ECON 3161 ECONOMETRIC ANALYSIS

Old Civil Eng. (CE), G-10, TR 9.35 am to 10.55 am

Instructor: Dr. Shatakshee Dhongde
Office: Room 221, Old CE
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Course Description:

This course introduces students to linear 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 on a variety of datasets. The course is quantitatively rigorous and requires knowledge of mathematics and statistics.

Goals and Learning Objectives:

An important objective of the course is to introduce regression analysis to students so that they are able to understand its applications in different fields in economics. Specifically, by the end of the course, students will be able to specify assumptions, formulate and estimate appropriate models, interpret the results and test their statistical significance. Students are required to conduct research in teams where they apply the techniques learnt during the course and present their results. Students will be trained to write a good quality undergraduate research paper in economics using the econometric methods taught in this class.

Required Text Book:

Introductory Econometrics: A Modern Approach, by J. Wooldridge, 6th edition (Cengage Learning)

Grading Structure:

Assignments	Dates	Grade Weight
Attendance and Participation	Throughout the semester	5 %
Homework	Assigned and announced on T-square	20 %
Group Research Project	Separate guidelines with dates on T-square	20 %
Midterm Exam	Thursday, October 13	20 %
Final Exam^{+}	Thursday, December 8	35 %

$^{+}$*Final exam will be of shorter duration @ 90 minutes*

Course Website:

All course announcements will be posted on T-Square: www.t-square.gatech.edu

Grading Scale:

Your final grade will be assigned as a letter grade according to the following scale:

A 90-100%

B 75-89%

C 60-74%

D 50-59%

F 0-49%

Course Content:

Chp. 1. The Nature of Econometrics and Economic Data

Chp. 2. The Simple Regression Model

Chp. 3. Multiple Regression Analysis: Estimation

Chp. 4. Multiple Regression Analysis: Inference

Chp. 6. Multiple Regression Analysis: Further Issues

Chp. 7. Multiple Regression Analysis with Qualitative Information: Binary (or Dummy) Variables

Chp. 8. Heteroskedasticity

*Course Calendar:**

Week	Date	Content
1	23-25 August	First Class/ Chapter 1
2	30 Aug.-01 Sept.	Chapter 2
3	06-08 September	Chapter 2
4	13-15 September	Chapter 2
5	20-22 September	Chapter 3
6	27-29 September	Chapter 3
7	04-06 October	Chapter 4
8	**11-13** October	**Fall Break/ Midterm Exam**
9	18-20 October	Chapter 4
10	25-27 October	Chapter 4
11	01-03 November	Chapter 6
12	08-10 November	Chapter 7
13	15-17 November	Chapter 7
14	22-**24** November	Chapter 8/ **Thanksgiving Break**
15	29 Nov.-01 Dec.	Chapter 8
16	06-08 December	Final Class/ **Final Exam**

**Denotes Tentative*

Course Expectations and Guidelines:

- ***Academic Integrity***

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit http://www.catalog.gatech.edu/policies/honor-code/ or http://www.catalog.gatech.edu/rules/18/. Any student suspected of cheating or plagiarizing on an exam or the research paper will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

- ***Accommodations for Individuals with Disabilities***

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or http://disabilityservices.gatech.edu/, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

- ***Assignment Turn-In***

Homework must be turned in on the due date in the class and not via email. Late submissions will not be accepted. There will be no extra credit opportunities offered at the end of the semester.

- ***Attendance and/or Participation***

Attendance and participation in the class is strongly recommended. When participating in "approved Institute activities" (e.g. field trips and athletic events) students should provide appropriate notice in advance for missing a class (see http://www.catalog.gatech.edu/rules/4/ for more information). Doctor's notes need to be provided for absences due to medical reasons. Make-up exam will be allowed only under exceptional circumstances.

- ***Collaboration & Group Work***

Students are encouraged to work together on homework assignments. Research projects will be assigned to groups of 2 to 3 students. If other team members report about a student slackening from group work, appropriate disciplinary action will be taken again the student.

- ***Student Use of Mobile Devices in the Classroom***

No cell phones are allowed during class; laptops will be allowed only when students are asked to bring them to class for course purposes.

- ***Student-Faculty Expectations***

At Georgia Tech we believe that it is important to continually strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See http://www.catalog.gatech.edu/rules/22/ for an articulation of some basic expectations – that you can have of me, and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech, while in this class.