

**ECONOMICS 240A
ECONOMETRICS**

This is the second half of the first year course in econometrics (a.k.a. quantitative methods), which develops the procedures used for empirical implementation and validation of economic relationships. A working knowledge of mathematical statistics (from the first half of the semester) and matrix algebra (at the level of Math 54) is a prerequisite.

The grade for this half of the course will be based upon (approximately) biweekly problem sets (30%) and an exam (70%). The second midterm exam will be given in class on December 2; no make-up exams will be given. Any time conflicts should be discussed with the instructor well before the exam date.)

The required texts for this half of the course will be *A Course in Econometrics* by A. Goldberger and *An Introduction to Classical Econometric Theory* by Paul Ruud. The problem sets will almost always refer to exercises given in the Goldberger text. Some of the exercises will require use of the Econometric Microcomputer Laboratory (EML); details will be given in the discussion sections.

COURSE OUTLINE FOR SECOND HALF OF SEMESTER

Month	Topic	Readings
October	Classical Regression	Goldberger, Ch. 13-17; Ruud, Ch. 1-9 and Appendix G.
November	Classical Normal Regression	Goldberger, Ch. 18-25; Ruud, Ch. 10-12.

LECTURE PLAN

Oct. 12: Overview of Econometrics

Oct. 19: Least Squares Prediction and Classical Linear Model

Oct. 21: Moments of LS and Gauss Markov Theorem

Oct. 26: Short, Long, and Residual Regressions

Oct. 28: Multivariate Normal and Quadratic Forms

Nov. 2: Classical Normal Regression Model

Nov. 4: Confidence Intervals and Regions

Nov. 9: Normal Hypothesis Testing Setup

Nov. 11: (No Meeting – Veteran's Day)

Nov. 16: Single and Multiple Hypothesis Tests

Nov. 18: Tests Using Residual Sums of Squares

Nov. 23: Marginal Significance Level and Multicollinearity

Nov. 25: Neoclassical Regression Model

Nov. 30: Review and Preview of 240B

Dec. 2: Midterm Exam