Course Syllabus
BUAN / MECO 6312 Section 001/003

Course Information

Course Number/Section	BUAN/MECO 6312
Course Title	Applied Econometrics and Time Series Analysis
Term	Spring 2023

Course Meeting Time

Section 001	Mondays 4pm-6:45pm, JSOM 12.206
Section 003	Thursdays 4pm-6:45pm, JSOM 12.214
No Class:	Monday Jan 16th, MLK
	Thursday Mar 9th
	Monday Mar 13th, Spring break
	Thursday Mar 16th, Spring break

Instructor Contact Information

Instructor	Joonhwi Joo
Email Address	joonhwi.joo@utdallas.edu
Office Location	JSOM 13.326
Office Hours	Mondays 2:30pm-3:30pm

TA Contact Information

TA	N/A
Email Address	
Office Location	
Office Hours	

Course Co-requisites:

OPRE 6301 or SYSM 6303 or FIN 6306

Although OPRE 6301 or SYSM 6303 or FIN 6306 is listed officially as co-requisites, I recommend students to take either of these courses BEFORE taking this course, or have a very good knowledge on the subjects covered in OPRE6301/SYSM6303/FIN6306. In addition, students are expected to have a good background knowledge on basic algebra and basic calculus.

Course Description

The course teaches students to empirically estimate and interpret commonly used econometric techniques to analyze cross-sectional and time series data sets. The emphasis will be given on understanding the linear models.

Student Learning Objectives/Outcomes

1. Students will be able to understand linear regression and related methods to analyze cross-sectional and time series.
2. Students will be able to use R, the free statistical programming language, to analyze cross-sectional and time series data.

Grade Policy

Grade Scale:
A, A-, B+, B, B-, C+, C, F

I follow (roughly) a curve with 30-40% A's (i.e., A, A-), 50% B's (i.e., B+, B, B-), and the rest are C's (i.e., C+, C). Of course, if the appropriate grade is an F, then an F it is!

Grades will be based on two NON-CUMULATIVE midterms (35% for each midterm), assignments (20% in total), and class participation and attendance (10% in total).

The instructor may consider how the student has cooperated for the smooth operation of the class for eLearning/MS Teams in assigning the class participation scores.

Both exams are closed-book and will comprise of multiple-choice and/or open questions.

Exams

The course has two closed-book in-person midterm exams. The course modality is in-person, and therefore, the exams will be administered in person. There will be NO way to take the exams on-line.

The exams will not be directly cumulative, but some questions in Midterm 2 may require a good knowledge on the materials covered during the first half of the semester.

In-class Midterm 1: 3/6 (Mo) for Sec 001 and 3/2 (Thu) for Sec 003, 16:00-17:15 CDT, in person
In-class Midterm 2: 5/1 (Mo) for Sec 001 and 5/4 (Thu) for Sec 003, 16:00-17:15 CDT, in person

Taking the exams during the designated date/time/location is the responsibility of the students. Taking exam across sections is not allowed. Failure to take the exams in the designated date/time/location will result in zero scores for the corresponding midterm. No exceptions will be accommodated.

Each midterm will be 75 minutes, respectively. Students who are working are advised to contact their workplace ASAP and to confirm that they can take the exams in the allotted time. It is your responsibility to take the exam in the allotted time. **No exceptions will be accommodated**.

Please be aware that travels - either for work or personal reasons- will not be accommodated. As explained before, you are advised to inform your workplace about your exam responsibilities and make sure that no travels are planned in a way that prevents you from taking the exam on time. **No exceptions will be accommodated**.

Communication

Unless it is related to personal matter, please communicate with the instructor and/or the TA through the discussion board on e-learning, and NOT through email. It's more efficient to answer a question once and make the answer available to all students in the course. This way, students can see all the questions and answers that had been already provided, and get answers to the questions more quickly. Student discussion board messages and emails will be answered either by the instructor or the TA within 2 working days under normal circumstances.

If the student wants to contact the instructor regarding a personal matter – send the instructor an email, but otherwise we expect all communications to be done through "Questions for Professor/TA" on e-learning.

Emails to the instructor or to the TA will be answered within 2 working days under normal circumstances. We typically will not respond to messages or emails over weekends.

Class Attendance

Slides are utilized by the instructor to lead and enhance the in-class lecture. The slides will be made available for download before classes. To encourage critical thinking, students are expected to attend classes and take notes. Being proactive in the classroom by asking questions is encouraged.

Problem Sets

There will be 3-4 problem sets. Problem set questions are designed to improve understanding of the course materials. It is allowed that up to **three** students group up for problem set submission.

Assignments must be submitted electronically to eLearning as ONE file (only submissions in pdf format are admissible). Although typesetting is not obligatory, it is encouraged that students typeset their assignment answers in LaTeX, LyX, or at least MS Word. **All empirical questions must be submitted together with their respective codes (.R files)**. You will receive a 0 credit for assignments submitted without an R file. No exceptions.

Groups for each homework submission can be different. Please find your own group. The TA will randomly assign students into groups only when requested by students. Each homework/project submission must clearly state ALL the group members' names and NetID; we will NOT accommodate including more names in a student group after the respective submission deadlines.

You are allowed to discuss the homework with your fellow classmates as well as refer to any generic online sources. Copying from others or from past solutions will be considered cheating. A score of zero will be assigned if it is determined that a student was cheating, which will result in zero scores for the respective homework and considered as a violation of a violation of the Student Code of Conduct. Further disciplinary actions may also be initiated.

Tentative Schedule (Chapter refers to Gujarati's book chapter number)

Week 1. 1/23 (M) and 1/19 (Th): Chapter 1, Appendix A

Week 2. 1/30 (M) and 1/26 (Th): Chapter 2

Week 3. 2/6 (M) and 2/2 (Th): Chapter 3

Week 4. 2/13 (M) and 2/9 (Th): Chapters 3 and 4

Week 5. 2/20 (M) and 2/16 (Th): Chapter 5

Week 6. 2/27 (M) and 2/23 (Th): Chapter 6

Week 7. 3/6 (M) and 3/2 (Th): In-class, in-person Midterm 1

No Class on 3/9 (Th), 3/14 (Mo), and 3/17 (Th) (Spring Break)

Week 8. 3/20 (M) and 3/23 (Th): Chapter 7

Week 9. 3/27 (M) and 3/30 (Th): Chapter 8

Week 10. 4/3 (M) and 4/6 (Th): Chapter 11

Week 11. 4/10 (M) and 4/13 (Th): Chapter 12

Week 12. 4/17 (M) and 4/20 (Th): Chapter 21

Week 13. 4/24 (M) and 4/27 (Th): Chapter 22

Week 14. 5/1 (M) and 5/4 (Th): In-class, in-person Midterm 2

Required Textbooks and Materials

The course will closely follow the textbook Gujarati's *Basic Econometrics* (5th ed) during class. It is fine that if you only have the older 4th edition of the book, and if so, you won't need to buy the newer 5th edition for the class.

I strongly recommend students to read the relevant textbook chapters before the class.

For a comprehensive guide in R programming, Matloff's *The Art of R Programming* would be helpful.

Other Required Materials

One of the major learning objectives of the course is to get familiarized with R to analyze the real-world data. Thus, the course will rely heavily on the use of R, a free statistical software language. **Note that the use of Excel or STATA is not allowed for this course, and use of any other programming languages in problem set submissions will require a prior consent from the instructor.**

R is a freeware, and there will be a tutorial session that walks you through the installation of R with RStudio.

Lecture slides, videos, assignments, codes and any additional material will be posted on the eLearning and/or Microsoft Stream website of this course.

Course Policies

Make-up exams: Make-up exam will NOT be given for absence from an exam (zero credit for the missing exam) unless a physician's note is provided.

Extra Credit: I have a strict **no extra credit** policy. Please **DO NOT** ask for it!

Late Work: Time extensions for assignments only with a very good reason. You will receive zero credit for assignments that are submitted late without my consent in advance, unless a physician's note is provided.

No food/drinks in classroom: **Food/drink is NOT permitted in classroom except for water**, as they may disturb other students. Violation may incur deduction in the class participation scores.

Mobile Phones and Computers in Class

No use of mobile phones for talking or texting is allowed in the classroom. If you must make a call during class or breaks, please step outside of the classroom.

Taking unauthorized pictures or video within the classroom, with your mobile phone or a camera, is an infringement of privacy and copyrights and it is prohibited. Posting the lecture materials/videos anywhere without a written permission from the instructor is an infringement of copyrights, which may result in a legal action by the university.

Technical Requirements

Students must be able to access the virtual classrooms in Zoom and eLearning. In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements http://www.utdallas.edu/elearning/students/getting-started.html#techreqs on the Getting Started with eLearning webpage http://www.utdallas.edu/elearning/students/getting-started.html.

Honorlock (This item applies in case the university mandates the course modality switch to remote/virtual at the time of the exam)

In case the university switches the course modality to remote/virtual/online at the time of the scheduled exams, this course will use Honorlock for the midterm and final exams. It is your responsibility to familiarize yourself and test Honorlock on your system before the exam. If your system does not work with Honorlock, please immediately explore upgrading, borrowing, or renting a computer that works with Honorlock. If you technically do not know how to use Honorlock, make sure you allow enough time to learn. As a graduate student, it is expected that you have some baseline computer proficiency or have the capability to learn it. Tens of thousands of students have taken exams using Honorlock with no issues at UTD.

Exam Score and Problem Set Score Appeal

Students who wish to challenge or question the grade in an exam or other assignments must do so within 7 calendar days from the date that the respective scores are posted in eLearning.

Course Access and Navigation

The course can be accessed using the UT Dallas NetID account at: https://elearning.utdallas.edu. Please see the course access and navigation http://www.utdallas.edu/elearning/students/getting-started.html#courseaccessandnav section of the site for more information.

To become familiar with the eLearning tool, please see the Student eLearning Tutorials http://www.utdallas.edu/elearning/students/eLearningTutorialsStudents.html.

UT Dallas provides eLearning technical support 24 hours a day/7 days a week. The eLearning Support Center http://www.utdallas.edu/elearninghelp services include a toll free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online eLearning Help Desk http://www.utdallas.edu/elearninghelp. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the course instructor.