

GBAA 3352. Quantitative Methods in Business

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On-line (Teams) office hours: Email me to make an appointment.

Credit Hours/Time Dedicated (per week): 3 credits/9 hours of time commitment (class time, reading, quizzes, studying)

Classroom/Time: Online anytime.

Prerequisites: None.

Required Class Materials

We are going to use an e-book and the **Connect** platform from McGraw-Hill. The textbook is:

David Doane & Lori Seward. (2022). *Applied Statistics in Business and Economics*. 7th Edition.
McGraw Hill

You must buy the Connect access (which includes the eBook as well) through the link in Blackboard (click on BryteWave Course Materials).

Library Resources

The **Bryan Wildenthal Memorial Library** and **Archives of the Big Bend** in Alpine offers 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/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, ScanIt, and Direct Mail to get materials delivered to you at home or via email.

Marketable Skills for the Business Administration program

- Students will apply the principles of business to the management of existing businesses or the creation of new businesses.
- Students will use appropriate information from research and analysis to make informed decisions.
- Students will be able to write business correspondence including letters, emails, reports, and resumes.
- Students will be able to make effective oral presentations to both professional and general audiences.

Course Description

Since the first two decades of the last century, our reality has been changing rapidly. With advancements in computational capabilities, there has been a significant increase in the development of analytical tools across all areas of our lives. The technological revolution has enabled us to enhance our data storage capacity, generate new data, and utilize innovative quantitative techniques that improve our understanding of real-world issues and reduce uncertainty about future events. In today's world, being informed and having access to data is essential for making decisions, both in our personal lives and in business. Statistics provides us with the tools to achieve this.

Quantitative methods in business involve the application of statistics to analyze business data. Companies use statistical analysis to describe data, test correlations, make inferences, and create forecasts. This course emphasizes the importance of thinking critically about data, selecting appropriate analytical tools, and using computers effectively.

Student Learning Outcomes

At the end of the course, you will be able to

1. Use different tools to describe data
2. Calculate and interpret descriptive statistics.
3. Calculate probabilities of occurrence of random events.
4. Distinguish among the different probability distributions.
5. Carry out one and two-sample hypothesis tests
6. Estimate the coefficients in a regression and carry out tests about their significance.
7. Analyze the significance of a regression and make forecasting.

Teaching Methods/Course Format

This is an online course. With my guide, I hope you can work on the different activities, submit them before their deadlines, and reach the learning objectives of the course.

Assessment strategy

Exams 2 online exams (midterm and the final exam)	50% (25% each)
Pre-class activities Chapter and videos (some). Due before the start of the chapter.	25%
After-class activities Homework due by midnight of the day before the start of the next chapter	25%

Each online exam consists of a combination of definitions, multiple-choice questions, short answer questions, quantitative problems, and graph analysis. You will be expected to differentiate concepts, analyze specific problems, determine the outcomes of these problems, and identify issues within a given context using graphs.

Homework and chapter readings are due each Sunday by midnight (11:59 PM Central Time). Each assignment is worth 100 points.

Course Schedule and Contents

Week	Topic	Reading/Videos Deadlines	Assignments' Deadline
1	Registration, getting started Blackboard Ultra, and Connect.		
2	Ch. 1. Overview of Statistics	Jan 19	Jan 26
3	Ch. 2. Data collection	Jan 26	Feb 2
4	Ch. 3. Describing data visually	Feb 2	Feb 9
5	Ch. 4. Descriptive statistics	Feb 9	Feb 16
6	Ch. 5. Probability	Feb 16	Feb 23
7	Ch. 6. Discrete probability distributions	Feb 23	Mar 2
8	Ch. 7. Continues probability distributions	Mar 2	Mar 9

9	Midterm. Chapters 2, 3, 4, 5, 6, & 7		March 10 th – 12 th
Spring Break			
10	Ch. 9. One-sample hypothesis tests	Mar 23	Mar 31
11	Ch. 10. Two-sample hypothesis tests	Mar 30	Apr 7
12	Ch.11. Analysis of Variance	Apr 6	Apr 14
13	Ch. 12. Simple regression	Apr 13	Apr 21
14	Ch. 13. Multiple regression	Apr 20	Apr 28
15	Ch. 14. Time series analysis	Apr 27	Apr 30
	Final exam. Chapters 9, 10, 11, 12, 13, & 14.	May 2nd - 5th. 11:59 pm	

Grading Policies and Procedures

If you believe there is an error in the way you have been graded, please email me to request a review. Any changes to exam or assignment grades must be requested no later than one week after the respective deadline but before the last day of class.

Students who miss an exam due to required participation in a university activity, a death in their immediate family, or a serious illness (note that COVID quarantine without a positive test does not qualify) may request a make-up exam. This request must be made within two weeks of the incident. If you miss an exam for one of the valid reasons listed above, please contact the instructor within 48 hours (about two days) to be eligible for a make-up exam. The instructor has discretion over the format of any make-up exams.

Please note that students who miss an exam for any other reason will receive a score of zero for that exam.

Grading Scale

Percent Range (Final Score)	Letter Grade
90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
59 and below	F

Course Expectations

What you should expect from me

1. The instructor will treat each one of you with respect and as an individual with his/her own beliefs, thoughts, and needs.
2. The instructor will provide weekly communication with the class through announcements (video and text), email notifications, and virtual office hours.
3. The instructor will respond to emails within 24 hours of receipt during the hours of 9:00 am-4:00 pm, Monday-Friday.
4. The instructor will be available to answer questions from students during virtual office hours.
5. The instructor will grade assignments and projects according to the specific rubric within two weeks of the submission date.
6. The instructor will provide feedback to journals and discussion boards as needed every week.
7. The instructor will provide clear and concise instructions on how to complete the online course requirements or any other activity.
8. And, finally, but not less importantly, the instructor will not change the deadline for the assignments unless something of major force happens.

My expectations from students

1. Positive, proactive, or successful students should be diligent in using both oral and written communication showing respect for each one individual's opinion.
2. Positive, proactive, or successful students will familiarize themselves with the course syllabus, policies, assessments, evaluation, grading criteria, and course design.
3. Positive, proactive, or successful students will complete all coursework on the assigned due date.
4. Positive, proactive, or successful students will engage in the course, with their peers, and the instructor, and with open communication and active participation.
5. Students should respond to instructor communication requests regarding course progress and general inquiries on time.
6. Positive, proactive, or successful students will not plagiarize the work of others, or use the work of their peers and claim it as their own.
7. Positive, proactive, or successful students will use the American Psychological Association (APA) system of referencing when submitting a paper.
8. Positive, proactive, or successful students will pre-plan for testing situations and ensure they can access the internet to complete the exam during its assigned date and time.
9. Students will be proactive and resourceful to problem solve in case of internet or technical issues.

Sul Ross State University Important Information

1. Official Communications

Official outside-of-class meeting communications will be delivered to the students via their SRSU e-mail. Students are responsible for checking their e-mail daily. Not having checked messages is not a valid excuse for missed coursework. Communication can also be done by appointment. IT support regarding blackboard is listed in the image below.



Who should I contact?	
Online Support Desk ☎ 888.837.6055 ✉ blackboardsupport@sulross.edu Available: 24/7 <ul style="list-style-type: none">• Logging into Blackboard• Questions about Blackboard tools/software• Trouble with tests/quizzes/assignments• Error messages on Blackboard• Online course video problems	Lobo Technology Assistance Center (LTAC) ☎ 888.837.2882 ✉ techassist@sulross.edu Available: Monday-Friday 8 a.m. - 5 p.m. <ul style="list-style-type: none">• Logging into your mySRSU/Banner/SRSU email• Campus computer, computer lab, or campus Wi-Fi issues• Security concerns with your SRSU or VPN account• Questions about Office 365 or OneDrive

Or by clicking at <https://www.sulross.edu/bb/>.

2. Policy on Academic Misconduct

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.

Students should familiarize themselves with the SRSU Student Code of Conduct. Cheating, plagiarism, and/or other form of academic misconduct are NOT TOLERATED in class. Any student found guilty of such misconduct will be subject to disciplinary action, including, but not limited to, **zero** scores on his/her class activities.

3. Special Needs

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Mary Schwartz, M. Ed., L.P.C., in **Counseling and Accessibility Services**, Ferguson Hall, Room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8691. E-mail: mschwartz@sulross.edu. **All medical information is treated confidentially.**