

Introduction to Econometrics

ECO4421 - Spring 2005

DEPARTMENT of ECONOMICS
FLORIDA STATE UNIVERSITY

COURSE OUTLINE & SYLLABUS

Lectures:	T & R; 3:35-4:50 and 11-12:15 (Bel 203)	Instructor:	Farasat A.S. Bokhari
Internet:	http://mailer.fsu.edu/~fbokhari/eco4421	Email:	fbokhari@fsu.edu
Office:	Bellamy 284	Tel:	(850) 644-7098
Hours:	Monday & Tuesday, 1-2pm	Fax:	(850) 644-4535

Required Text. Basic Econometrics by Damodar N. Gujarati, Fourth Ed., 2003

Course Description. Economics 4421 is an introductory econometrics course offered by the Economics Department at Florida State University. This course covers topics in probability theory, statistics, and econometrics, including simple and multiple regression analysis, and inference and hypothesis testing. The aim of this course is to introduce you to a range of econometric techniques and provide hands-on experience in using those techniques appropriately. The first part of the course will cover the fundamentals of probability and statistics. This is essential to an appreciation of later material, even though it will be a review for some of you. Next, we will cover the basic ideas of linear regression, first with the two-variable regression model and then with the multivariate model, using both quantitative and qualitative variables. In the final section, we deal with the practical consequences of relaxing various assumptions of the classical linear regression model.

This class requires a commitment both to attendance and participation. You are responsible for completing homework and computer assignments on time. Exams will be based on the sorts of problems covered in the homework and assignments as well as on the lecture material.

Office Hours. I will hold office hours on Wednesday and Friday from 3:00 P.M.-4:00 P.M. in 284 Bellamy. These hours are reserved for students, so do not hesitate to spend as much of this time as you need getting help. Outside of these times, I will be happy to talk with you if I am not busy. If I am busy, I will tell you so and make arrangements to talk to you at another time.

Course Web Page. The course web address is <http://mailer.fsu.edu/~fbokhari/eco4421>. In addition to course announcements a copy of the syllabus, assignments, solutions, data-sets etc., will be posted at this address. Be sure to check it regularly for any special announcements.

Software. Your textbook comes with CD which has the data used in the Gujarati textbook. Additionally, the CD also has a student version of the EViews software on it. For homework assignments you are free to use any software you like (Excel, EViews, SAS, Stata, etc.) however, when turning in your assignments, you must carefully cut-and-past tables and/or numerical answers that you need to submit. Large computer printouts attached to your assignments will not be accepted. Finally note that while the student version of EViews and Excel do not allow you to program the code, I will from time to time also post a SAS version of the dataset to be used for the assignment(s) on the course web-site along with the SAS code to do the problems.

Grading Policy. Students will be evaluated on the basis of three exams (30% for each exam), homework problems and class participation (5% each). Your final grade will depend solely on the total points you receive on the exams and assignments. *There is no extra credit work available to compensate for poor exam*

scores. The exam and assignments will consist of both, 'theoretical' problems as well as numerical assignments to be done using computers. There are no make-up exams and late assignments will not be accepted.

Assignments. There will be about 5 or 6 assignments handed out during the semester and will be due at approximately equal intervals during the course of the semester (due dates will be announced when the assignments are handed out.) The assignments will not be corrected for each problem separately. Instead, on each assignment you will get a score of 0 (not turned in), 1 (turned in but less than 50% problem attempted or turned in and attempted all problems but appeared to have many errors) and 2 (turned in on time, attempted all problems and had none or very minor errors). Your cumulative score from all the assignments will then be used to compute your final numeric score needed to assign letter grades. Very detailed solutions will be posted on the course web-site and you must go through them to compare them to your own answers.

Exam Dates. The three in-class exams be on the following dates.

- Exam 1: February 3rd. (Thursday)
- Exam 2: March 22nd. (Tuesday)
- Exam 3: Per the dates & times decided by the Registrars office:
 - Section 01 (03:35-04:50pm) on Tuesday from 5:30 to 7:30pm.
 - Section 02 (11:00-12:15pm) on Thursday from 7:30 to 9:30am.

Academic Honesty. While I encourage you to study in groups, all assignments and the exams in this class are to be done independently. Deviation from this will be considered academic dishonesty and will be dealt with according to the department and university protocol. Please refer to the FSU Academic Honor Code (<http://www.fsu.edu/~union/honor.htm>).

American Disabilities Act Statement. Students with disabilities needing academic accommodations should: (1) register with and provide documentation to the Student Disability Resource Center (SDRC); (2) bring a letter to the instructor from SDRC indicating that you need academic accommodations. This should be done within the first week of class.

Course Outline. Except for the review on probability and statistics, we will be following Part I and Part II of the Gujarati text book pretty closely. For the review of probability and statistics, we will use Appendix A and parts of chapter 2 in the text book. Note that I will cover the material in Appendix A in much more detail than is given in the book. While I will post an outline/summary of my lectures on probability and statistics on the course website, you should plan on taking careful notes in class. Note also that I will not be posting any notes on the rest of the material that we will cover during the semester.

- (1) Introduction (Chap. 1)
- (2) Review of Statistics and Probability (Appendix A, Appendix 5.A. Chap. 2 and lecture notes)
- (3) Two-Variable Regression Analysis (Chap. 3 and Chap. 4)
- (4) Extensions of the Two-variable model (Chap. 6)
- (5) Hypotheses Testing (Chap. 5)
- (6) Multiple Regression Analysis (Chap. 7 and Chap. 8)
- (7) Dummy Variable Regression Models (Chap. 9)
- (8) Multicollinearity (Chap. 10)
- (9) Heteroscedasticity (Chap. 11)
- (10) Model Specification (Chap. 13)