ECON 3161 ECONOMETRIC ANALYSIS

Instructional Center 117, TR 9.35 am to 10.55 am

Instructor: Dr. Shatakshee Dhongde
Office: Room 221, Old CE
Office Hours: TR: 2.00 to 3.00 pm
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TA: Carrie Zhai, Graduate Student
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Course Description:

This course introduces students to regression models used in empirical economic analysis. The course emphasizes on the application of econometrics in different fields of research. Students will model simple applications using **STATA** statistical software. During the course, they will work with a variety of datasets. The course is quantitatively rigorous and requires knowledge of mathematics and statistics. Students are required to conduct independent research where they apply the econometric techniques learnt during the course and present their estimation results.

Learning Objectives:

A broad objective of the course is to introduce regression analysis which is widely used in various fields in economics such as development, environment, and macroeconomics. Specifically, at the end of the course, students will be able to specify assumptions, formulate appropriate models, estimate the models (mathematically and using STATA), interpret the results and test their robustness. Students will be proficient to write a high quality undergraduate research paper in economics using the econometric methods taught in this class.

Required Text Book:

Introductory Econometrics: A Modern Approach, by Jeffrey Wooldridge, 5th edition (Southwest-Cengage Publishers)

Grading Structure:

Assignments	Dates	Grade Weight
Attendance and Participation	Throughout the semester	5 %
Homework	Given on Thursdays, and due on following Tuesday (see T-square for announcements)	20 %
Group Research Project	Separate guidelines with dates (on T-square)	20 %
Midterm Exam	Thursday, October 8*	20 %
Final Exam	Thursday, December 10	35 %

*Approximate grading scale based on previous years grades: 90 and up: A, 75 to 89: B, 60 to 74: C

Course Content:

1. The Nature of Econometrics and Economic Data.
2. The Simple Regression Model.
3. Multiple Regression Analysis: Estimation.
4. Multiple Regression Analysis: Inference.
7. Multiple Regression Analysis with Qualitative Information: Binary (or Dummy) Variables.
8. Heteroskedasticity.

*Course Calendar:**

Week	Date	Content
1	18-20 August	Chapter 1
2	25-27 August	Chapter 2
3	01-03 September	Chapter 2
4	08-10 September	Chapter 2
5	15-17 September	Chapter 3
6	22-24 September	Chapter 3
7	29 Sept. – 1 Oct	Chapter 4
8	06-**08** October	Revision/ **Midterm**
9	**13**-15 October	**Fall Break**/ Midterm solution
10	20-22 October	Chapter 4
11	27-29 October	Chapter 4
12	03-05 November	Chapter 6
13	10-12 November	Chapter 6
14	17-19 November	Chapter 7
15	24-**26** November	Chapter 7/ **Thanksgiving Break**
16	01-03 December	Chapter 8

Class Policy:

- Attendance and participation in the class is strongly recommended. When possible, students should provide advance notice for missing a class.
- Make-up exams will be allowed only under exceptional circumstances.
- Homework must be turned in on the due date in the class (dates will be posted on T-square). Late submissions will not be accepted. Students are encouraged to work together to solve homework.
- All course announcements will be posted on T-Square: www.t-square.gatech.edu
- Students are expected to maintain academic honesty See Honor Code http://www.honor.gatech.edu.
- GT Policy on Disability Services at: http://disabilityservices.gatech.edu/content/15/policies-procedures