

Economics 418
Introduction to Econometrics
Fall 2007

Professor R. L. Oaxaca
McClelland 401QQ
Office Hours: TR 2-3 p.m ,
or by appointment

SYLLABUS

The objective of this course is to acquaint the student with the applications of statistical methods to the estimation and testing of behavioral models common to economic analysis.

Prerequisites: Econ 276 or 339

Prior exposure to elementary calculus would be helpful though it is not strictly required.

Text: Wooldridge, *Introductory Econometrics*, 3rd ed., 2006

Notes: Econ 418 Class Materials and Notes

Class materials and notes for this course will be available for downloading from the following website: <http://www.u.arizona.edu/~rlo/>. Once you have arrived at the website just click on the label "Teaching". The website may also be accessed by following the links from the UofA website <http://www.arizona.edu> to the Eller College of Management, Department of Economics. You will want to have your own portable computer storage device (i.e. a flash drive).

In addition to the three midterm exams and an optional final exam, students will be responsible for completing take-home problem sets and being prepared for class discussions.

Classroom Etiquette - Please remember to turn off cell phone ringers and refrain from leaving the room and returning during class and exams.

COURSE POLICIES & REQUIREMENTS

I. Class attendance and participation

- A. Excessive absences may result in an administrative drop with the grade of E.
- B. Students will be called upon in class to answer questions pertaining to concepts covered in class and to take-home problem assignments.

II. Exams

A. Schedule

- 1. Midterm Exam #1 - Thursday, September 27, 2007
- 2. Midterm Exam #2 - Thursday, October 25, 2007
- 3. Midterm Exam #3 - Thursday, November 29, 2007
- 4. Optional Final - Tuesday, December 11, 2007 (11 a.m.– 1 p.m.)

- B. Optional Final - Students who wish to decline the opportunity to take the final exam must be in class on Tuesday, December 4, 2007, to fill out and sign a final exam waiver form; otherwise, the final exam is mandatory.

C. Missed exams

- 1. Exams will be given during scheduled class hours, thus there should be no excuse for missing them.
- 2. Failure to show for an exam will result in a score of zero for that exam.

- D. All exams will be closed book, however the use of calculators is permitted.

III. Determination of the Final Course Grade

A. Total points possible.

	No Final	Optional Final
Take Home Problem Sets	100	100
Midterm Exam #1	125	125
Midterm Exam #2	125	125
Midterm Exam #3	150	150
(Optional) Comprehensive Final		100
Total Points	<u>500</u>	<u>600</u>

B. Guidelines for letter grades assignments

Grade	No Final	Optional Final
A	455 ⁺	546 ⁺
B	405–454	486–545
C	335–404	402–485
D	300–334	360–401
E	0–299	0–359

IV. Take-Home Problem Sets

A. Graded take-home problem sets involving computer applications will be assigned throughout the semester.

1. Students may work together in groups of 3 or less on these assignments, i.e. no more than 3 names may appear on a completed assignment.
2. Each completed assignment must include supporting computer printout in order to receive credit.

B. Available Econometrics/Statistical Programs

1. Students are free to use any statistical software package they find convenient.
2. Partial listing of available econometrics/statistical software programs suitable for this course:
STATA, SAS and Soritec programs (available at the Sands Computing Lab - McClelland 135).

COURSE OUTLINE AND READING LIST

I. Introduction

- A. Wooldridge, Chapter 1
- B. Basic Mathematical and Statistical Concepts
Wooldridge, Appendix A, B, & C

II. The Simple Regression Model

Wooldridge, Chapter 2.

Class notes on functional form

III. The Multiple Regression Model

Wooldridge, Chapters 3, 4, 5, 6 & 7.

IV. Econometric Issues and Problems in Single Equation Models

- A. Heteroscedasticity
Wooldridge, Chapter 8
- B. Specification Error
Wooldridge, Chapter 3, pp. 94-99, 105-106 and Chapter 9
- C. Multicollinearity
Wooldridge, Chapter 3, pp.101-104.
- D. Time Series and Serial Correlation
Wooldridge, Chapters 10, 11, and 12

V. Simultaneous Equations Models

Wooldridge, Chapter 16