

**Department of Economics  
Carnegie Mellon University  
Econometrics II, 73-360  
Fall, 2000-2001**

**Syllabus**

Lectures	MW 10:30-11:20, PH A18A
Recitation	A: F 10:30-11:20, OSC 201 B: F 10:30-11:20, PH A18B C: F 10:30-11:20, PH A18A
Instructor	Bill Vogt HBH 2116D, 268-1843 wilibear@andrew.cmu.edu
Office Hours	M 3:30 - 5:30 W 11:30- 2:00
TAs	A: B: C:
Textbooks	Gujarati, Damodar (1992) <i>Essentials of Econometrics</i> . New York, NY: McGraw-Hill. Delwiche, Lora D. & Susan J. Slaughter (1995) <i>The Little SAS Book: A Primer</i> . Cary, NC: The SAS Institute.
Website	<a href="http://www.andrew.cmu.edu/course/73-360/index.htm">http://www.andrew.cmu.edu/course/73-360/index.htm</a>

## **1 Course Objectives**

Our objective will be to build understanding of estimation and inference in several popular econometric models. These will include (time permitting) the multivariate linear regression model, models of discrete and limited dependent variables, and simultaneous equations models.

## **2 Prerequisites**

The first course in this two course series is Econometrics I, 73-260. That course (or equivalent) is a prerequisite. Students are expected to understand basic probability, sampling, hypothesis testing, confidence intervals, and the bivariate linear regression model.

## **3 Grading**

The grade will be determined by performance on homework assignments (30%), a midterm (30%), and the final exam (40%). You are responsible for the content of the lectures, including any handouts. The lectures cover material very similar to that presented in chapters 5-13 of the book. However, lectures do NOT follow the book exactly and it is the lecture material for which you are responsible.

## **4 SAS**

For our class examples, homework, and tests, we will use the statistical package SAS. One of the texts for the course is a SAS primer. SAS is a general purpose statistical programming language. It is installed in more than 3 million sites world-wide and is nearly a de facto standard in the manipulation of large datasets. There will be instructional material on the website for SAS as well as several SAS review sessions in the evenings in a computer cluster.

## 5 Various Class Policies

### 1. Policy on Cooperation

- You may cooperate as much as you like on homework assignments; however, each individual must submit a separate assignment, and each individual will be separately graded on that assignment.
- You may not cooperate while taking exams.

### 2. Policy on Aids During Exams

- All exams are open book. You may use text, notes, calculators, computers, reference materials, etc.
- You may not communicate or cooperate with anyone on the exam.
- Please do not use the open book policy as a substitute for studying. If you need to look in your book, notes, etc for instructions on HOW TO DO the exam, you will surely run out of time.

### 3. Policy on Format of Assigned Work

- All work must be legible. Illegible is the equivalent of completely wrong.
- Spelling, grammar, style, etc do not “count” per se. However, anything which I (or the TAs) cannot understand is wrong. Poor spelling, grammar, style, etc are often confusing.

### 4. Policy on Lateness

- Due and return dates for assignments are in the syllabus in the schedule section. Unless the instructor or TA announces otherwise, these dates are binding.
- Late assignments are not accepted without either prior arrangement or compelling and verifiable reason.
- Assignments and homeworks will be returned to you in recitation. You are responsible for picking them up. You are responsible for keeping them to compare against your final grade. I will use whatever grade I have recorded for your work (even if you think there is an error) unless you can show me the graded work so that I can see the error.

- You are responsible for collecting your graded work. Claims by students similar to “I turned in homework #2, but I don’t have a copy of it because you did not return it to me!” must be made within one week of the return date of the assignment. If you fail to make the complaint in time, I will use whatever grade I have in my records.

## 6 Schedule

The class schedule below is tentative and likely will not be followed exactly. I offer it to give you an idea of which topics we will cover in what order and to give you an idea of how many assignments to expect.

Date	Material, Book Sections	Work
M Aug 28	Introduction	
	<b>The Multivariate Model</b>	
W Aug 30	Assumptions of Model, 7.1, 7.2	HWK 1 assigned
F Sep 01	No Recitation	
M Sep 04	No classes, Labor Day	
W Sep 06	Estimation, Gauss-Markov, 7.3 6.3	
F Sep 08	Recitation	
M Sep 11	Confidence Intervals, Hypothesis Testing, 7.7	
W Sep 13	Hypothesis Testing, several parameters, 7.8	
F Sep 15	Recitation	HWK 1 due
M Sep 18	Examples	HWK 2 assigned
	<b>Functional Forms</b>	
W Sep 20	elasticity, log-log regression, 8.1-2	
F Sep 22	Recitation	
M Sep 25	growth, semi-log regression, 8.1-2	
W Sep 27	dummy variables, 9.1-2	
F Sep 29	Recitation	HWK 2 due
M Oct 02	dummies, many categories, 9.3-4	HWK 3 assigned
W Oct 04	Examples	
	<b>Heteroskedasticity</b>	
F Oct 06	Recitation	HWK 3 due
M Oct 09	Consequences, 11.1-2	
W Oct 11	Testing, Correcting, 11.3-4	
F Oct 13	Recitation	HWK 3 returned

Date	Material, Book Sections	Work
M Oct 16	Examples/Review	
W Oct 18	<b>Midterm</b> , covers through hetero	
F Oct 20	No Recitation, Midsemester Break	
M Oct 23	No Class, Midsemester Break	
	<b>Serial Correlation</b>	
W Oct 25	Consequences, 12.1-2	
F Oct 27	Recitation	Midterm returned
	<b>Specification Errors</b>	
M Oct 30	Omitted and Extraneous Variables, 13.1-2	HWK 4 assigned
W Nov 01	Multicollinearity, 10	
F Nov 03	Recitation	
	<b>Discrete Dependent Variables</b>	
M Nov 06	Discrete Dependent Variables Models	HWK 5 assigned
W Nov 08	Discrete Dependent Variables Models	
F Nov 10	Recitation	HWK 4 due
M Nov 13	Idea of Maximum Likelihood	
W Nov 15	Maximum Likelihood, Estimation, Inference	
F Nov 17	Recitation	HWK 5 due, HWK 4 ret
M Nov 20	DDV examples	HWK 6 assigned
W Nov 22	No Class, Thanksgiving Break	
F Nov 24	No Recitation	
M Nov 27	Multinomial Logit	
	<b>Limited Dependent Variables</b>	
W Nov 29	Limited Dependent Variables Models	
F Dec 01	Recitation	HWK 6 due, HWK 5 ret
M Dec 04	Tobit Model	
W Dec 06	Tobit Model, Estimation, Inference	
F Dec 08	Recitation	HWK 6 returned
M Dec 11	Catch up & Review	
Dec 14-9	Final Exams	

Date    Material, Book Sections    Work