

Economics 7818
Dr. Waldman
Room 108, Economics

August, 2005
waldman@colorado.edu
T: 8:30-9:30, R 3:30 - 4:30, and by appointment

Course Information

General: Economics 7818 is a course in mathematical statistics for economics Ph.D. students. It is followed by Economics 7828, a course in regression analysis. Together, Econ 7818 and 7828 are required courses for taking the preliminary exam in quantitative methods.

Prerequisites: An undergraduate course in statistics; calculus, to the level of multiple integration with transcendental functions (*e.g.* \log , e^x , etc.); the ability to manipulate and simplify algebraic expressions; to think abstractly.

Requirements: There will be two lectures weekly, meeting Tuesday and Thursday from 2:00 to 3:15 p.m. in Economics Rm. 2. There will be a midterm exam, Thursday, October 13, a final exam, Saturday, December 10, 7:30-10:30 a.m., and required written work (usually, practice problems from the text) throughout the semester.

Grading: Grades will be determined approximately as follows:

Midterm:	30%
Final exam:	40%
Problem Sets:	20%
Residual:*	10%

*This includes class participation, contact in office hours, subjective scoring of written work, etc.

Text:

Required: A Course in Econometrics, Arthur S. Goldberger, Harvard Press, 1991.

Supplemental: Introduction to Statistics and Econometrics, Takeshi Amemiya, Harvard, 1994.

Tentative Course Outline: We will cover, in order, the first 17 chapters of the text. After a brief introduction of what empirical economists do, we will discuss univariate and bivariate distributions, especially the normal distribution; expectation and sampling distributions; methods of estimation; and introduce the multiple regression model.

Practice Problems: All end-of-chapter problems are suggested; only some are required (to be indicated). Answers to selected problems will be posted on the course website approximately one week after the presentation of the relevant material in class, on a date to be previously announced. Written answers to problems are to be submitted before the answers are posted. These will be selectively graded, and returned. I will take some midterm and final exam questions from these problems. For the purposes of grading, I do not expect you to do all the problems at the end of each chapter.