

# **ECON 4381: QUANTITATIVE METHODS FOR SOCIAL SCIENCES**

## **Course Syllabus**

Spring 2022

**Section 010:** 11:00a.m.-12:15p.m. TR Rassman Business 263

**Instructor:** Dr. Edwar E. Escalante

**Email:** eescalante@angelo.edu

**Office:** Rassman Business 102A

**Office Hours:** MW: 4:45 PM – 6:00 PM

TR: 12:15 PM – 1:30 PM

Or by appointment

### **TEXTBOOK:**

Kosuke Ima, *Quantitative Social Sciences: An Introduction* (Required)

This class also requires the student to bring a laptop or computer device. Though this equipment is available at ASU, it is recommended to use a single device.

### **COURSE DESCRIPTION**

This course introduces students to data analysis and statistics in the social sciences. The course engages students directly with empirical analysis showing students how to analyze data using R programming language and to interpret the results.

### **GRADING**

Grades will be assigned according to students' final scores:

90+	A
80-89.9	B
70-79.9	C
60-69.9	D
59.9 or less	F

Final scores are broken down into the following components:

Class participation	30%
Weekly Assignments	30%
Final Assignment	40%

*Class Participation:* This grade is based on performing tasks during class.

*Weekly Assignments:* Assignments will be submitted each week before class. The deadline for submission will be Monday (or Wednesday) at 5:00pm. Your final weekly assignment grade will be the average.

*Final Assignment:* This assignment will be submitted the day scheduled for the final exam.

*Extra Credit Quiz:* Extra credits are also assigned through the three conferences organized by the FMI. Each credit (100) will replace any of your grades on class participation or weekly assignments if they are lower than 100. This replacement will be at the end of the semester. I strongly suggest you attend these events. They are VERY important.

<i>Peter Boettke</i>	<i>February 08, 5:30pm</i>
<i>Randy Holcombe</i>	<i>March 29, 5:30pm</i>
<i>Jason Riley</i>	<i>April 25 (or 26), 5:30pm</i>

A grade of zero will be given for any assignment missed. If the assignment or class participation was missed for a University-excused reason (i.e., representing the University in a competition, a health emergency, or a family emergency) the student will have the opportunity to receive a deadline extension or should take advantage of the extra credit opportunity.

*Covid-19:* If any student feels symptoms it should get tested as soon as possible and fail the daily wellness check. If I receive confirmation from students' affairs office that the student has tested positive or is waiting for a result, I will proceed with specific arrangements.

## **COMMUNICATION**

The easiest and fastest way to communicate is by email (eescalante@angelo.edu). I encourage a professional behavior on this matter to your professor and fellow classmates. Establishing a communication with your professor is not a colloquial text to a friend. Given the academic environment and the professional purpose of a Business School I ONLY respond emails that come with a proper salutation: Dr. Escalante or Professor Escalante.

## **CLASSROOM RULES AND BEHAVIOR**

Students are expected to show respect to classmates, instructors, and especially guest speakers. These are rules that I will enforce during this class:

1. Do not talk during class meetings. Talking is disruptive to the instructor and to your fellow classmates.
2. Do not arrive late to class and do not leave the classroom during class meetings. Exceptions may occur for medical emergency, physiological urgency or situations where prior instructor approval has been granted.

3. Do not use (including viewing of) communication devices (phones, iPad, etc.) during class meetings. All electronic devices should be silenced during class meetings. This includes laptops.
4. Do not read/view other unassigned materials (newspapers, magazines, etc.) during class meetings.
5. Do not exhibit disruptive posture during class meetings. e.g. sleeping, slouching, laying, resting feet/head on furniture, etc.
6. Do not use notebook computers during class meetings unless prior instructor approval has been granted.
7. Do not bring/use food and/or tobacco products during classroom meetings unless prior instructor approval has been granted.

## OUTLINE AND ASSOCIATED TEXTBOOK CHAPTERS

This is a *tentative* list of topics. The faculty member reserves the option to make changes as necessary to this syllabus and the course content.

Date	Topic	Chapter QSS**	Swirl Lesson**
Week 1 (Jan 18- 20)	Introduction Class	1.3	INTRO1
	Intro R		
Week 2 (Jan 25-27)	Bias Turnout Voting	1.3	INTRO2
	CT: World Population Dynamic		
Week 3 (Feb 01- 03)	Sub-setting Data	2.1 – 2.4	CAUSALITY1
	Observational Studies		
Week 4 (Feb 08 –10)	Causality Wrap up	2.5 – 2.6	CAUSALITY2
	CT: Gay Marriage		
Week 5 (Feb 15-17)	Missing Data and Visualize	3.1 – 3.4	MEASUREMENT1
	Survey Sampling		
Week 6 (Feb 22-24)	Measure Ideology & Distribution	3.5 – 3.7	MEASUREMENT2
	Clustering		
Week 7 (Mar 01- 03)	Predicting Elections	4.1	PREDICTION1
	Linear Regression		
Week 8 (Mar 08-10)	Regression and Causation	4.2	PREDICTION2
	<i>No Class 03/10</i>		
Week 9 (Mar 15-17)	<i>SPRING BREAK</i>	4.3	PREDICTION3
Week 10 (Mar 22-24)	Discovery	5.1	DISCOVERY1
Week 11 (Mar 29-31)	Discovery	5.2	DISCOVERY2
Week 12 (Apr 05-07)	<i>No Class 04/05</i>	5.3	DISCOVERY3
	Probability	6.1 – 6.3	PROBABILITY1
Week 13 (Apr 12-14)	Probability	6.4 – 6.5	PROBABILITY2
Week 14 (Apr 19-21)	Uncertainty	7.1	UNCERTAINTY1
Week 15 (Apr 26-28)	Uncertainty	7.2	UNCERTAINTY2
Week 16 (May 03-05)	Review	7.3	UNCERTAINTY3
Final Assignment Due			

**\*You should read this chapter before the class. The lectures will be based on these chapters**

**\*\*Practice these exercises to improve your understanding.**

## **ACADEMIC HONESTY**

Academic honesty is expected on all work. Students are expected to maintain complete honesty and integrity in their online experiences. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

We adhere to the academic honesty statement as set forth in the Angelo State University Student Handbook: Angelo State University's Academic Integrity Policy. The University "faculty expects all students to engage in all academic pursuits in a manner that is above reproach and to maintain complete honesty and integrity in the academic experience both in and out of the classroom setting and may initiate disciplinary proceedings against a student accused of any form of academic dishonesty, including but not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials."

## **PLAGIARISM**

Plagiarism at ASU is a serious topic. The Angelo State University's Honor Code gives specific details on plagiarism and what it encompasses. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word for word without quotation marks and the source of the quotation. We use the APA Style Manual of the American Psychological Association as a guide for all writing assignments. Quotes should be used sparingly. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list. Papers are subject to be evaluated for originality via Bb Safe Assignment or Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center: Angelo State University's Writing Center Website.

## **STUDENTS WITH DISABILITIES**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office

of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at [ADA@angelo.edu](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the Student Disability Services website at [www.angelo.edu/ADA](http://www.angelo.edu/ADA). The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Ms. Dallas A. Swafford  
Director of Student Disability Services  
325-942-2047  
[dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)  
Located in the Houston Harte University Center 112

### **TITLE IX at ANGELO STATE UNIVERSITY**

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex. You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)  
Face to Face: Mayer Administration Building,  
Room 210  
Phone: 325-942-2022  
E-Mail: [michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix).

### **INCOMPLETE GRADE POLICY (OP 10.11 Grading Procedures)**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required.

### **STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS**

“A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence.” Please see ASU Operating Policy 10.19.

### **COPYRIGHT POLICY**

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