Econ 482 – Econometric Theory and Practice
Autumn 2012

Instructor: Sangeetha Srinivasan
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Lecture Hours: MW 8:30 – 10:20am
Classroom: SAV 264
Office Hours: TTh 1–2pm (in SAV 319E)

Econ 482 is an upper division undergraduate course in applied econometrics. Econometrics is distinguished by the unification of economic theory and statistical methodology. It is concerned with estimating economic relationships, confronting economic theory with facts, and testing hypotheses involving economic behavior.

Specific topics addressed in this course include single and multiple variable regression analysis, hypothesis testing, model specification, dummy variables, heteroskedastic and serially correlated errors, simultaneous equations and instrumental variables, and binary choice models. Regression estimators and their properties are formally derived using calculus.

Though the course is largely theoretical, we will frequently use these methods with real world financial and economic data. We will use Eviews (econometric software) for data analysis.

Prerequisites:

This course requires some mathematical, statistical, and computer proficiency. Specifically, familiarity with algebra, differential calculus, mathematical statistics, intermediate microeconomics and macroeconomics is assumed.

Learning Goals:

With the completion of this course, students should

- be able to understand, interpret, and implement multiple regression and related statistical techniques,
- know the limitations and pitfalls of regression methods, and
- be able to write a focused explanation of the findings of a statistical investigation, clearly and concisely.

Textbooks:


Software:

EViews - Quantitative Micro Software (www.eviews.com)

EViews is available at CSSCR on the first floor of Savery Hall. You can start EViews by double-clicking on the EViews icon on the desktop. The entire EViews manual is online.

You can also buy a student version for $39.95 at http://www.eviews.com/eviews6/eviews6s/evstud6.html

Class Webpage: You should be able to access your grade book, a copy of this syllabus, lecture notes, HW, any handouts I give in class, answers to exams etc. at the following webpage. https://catalyst.uw.edu/workspace/sangee/32904/ You will need your UW student ID and password to log in. You can set the notifications ON to let you know when I have posted something.

Course Requirements:

There will be approximately 6 home works, two exams and one econometric project.

Exam I 35%
Exam II 35%
Groups HWs (5-6) 15%
Group Project (Paper) 15%

Group HW and Project - Every student is expected to actively participate in one group during the quarter. Students will choose a group of 3 (no more than 3) and will do home works and projects in their respective groups. Only one assignment needs to be submitted per group. You should start talking to each other about group formation from the first day of the class. While submitting your HW, write the name of each individual of the group on the assignment. If you wish to switch your group at a later date let me know after you change your group. The last date to change your group is Oct 29th. It is strongly recommended that every group meet for several hours every week (in addition to the time spent attending lectures!) to prepare the group assignments and review classroom materials and discuss questions.

Homework will be due at the beginning of the class on due dates. Late submissions will not be accepted. Grading of homework questions will be random, that is, a couple of questions will be selected randomly from the problem set and will be graded thoroughly.

Project - The details about the final project will be given in due course. Project proposal is due on Wednesday, Nov 7th and the final paper is due on the last class day (Wednesday, Dec 5th). There will not be any extension.
**Exams** - There is *no makeup* exam for any of the exams in this course. Please plan on attending all the exams on time and as scheduled. In case of unexpected and unforeseen medical/emergency circumstances for the First Exam (for which you are required to provide a proof or documentation), the grade of your second exam will be doubled. Also, you must inform me about the same as soon as you can.

Note: Any issues with the scores on your HWs or Exams must be resolved within 1 week after they are handed back to you. It is part of your responsibility to verify the entries on catalyst grade book.

You may need a simple 4-function calculator for some of the questions in exams. **GRAPHING CALCULATORS, CELL PHONES, IPODS OR IPHONES ARE NOT ALLOWED.**

**Important Dates:**

- **Midterm Exam:** Nov 5th, 2012 (Monday) - 8:30-10:20am - SAV 264
- **Final Exam:** Dec 11th, 2012 (Tuesday) - 8:30-10:20am - SAV 264
- **Project Proposal:** Nov 7th (Wednesday)
- **Final Project Submission:** Dec 5th (Wednesday)

**Topics:**

1. Introduction to Econometrics
2. Review of Mathematical Statistics (Dougherty, Review Section)
3. Simple Regression Analysis (Ch 1)
4. Properties of Regression Coefficients and Hypothesis Testing (Ch 2)
5. Multiple Regression Analysis (Ch 3)
6. Model Specification (Ch 4 & 6)
7. Dummy Variable (Ch 5)
8. Heteroscedasticity (Ch 7)
9. Serial Correlation and Time Series Analysis (Ch 11-13)
10. Simultaneous Equation and Instrumental Variable (Ch 8 & 9)
11. Binary Choice Model (Ch 10)
12. Panel Data Models (Ch 14)
Disability Accommodations:

If you have a documented disability and feel comfortable sharing that with me please do so at the earliest, so that I can help make any necessary accommodations. I also encourage you to work with staff at the Office of Disability Resources for students.

Classroom Behavior:

- Language and actions on this campus should always be respectful of the wide range of diversity (race, sexual orientation, religion, ethnicity, socio-economic status, ability, age, gender, etc.)

- When one person is talking in our class, whether it is one of your colleagues or me, no one else should be talking. This is essential for each student to have complete freedom to ask questions and for me to effectively clear doubts.

- Students are strongly encouraged to raise questions as and when doubts arise. More often than not many of your classmates have similar concerns.

- Cell phones should be on vibrate/silent during class hour and put away during exams. Laptops can be used only to take notes etc. Please don’t engage in Im-ing, emailing, web-browsing because it distracts the others, not to mention how it affects your listening.

- ACADEMIC DISHONESTY WILL NOT BE TOLERATED. CHEATING OF ANY KIND WILL WARRANT STRICT ACTION AGAINST THE OFFENDER (S), MAY EVEN RESULT IN THEIR EXPULSION FROM THE UNIVERSITY.

- All work submitted, whether for homework or on exams, must be your own, original work submitted solely for this course. While I encourage you to discuss assignments outside of class, plagiarism, copying off others during exams, looking at someone else’s exam, using past assignments or test, or any other form of academic dishonesty will result in a zero grade on the assignment and/or exam and could result in more severe penalties as allowed by University policy. If I have any reason to suspect academic misconduct, I will follow University policy in dealing with the situation.