9. To make an effective presentation of your research

**Required Texts**

Using Econometrics: A Practical Guide (6th Edition) A.H. Studenmund; ISBN-10: 0131367730

**Teaching and Learning Methods**

The course consists of in-class lectures, including in-class reviews for the midterm and final exam. Each lecture is associated with readings from the textbook and demonstrations of the applied techniques.

**Policies**

Students should speak with instructor *in advance* to request special consideration in the case of some extenuating circumstance that prevents their taking an exam or submitting an assignment at the scheduled time. Exams may only be taken the day indicated in the course schedule.

No extra credit is given in this class; students already have sufficient opportunities for learning and for demonstrating their knowledge of the subject and their effort and commitment in the class.

As a courtesy to everyone present, please arrive on time to class. Consistent attendance is recommended, but attendance is not taken.

**Computers and Software**

You will need access to a computer to complete this class. Many of you have personal notebook computers, which are fine. The software we will use runs under Linux, OSX, or Microsoft Windows.

If you have a personal computer, I encourage you to bring it to class so that you can follow along with the demonstrations as I lecture. If you do not have a personal computer, the software is available on the computers in the CSBS computer labs, an as well at the Marriott Library.

**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, cross-cultural 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.

**Grading Policy**

Grades will be based upon four components: Each component is weighted as follows:

|  |  |
| --- | --- |
| Activity  | Grade Weighting |
| Homework Assignments | 10% |
| Midterm Exam | 25% |
| Group Project | 25% |
| Final Exam | 40% |

 *The official University of Utah grading scale is used*

**Exams, Homework, and Group Projects**

* *Exams:* You will take a midterm and a final exam. Both of these tests will be take home tests, which I will discuss more as we progress in the class. By the very nature of the class, the Final will be comprehensive.
* *Homework:* You will have a few periodic homework assignments that need to be completed by the following class period. Each assignment will cover some portion of what we have discussed in class.
* *Group Project:* Participate actively in your group project, which I will discuss further during class.

**Tentative Schedule**

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| --- | --- | --- | --- |
| **Week** | **Dates** | **Chapters** | **Calendar** |
| 1 | 8/20, 8/22 | Review, 1, Introduction to R |   |
| 2 | 8/27, 8/29 | 2 |   |
| 3 | 9/5 | 3 | Labor Day 7/3 |
| 4 | 9/10, 9/12 | 4 |   |
| 5 | 9/17, 9/19 | 5 |   |
| 6 | 9/24, 9/26 | 6 |   |
| 7 | 10/1, 10/3 | Midterm Review & Midterm Exam |   |
|   | 10/8, 10/10 | Fall Break! | Fall Break All Week! |
| 8 | 10/15, 10/17 | 7 |   |
| 9 | 10/22, 10/24 | 8 |   |
| 10 | 10/29, 10/31 | 9 |   |
| 11 | 11/5, 11/7 | 10 |   |
| 12 | 11/12, 11/14 | 11 |   |
| 13 | 11/19 | 12 | Thanksgiving Break |
| 14 | 11/26, 11/28 | 13 |   |
| 15 | 12/3, 12/5 | Final Review & Last Class |   |
| 16 | 12/12 | Final Exam |   |