Description of Course Content:
1. The **Classical Linear Regression Model**, its maintained assumptions and optimal properties. This model is by far the most frequently used by economists to analyze economic data.
2. How to apply the Classical Linear Regression Model to economic data for the purposes of **hypothesis testing** and **prediction**.
3. How to determine, vis-à-vis **diagnostic statistics**, when the **maintained assumptions** of the Classical Linear Regression Model are violated and how to address the violations so that **correct statistical inferences** can be drawn.
4. The details of some **statistical computer programs** frequently used by economists to analyze economic data.

Student Learning Outcomes: The class will be evaluated using your grades from 3 exams, weekly quizzes, and lab reports. Each exam will be worth 20% of your final grade. Labs and quizzes will be worth 40%


Descriptions of major assignments and examinations: Quizzes will come straight out of your homework. The exam 1 will be on February 13th, exam 2 will be on March 27th. Exam 3 is your final exam, which is scheduled by the department.
The answers to the problems discussed during the lab session (sessions in which we focus on STATA applications) are due the following class. These are your "lab reports."

Attendance: You are expected to attend all the class sessions. There are no make-up exams or quizzes, except for university athletes.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor
with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:** Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

> I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

> I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Student Support Services:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Course Schedule.**

*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.*

1. Syllabus and Introduction to Econometrics
2. The Simple Linear Regression Model
3. Interval Estimation and Hypothesis Testing
4. Prediction, Goodness-of-Fit, and Modeling Issues
5. The Multiple Regression Model
6. Inference in the Multiple Regression Model
7. Using Indicator Variables
8. Heteroskedasticity
9. Time Series Data: Stationary Variables (Serial Correlation)
10. Random Regressors and Instrumental Variables (Endogeneity)