

**Criminal Justice 7321**  
**Linear Regression for Criminal Justice Research**  
**Texas State University**  
**Spring 2020**  
**Professor Vásquez**

**Description and Objectives**

Instruction on the use of advanced linear modeling techniques in criminal justice research is addressed. After completing this course, students should be able to evaluate quantitative research articles in the major criminal justice journals and be prepared to complete a major quantitative research project of their own.

This course provides an introduction to multivariate regression analysis. Topics include estimation, bivariate and multivariate regression models, model assumptions and diagnostics, and statistical interactions. While these topics will receive theoretical treatment, this is not a mathematical statistics or calculus-based course. The objective of the course concerns the application of the techniques and the interpretation of estimates generated with statistical software. However, this doctoral-level course is for students who actually intend to engage in quantitative data analysis for research purposes.

The course assumes students have the understanding of statistics provided by CJ 7323.

**Class Meeting Time and Place**

This class meets Wednesday from 6:30PM-9:20PM in Hines Academic Center room 206.

**Contact Information, Office Hours, and Email Message Policy**

Professor Bob Edward Vásquez  
Hines Academic Center, 126  
Office Hours: 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. Statistical knowledge builds on itself, and my lectures will assume knowledge and understanding of previous lectures. If you get behind, you will find it difficult to catch up. Absences will be disastrous for your progress and grade.

### Attendance Policy (continued)

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

*\*\* I do not provide my 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 and should be available at the university bookstore. Other readings will be announced in class 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.

Kutner, M. H., Nachtsheim, C. J., & Neter, J. (2004). *Applied linear regression models* (4<sup>th</sup> ed.). (ISBN-13: 9780073014661)

Jaccard, J. J., & Turrisi, R. (2003). *Interaction effects in multiple regression* (2<sup>nd</sup> ed.). (ISBN-10: 0761927425)

### Exams, Grading, and Late Work

Your final grade will be based on your performance on four equal-weight exams given over the span of the semester. Exams are take-home assignments due *approximately* one week after they are assigned. An additional homework (CITI Training) assignment is part of the Exam I assignment.

The grading weights and dates are:

Exam 1 = 25%	Due: February 19, 2020
Exam 2 = 25%	Due: March 25, 2020
Exam 3 = 25%	Due: April 22, 2020
Exam 4 = 25%	Due: May 6, 2020

However, attend all classes because the dates are subject to change. Assignments are due at the beginning of class. Late work is not accepted. If a student's assignment is not in my hands on or before the time it is due, *the student earns a grade of zero percent on the assignment.*

### 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 is provided 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> )

Dates	Course Calendar Topic	Readings
January 22, 29; February 5, 12:	Bivariate Regression Model, CITI, and SPSS <b>CITI Homework Due January 29, 2020</b> <b>**TEST 1 Assigned February 12 (DUE February 19, 2020)**</b>	Chapters 1-3, Appendix A
February 19, 26; March 4, 11:	Multiple Regression Model, Correlations, and Collinearity	Chapters 5-7
March 25; April 1, 8:	Interaction Effect and Influential Cases <b>**TEST 2 Assigned March 18 (DUE March 25, 2020)**</b>	Chapters 8, 10-11; Jaccard & Turrisi, entire book
April 15, 22, 29:	Nonlinear Alternatives and Logistic Regression <b>**TEST 3 Assigned April 15 (DUE April 22, 2020)**</b>	Chapters 13-14
May 6	<b>**TEST 4 Assigned April 29 (DUE May 6, 2020)**</b> FINAL EXAM DAY <b>**Submit Test 4**</b> (class meets 8:00PM-10:30PM same room)	

Note: Calendar and test dates are subject to change. Attend all classes