

Quantitative Methods

Spring 2022

Professor: Francisco J Pallares, DED

Class Meeting: Online

Office Hours: Online by appointment

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Course Syllabus

Required Textbook: *Statistical Techniques in Business and Economics*, 18th Edition by Douglas Lind and William Marchal and Samuel Wathen (9781260239478) There's several places from which you can find it, I'd suggest purchasing the least expensive one or even the E-Text.

<https://www.mheducation.com/highered/product/statistical-techniques-business-economics-lind-marchal/M9781260239478.html>

1. Course Overview

This course is a study of statistical data analysis and statistical inference, including estimation of population parameters, hypothesis testing, linear regression, and correlation. The course includes the use of computer technology in handling statistical data. Prerequisite: Math 1314 or 1324

2. Course Objectives

- Evaluate validity of statistical studies/representations;
- Correctly represent data using frequency distributions and other graphical techniques
- Describe and interpret data in terms of measures of central tendency and variation
- Solve applied problems using properties of normal distribution; and
- Solve applied problems using hypothesis testing.

3. Course Grade

- There will be a total of 3 exams in the semester each worth 10% for a total of all three tests to 30% all exams are **MANDATORY**.
- Besides the two Exams there are going to be 12 Weekly Problem Sets each worth 5% for a total of 60% all **MANDATORY**.
- As well as 1 initial assessment worth 10% (note the assessment is not graded on the performance, but rather on turning it in) it is **MANDATORY**.

12 Problem Sets60% (All Mandatory-**Available on Blackboard**)

1 Assessment.....10% (Mandatory)

3 Exams..... 30% (Mandatory)

Total 100%

The grading scale follows:

A... 100%-90%

B... 89%-80%

C... 79%-70%

D... 69%-60%

F... 59% and below

- Each of these exams will be in a multiple choice format.
- **No makeup exam is allowed or offered or accepted, except for the University Excused Absences.**
- **No makeup Problem Set is allowed or offered or accepted, except for the University Excused Absences.**
- There are NO extra credit opportunities.

4. General Education Outcomes

All general education courses are required to include instruction and evaluation of a variety of essential skills. There are two such skills associated with this course:

- A. Area II: Math
 - a. Communication
 - b. Critical thinking
 - c. Quantitative reasoning
- B. Area IV: Social and Behavioral Sciences
 - a. Communication
 - b. Critical thinking
 - c. Personal and social responsibility.

5. Marketability

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

6. Official Communications

- **Email Communications:** Your SRSU email account is the official means of communicating with the university. Information critical to your success at SRSU is delivered to you via this account, and you are expected to follow rules and policies provided to you via this communication method. Any email from you to the instructor should be sent through your official SRSU email account. Please be advised that due to privacy and security concerns, we are unable to respond to emails from outside sources. Not having checked messages is not a valid excuse for missed course work. Communications can also be done by appointment.

7. Remote Online 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 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.

8. Policy on Academic Misconduct

(Please refer https://d1mg6ms3faonj.cloudfront.net/wp-content/uploads/2020/09/student_handbook_2019-2020_revision_12.7.2020.pdf)

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 actions. Including, but not limited to, Zero score on his/her class activities.

9. Special Needs

Alpine Disability statement:

SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with 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. Alpine students seeking accessibility/accommodations services must contact Mary Schwartz Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message if no response), or email mschwartz@sulross.edu the office is located on the first floor of Ferguson Hall (Suite 112), and the mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832. All medical information is treated confidentially

10. Course Outline and Tentative Schedule

(Please remember that **this schedule is tentative** and it can be subject to changes, if appropriate changes are necessary they will be announced in class).

Week	Weekly Saturday	Topic	Text Material/ Assignments
1	15-Jan	Syllabus & Introductory Assessment	Assessment
2	22-Jan	Ch. 1 What is Statistics	Ch. 1-PS1
3	29-Jan	Ch. 2 Frequency Tables, Frequency Distributions and Graphic Representation	Ch. 2-PS2
4	5-Feb	Ch. 3 Numerical Measures	Ch. 3-PS3
5	12-Feb	Ch. 4 Displaying and Exploring Data	Ch. 4-PS4
6	19-Feb	Exam 1 Ch. 1, 2, 3, 4	Exam 1
7	26-Feb	Ch. 5 A Survey of Probability Concepts	Ch. 5-PS5
8	5-Mar	Ch. 6 Discrete Probability Distributions	Ch. 6-PS6
9	12-Mar	***Spring Break***	***
10	19-Mar	Ch. 7 Continuous Probability Distributions	Ch. 7-PS7

11	26-Mar	Ch. 8 Sampling, Sampling Methods, and the Central Limit Theorem	Ch. 8-PS8
12	2-Apr	Exam 2 Ch. 5, 6, 7 ,8	Exam 2
13	9-Apr	Ch. 9 Estimation and Confidence Intervals	Ch. 9-PS9
14	16-Apr	Ch. 10 One-Sample Tests of Hypothesis	Ch. 10-PS10
15	23-Apr	Ch. 11 Two Sample Tests of Hypothesis	Ch. 11-PS11
16	30-Apr	Ch. 13 Correlation and Linear Regression	Ch. 13-PS12
17	7-May	Exam 3 Ch. 9, 10, 11, 13 <u>Due on May 4th</u> <u>Wednesday</u>	Exam 3

-Last day to withdraw with a "W" is April 14

Final Disclaimer: I reserve the right to modify this syllabus with a one week notice if I view doing so to be in the best interest of the educational process. The class will be notified of changes as soon as practical. Nothing in this syllabus is meant to conflict with the rules and regulations of the University, the college of business, nor the Department of Economics.