Criminal Justice 7350A
Forecasting, Trend Analysis, and Data Interpretation
Texas State University
Fall 2020
Dr. Vásquez

Description and Objectives

"A review of quantitative approaches to public policy analysis, the diverse conceptions of the goals and objectives that should be served by policy, and the appropriate role of the policy analyst. Policy consequences are traced to indirect and subtle incentives and disincentives."

The primary focus of the course is regression models for time-series analysis. Some general topics include detecting and modeling autocorrelated errors, and ARIMA-based intervention analysis. While these techniques will receive theoretical treatment, this is not a theoretical statistics or calculus-based course. The objective of the course concerns the application of the techniques and the interpretation of estimates generated with software.

The course will, *in a very obvious way*, assume the student has the understanding of regression provided by CJ 7321 and access to Stata software.

Class Meeting Time and Place

This class meets at 6:30 PM-9:20 PM on Mondays in Hines Academic Center room 203. As needed, the course will meet as a remote synchronous course. A unique link for each Zoom meeting will be sent (to your Texas State University email address) prior to the meeting.

Office Hours, Contact Information, and Email Message Policy

Bob Edward Vásquez, Ph.D.
Hines Academic Center, 126
Office hours are by appointment.
Phone: (512) 245-8460
E-mail: Bob.Vasquez@txstate.edu

Students with appointments are given priority over "walk-ins," phone calls, and email messages, so try to set up an appointment with me. I strive to respond to email messages within 24 hours of receiving them. Email messages should contain a greeting, a body, and a closing. Send professional email messages when corresponding with me. *I do not respond to incomplete email messages or messages that do not have sentence structure*.

Attendance Policy

Do not miss class. Attendance is required in this course, and tardiness disrupts the class. Absences will be disastrous for your progress and grade. It is in your personal interest to attend class. Statistical knowledge builds on itself, and my lectures will assume knowledge and understanding of previous lectures. If you get behind, you will find it exceedingly difficult to catch up.

Students should be mentally present too, a reason why there is no use of mobile phones or other such devices or distractions during class. Students should expect to take extensive notes during lecture.

** I do not provide lecture notes to students. I do not provide make-up lectures for absent students. I do not allow any audio or visual recordings of my lectures.

Text and Materials
The following textbooks are required. Articles for the course will be uploaded on Canvas as needed. You will also need a three-ringed hard-covered binder, plenty of paper, a writing instrument, and a scientific calculator. *Mobile phone calculators are not sufficient*. A graphing calculator is not needed, however. Bring all materials to every class.

Enders, Walter. (2015). *Applied Econometric Time Series* (4th Edition), Wiley, ISBN: 1118808568

David McDowall, Richard McCleary, Bradley J. Bartos (2019). *Interrupted Time Series Analysis*. Oxford University Press. ISBN: 0190943955

Exams, Grading, and Late Work
There will be three equal-weight exams over the span of the semester. Exams are take-home assignments due *approximately* one week after they are assigned.

Exam I	= 1/3 of grade	Assigned October 5, 2020
Exam II	= 1/3 of grade	Assigned November 9, 2020
Exam III	= 1/3 of grade	Assigned December 2, 2020

Late work is not accepted. If the assignment is not in my hands on or before the time it is due, the assignment is late. Assignments are due at the beginning of class.

Students with Special Needs
If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me as soon as possible. You will be asked to provide documentation from the Office of Disability Services. Failure to contact me in a timely manner may delay your accommodations.

Academic Dishonesty
It is expected that students do their own work in my class. This is a University-wide expectation, and academic penalties exist for violating the Honor Code Policy, which I provide below.

Texas State University
Honor Code
As members of a community dedicated to learning, inquiry, and creation, the students, faculty, and administration of our University live by the principles in this Honor Code. These principles require all members of this community to be conscientious, respectful, and honest.

WE ARE CONSCIENTIOUS. We complete our work on time and make every effort to do it right. We come to class and meetings prepared and are willing to demonstrate it. We hold ourselves to doing what is required, embrace rigor, and shun mediocrity, special requests, and excuses.

WE ARE RESPECTFUL. We act civilly toward one another, and we cooperate with each other. We will strive to create an environment in which people respect and listen to one another, speaking when appropriate, and permitting other people to participate and express their views.

WE ARE HONEST. We do our own work and are honest with one another in all matters. We understand how various acts of dishonesty, like plagiarizing, falsifying data, and giving or receiving assistance to which one is not entitled, conflict as much with academic achievement as with the values of honesty and integrity.

THE PLEDGE FOR STUDENTS
Students at our University recognize that, to insure honest conduct, more is needed than an expectation of academic honesty, and we therefore adopt the practice of affixing the following pledge of honesty to the work we submit for evaluation:

I pledge to uphold the principles of honesty and responsibility at our University.

THE PLEDGE FOR FACULTY AND ADMINISTRATION
Faculty at our University recognize that the students have rights when accused of academic dishonesty and will inform the accused of their rights of appeal laid out in the student handbook and inform them of the process that will take place.

I recognize students' rights and pledge to uphold the principles of honesty and responsibility at our University.

ADDRESSING ACTS OF DISHONESTY
Students accused of dishonest conduct may have their cases heard by the faculty member. The student may also appeal the faculty member's decision to the Honor Code Council. Students and faculty will have the option of having an advocate present to insure their rights. Possible actions that may be taken range from exoneration to expulsion.
(For more information, visit http://www.txstate.edu/effective/upps/upps-07-10-01.html)

Note: The calendar and syllabus are subject to change. Attend all classes.

Course Calendar

Dates	Topic	Readings
August 24, 31 September 14, 21, 28; October 5	**Standard Linear Model** **Static and Dynamic Regression Models Using Time-Series Data** ** Exam 1 distributed October 5 **	Enders Chapters 1-2
October 12, 19, 26; November 2	**Nonstatiomarity and Cointergation** **Exam 2 distributed on November 9**	Enders, Chapters 4-6; McDowall et al., Chapter 5
November 9, 16, 23, 30	**ARIMA models for Intervention Analysis** **Exam 3 distributed on December 2**	McDowall et al., Chapters 1-4
December 7	**Final Exam 8:00 PM-10:30 PM (in same classroom)**	