GBAA 3352: Quantitative Methods in Business
Spring 2026: Online Asynchronous Syllabus

Rio Grande College of Business

Faculty Information

Dr. Philamer C. Torio
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Office Hours: TBA

Course Description

A study of data presentation, descriptive measures, probability distributions, sampling distributions, confidence intervals, and hypothesis testing with emphasis on business applications.

Course Materials

Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. ISBN: 978-1-4533-8895-2

Microsoft Office Excel

Program Student Learning Outcomes

PSLO1: The students will analyze and solve business problems across major business functions, using fundamental business principles & strategies.

PSLO2: The students will communicate business information through written, oral, and other delivery processes.

PSLO3: The students will identify and understand the impact of ethical and social responsibility issues in business.

Course Student Learning Outcomes

CSLO1: Employ appropriate types of statistical analyses to make informed business decisions. (Homework, Exams)
CSLO2: Use statistical vernacular appropriately. (Homework, Exams)
CSLO3: Interpret statistical results in everyday language. (Homework, Exams)
CSLO4: Practice statistical techniques and tests. (Homework, Exams)

Marketable Skills

Marketable Skill 1: Students will have the ability to apply the principles of business they learn to the management of existing businesses or the creation of new businesses.

Marketable Skill 2: Students will have the ability to use research and analysis to make informed decisions.

Course Assignments and Grading

(Standardized)

Overview of Required Assignments	***% of Final Grade***
Discussions (2)	10%
Exams (3)	30%
Homework (12)	50%
Hours in Course	10%
TOTAL	**100%**

Late Assignment Statement: Unless approved by professor, no late work will be accepted, and no make-up exams will be given.

Discussions (5% of Final Grade): There will be two discussions. For each discussion you should:

- Post your initial discussion by the due date at 11:59 pm
- Initial posting should be no less than 150 words
- Respond to at least two of your classmates by the due date at 11:59 pm
- Your responses to classmates should be no less than 75 words and should ask pertinent questions, expand upon the discussion, or contribute significantly to the initial post

Exams (30% of Final Grade)

Your exams will consist of a combination of multiple choice, short answer, and essay questions. All exams are due the week they are presented no later than Sunday by 11:59 pm.

Homework (40% of Final Grade)

There are 14 homework assignments throughout the semester. Homework will be graded on completion, not on accuracy. Homework is due on Sundays at 11:59 pm.

Attendance (15% of Final Grade)

As a web-scheduled course, there will be scheduled synchronous sessions on Wednesdays from 6:00-8:45 pm. Your attendance is mandatory and will be recorded in these sessions.

Course Schedule

(Note: This schedule is subject change based on instructor determinations)

Module	Module Title & Assignments	Readings
1 1/14-1/18	What You Didn't Know You Already Knew! **Due:** • **Discussion:** Introduce Yourself • **Assignment:** Statistics in the News	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 1.1: Basic Definitions & Concepts • 1.2: Overview

		• 1.3: Presentation of Data
2 1/19-1/25	Describing with Data **Due**: • **Assignment:** Homework 1	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 2.1: Three Popular Data Displays • 2.2: Measures of Central Location
3 1/26-2/1	More Describing **Due**: • **Assignment:** Homework 2	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 2.3: Measures of Variability • 2.4: Summary Description of Data Sets • 2.5: Relative Position of Data • 2.6: The Empirical Rule & Chebyshev's Theorum
4 2/2-2/8	It is Likely? Probably! **Due:** • **Assignment:** Homework 3	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 3.1: Sample Spaces, Events, & Their Probabilities • 3.2: Compliments, Intersections, & Unions • 3.3: Conditional Probability & Independent Events
5 2/9-2/15	Doing It Discretely **Due:** • **Assignment:** Homework 4	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 4.1: Random Variables

		• 4.2: Probability Distributions for Discrete Random Variables • 4.3: The Binomial Distribution
6 2/16-2/22	Continuous It Is! **Due:** • **Assignment:** Homework 5	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 5.1: Continuous Random Variables • 5.2: The Standard Normal Distribution • 5.3: Probability Computations for General Normal Random Variables • 5.4: Areas of Tails of Distributions
7 2/23-3/1	I Would Like a Sample! **Due:** • **Exam 1**	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 6.1: The Mean & Standard Deviation of the Sample Mean • 6.2: The Sampling Distribution of the Sample Mean • 6.3: The Sample Proportion
8 3/2-3/8	It's All in the Estimation **Due:** • **Assignment:** Homework 6	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 7.1: Large Sample Estimation of a Population Mean • 7.2: Small Sample Estimation of a Population Mean

		• 7.3: Large Sample Estimation of a Population Proportion • 7.4: Sample Size Considerations
3/9-3/15	**Spring Break!!!!!**	
9 3/16-3/22	Let's Test It! **Due:** • **Assignment:** Homework 7	Shafer, D.S., & Zhang, Z. (2018). Introductory statistics: A first course v2.0. Flatworld. • 8.1: The Elements of Hypothesis Testing • 8.2: Large Sample Tests for a Population Mean • 8.3: The Observed Significance of a Test
10 3/23-3/29	Still Single! **Due:** • **Assignment:** Homework 8	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 8.4: Small Sample Tests for a Population Mean • 8.5: Large Sample Tests for a Population Proportion
11 3/30-4/5	Now There are Two! **Due:** • **Assignment:** Homework 9	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 9.1: Comparison of Two Population Means: Large, Independent Samples • 9.2: Comparison of Two Population Means: Small, Independent Samples
12 4/6-4/12	Then and Now! **Due:**	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld.

	• **Assignment:** Homework 10	• 9.3: Comparison of Two Population Means: Paired Samples • 9.4: Comparison of Two Population Proportions • 9.5: Sample Size Considerations
13 4/13-4/19	All About Relationships **Due:** • **Exam 2**	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 10.1: Linear Relationships Between Variables • 10.2: The Linear Correlation Coefficient • 10.3: Modelling Linear Relationships with Randomness Present
14 4/20-4/26	I Can Tell the Future! **Due:** • **Assignment:** Homework 11	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 10.4: The Least Squares Regression Line • 10.5: Statistical Inferences About the Slope • 10.6: The Coefficient of Determination • 10.7: Estimation & Prediction
15 4/27-5/3	There are More Tests! **Due:** • **Final Exam (Due by 5/3, 11:59 pm)**	Shafer, D.S., & Zhang, Z. (2018). *Introductory statistics: A first course v2.0.* Flatworld. • 11.1: Chi-Square Tests for Independence • 11.2: Chi-Square One-Sample Goodness-of-Fit Tests

		• 11.3: F-tests for Equality of Two Variances • 11.4: F-tests in One-Way ANOVA
16 5/4-5/6	Wrapping It Up! **Due:** • **Discussion:** Course Reflection (Due by 5/6, 11:59 pm)	

ADA Statement

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director or Ronnie Harris, LPC, Counselor, at 432-837-8203 or email mschwartze@sulross.edu or ronnie.harris@sulross.edu. RGC students can also contact Alejandra Valdez, at 830-758-5006 or email alejandra.valdez@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

Student Responsibilities Statement

All full-time and part-time students are responsible for familiarizing themselves with the Student Handbook and the Undergraduate & Graduate Catalog and for abiding by the University rules and regulations. Additionally, students are responsible for checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize themselves with the requirements of such laws.

SRSU Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website.

Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires a secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

Counseling

Sul Ross has partnered with TimelyCare where all SR students will have access to nine free counseling sessions. You can learn more about this 24/7/365 support by visiting Timelycare/SRSU. The SR Counseling and Accessibility Services office will continue to offer in-person counseling in Ferguson Hall room 112 (Alpine campus), and telehealth Zoom sessions for remote students and RGC students.

Libraries

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu/. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using open AI sources ***unless permission is expressly given*** for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Supportive Statement

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create a supportive environment and care for the whole student as part of the Sul Ross Familia.

If you feel like your performance in the class is being impacted by your experiences outside of class, please don’t hesitate to come and talk with me. I want to be a resource for you.