**Empirical Methods in Economics**

Econ 253, Spring 2002


Time: Wed, Fri 11:00am - 12:15pm
Room: Griffin 2
Office Hours: Tue, Wed, Fri 2:00 - 4:00pm
http://www.williams.edu/Economics/tdvorak/253

Tomáš Dvořák
Office: Fernald 6
Phone: 597 3143
Email: tdvorak@williams.edu


**Course description:** This course is an introduction to applied quantitative economic analysis. It will acquaint students with the empirical dimension of economic research by familiarizing them with the basic empirical methods used by economists. Emphasis throughout will be on the practical application of the principles being developed. Computer work will be part of the course, but no previous training in computers is expected. Elementary calculus will be used in assigned readings, exams, and lectures.

**Prerequisites:** The formal prerequisites include two courses in economics. Informal prerequisites include a strong interest in applied economics and enthusiasm to work with economic data.

**Readings:** There are two required texts for this course. The first text is *Essentials of Econometrics, 2nd ed.* by Damodar Gujarati. This is the main text which we will follow very closely. The second required text is *Stataquest*, a student version of a powerful and widely used statistical software called STATA. We will use *Stataquest* to apply econometric methods to data.

**Course requirements:** Learning Econometrics is cumulative. Each topic builds on the previous one. It is therefore important that you are regular in class attendance and in submitting problem sets. The final course grade will be determined according to the following table:

| | |
|---|---|
| Midterm 1 (February 27) | 25% |
| Midterm 2 (April 17) | 25% |
| Homework | 15% |
| Final | 35% |

**Logistics:**

- Homework assignments should be turned in to the assigned mailbox in Fernald House. Please write your name and SU box number on the front of each assignment.
- Late assignments will not be accepted. The lowest of your homework assignments will not be calculated into your grade.
- You may work together on homework assignments, but all work must be submitted individually.

- You will be allowed a one-sided "cheat sheet" (8.5x11) for each midterm and a two-sided "cheat sheet" for the final.
- The TA for this course is Shenil Saya who will hold question and answer sessions once a week, time and room tba.
- It is considered the violation of the Honor Code to use solution sets that were handed out in the past. If you are uncertain as to how the Honor Code applies to your work in this course, please ask me.

**Tentative Course Outline:**

**I. Basics of Probability**

- Chapters 2 and 3

**II. Statistical Inference and Hypothesis Testing**

- Chapters 4

**III. Two-Variable Linear Regression Model**

- Chapters 5 and 6

**IV. Multiple Regression Model**

- Chapter 7

**V. Functional Forms**

- Chapter 8

**VI. Dummy Variables**

- Chapter 9

**VII. Data Problems**

- Chapters 10,11 and 12

**VIII. Choosing the Appropriate Model**

- Chapter 13