

Eugene Lang College
Instructor: Dr. Christian Proaño
E-mail: proanoac@newschool.edu
Office hours: MW 1–2pm

Spring 2011
Lecture: MW 4–5.40pm

LECO 2011 Introduction to Econometrics

– Syllabus –

Course Description

Econometrics is the field of statistical inquiry using economic data, which emphasizes on estimation and testing of the parameters used to specify economic models. In this course, students learn about linear regression, starting from foundations in probability theory. Topics covered from multiple perspectives include parameter estimation, hypothesis testing, and the statistical properties of estimators. Time permitting, the course may conclude with discussions about how the techniques covered can be extended to time-series analysis and other advanced topics.

Grading

Grading will be based on homework exercises (20%), the midterm in-class exam (30%) the final in-class exam (40%) and class participation (10%).

Course Outline

- Preliminaries
- Basic Statistical Theory
- Review of Matrix Algebra
- Linear Regressions with Single/Multiple Regression

- Nonlinear Regressions Functions
- Model Selection and Model Validity
- Regression with Binary Dependent Variables
- Instrumental Variables Estimation
- Time Series Regressions and Forecasting
- Panel Data Econometrics

Course Textbooks

Stock, J., Watson, M. (2010), *Introduction to Econometrics*, 3rd Edition, Prentice Hall.

Wooldridge, J. M. (2008), *Introductory Econometrics – A Modern Approach*, 4th edition, South-Western College Pub.