Econometrics (01:220:322:02)

Rutgers University, New Brunswick

Spring, Tues/Fri 11:30 am - 12:50 pm

Final: May 4, 12:00-3:00 pm

Location: CAC MU 212

Instructor: Sungkyung Lee (Sung Lee)

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Office Location: CAC NJ Hall 425

Office Hours: Tues 2:00-3:00 pm & Fri 2:00-3:00 pm

Course Objective and Learning Goals:

Econometrics is a set of research tools used to estimate and test economic relationships. The methods taught in this introductory course can also be employed in the business disciplines of accounting, finance, marketing and management and in many social science disciplines. The aim of this course is to provide you with the skills helpful in filling the gap between being "a student of economic" and being "a practicing economist" By taking this introduction to econometrics you will gain an overview of what econometrics is about, and develop some "intuition" about how things work. The emphasis of this course will be on understanding the tools of econometrics and applying them in practice.

Students who successfully complete Econ 322 should be comfortable with basic statistics and probability. They should be able to use a statistical/econometric computer package to estimate an econometric model and be able to report the results of their work in a non-technical and literate manner. In particular, a student who successfully completes Econ 322 will be able to estimate and interpret linear regression models and be able to distinguish between economic and statistical importance. They should be able to critique reported regression results in applied academic papers and interpret the results for someone who is not trained as an economist.

Prerequisite: (A minimum C grade required for each prerequisite course)

Introduction to Microeconomics (220:102), Introduction to Macroeconomics (220:103), Calculus I (640:135), and Introduction to Statistics (960:211 or 960:285)

Course Schedule:

- Introduction (Chapter 1)
- Review of Statistical Concepts (Chapter 2 and Chapter 3)
- The Simple Linear Regression Model (Chapters 4, 5, and 17)
- Midterm 1: Feb 17
- The General Linear Regression Model (Chapters 6, 7, and 18)
- Non-linear effects in Regression models (Chapter 8)
- Assessing Regression Models (Chapter 9)
- Midterm 2: Mar 31
- Regression with Panel Data (Chapter 10)
- Regression with a Binary Dependent Variable (Chapter 11)
- Instrumental Variables Regression (Chapter 12)
- Topics in Time Series Econometrics (Chapters 14-16)
- Final: May 4, 12:00-3:00 pm (https://finalexams.rutgers.edu/)

Textbook: (strongly recommended)

James H. Stock and Mark W. Watson, Introduction to Econometrics, updated 3rd Ed, Pearson

In addition to this textbook, we will be using MyEconLab throughout the semester. As purchasing options,

- MyEconLab access card (all digital) (ISBN 0133487679 or 9780133487671)
- MyEconLab + Looseleaf Package (ISBN 0133848914 or 9780133848915)
- MyEconLab + Bound Text Package (ISBN 0133595420 or 9780133595420)
- if you already have a copy of the text you can purchase a access code from the bookstore or from Pearson directly.

Alternatively, you may also refer to **Jeffrey Wooldridge's textbook**, **Introductory Econometrics:** A modern Approach.

Software:

This class will use *EVIEWS*. I'll assume that students haven't been exposed to this software. However, over the semester, I expect you to follow my instruction and practice using it by yourselves so that you are able to finish assigned empirical homework. You can use *EVIEWS* in any computer labs on campus.

Grading Assessment:

- MyEconLab assignments 20 % (empirical exercises will be given more weight)
- Midterm1 15 %
- Midterm2 25 %
- Final 40 %

Academic Integrity Policy:

I will regard academic integrity as one of basic virtues that educated students should have. I strongly recommend to take a look at academic integrity policy before exams. All electronic devices should be turned OFF and be put into your bag during exams. (http://academicintegrity.rutgers.edu/academic-integrity-policy/)

Self-Reporting Absence Application:

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website (https://sims.rutgers.edu/ssra/) to indicate the date and reason for your absence. An email is automatically sent to me.

Important Notes:

- There is NO make-up exam in principle unless you can prove your urgent case with an official form.
- A grade of C or better is required in the prerequisites, whether one is an Econ major or not. All econ majors need a C or higher to complete the major requirement.
- Please be considerate of other students when you "have to" use electronic devices during lectures.

Student-Wellness Services:

- **Just In Case Web App**: for a mental health crisis for you or a friend: http://codu.co/cee05e
- Counseling, ADAP & Psychiatric Services (CAPS): for non-emergency psychological health issues: (848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 www.rhscaps.rutgers.edu/
- Violence Prevention & Victim Assistance (VPVA) (848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 www.vpva.rutgers.edu/
- **Disability Services** (848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/
- **Scarlet Listeners**: for confidential peer counseling and referral hotline: http://www.scarletlisteners.com/or call (732) 247-5555

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