# Introduction to Econometrics
## ECO4421 - Spring 2010

DEPARTMENT *of* ECONOMICS
FLORIDA STATE UNIVERSITY

SYLLABUS

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| Lectures: | MW, 5:15-6:30, BEL 204 | Instructor: | Farasat A.S. Bokhari |
| Internet: | http://mailer.fsu.edu/~fbokhari/eco4421 | Email: | fbokhari@fsu.edu |
| Office: | Bellamy 284 | Tel: | (850) 644-7098 |
| Hours: | M − 1:30-3:30 | Fax: | (850) 644-4535 |

**Required Text.**   Basic Econometrics by Damodar Gujarati & Dawn Porter, Fifth Ed., 2008

**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 Mondays from 1:30-3:30PM 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. Additionally, the publishers of your textbook (McGraw-Hill/Irwin) provide a copy of all tables and datasets in the textbook on their own web-site. The URL for the textbook website is http://www.mhhe.com/gujarati5e. You are encouraged to download these datasets.

**Software.**   For homework assignments your 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 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 and Class Attendance.**   Students will be evaluated on the basis of two exams (40% and 45% respectively) and homework problems (5%). 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. There are no make-up exams and late assignments will not be accepted.*
The exam and assignments will consist of both, "theoretical" problems as well as numerical assignments
to be done using computers. In addition, class attendance is mandatory. Upto two classes can be missed
during the semester. After that, every additional missed class will result in the final letter grade being
lowered by one full letter. Just to be clear: if based on assignments and exams, your letter grade is an
"A", then missing the third class would automatically lower it to a "B" and missing the fourth class would
lower it to a "C" and so on.

**Exam Dates.**    The two in-class exams will **<u>TENTATIVELY</u>** be on the following dates.
- Midterm: March 1st, 2010 (approximately mid-way through the semester)
- Final: TAB (Date and time as set by the registrar)

Note that the dates given above are <u>tentative</u>. As we progress through the semester, these dates are likely
to change so do not make alternative plans around these dates as you are responsible for missing the exams.

**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://dof.fsu.edu/honorpolicy.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.

 

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