

Sul Ross State University
Del Rio Eagle Pass Uvalde
Math 3302
Probability and Statistics I

Location: Web

Term: Summer II 2020

Professor: Patricia Nicosia, Ph.D.

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Text:

1. Larson & Farber, *Elementary Statistics: Picturing the World*, 6th Edition, Prentice Hall Publishing Company. ISBN 978-0-321-91121-6
2. Graphing Calculator Manual, ISBN 978-0-321-69379-2
3. Video Resources on DVD, ISBN 978-0-321-69374-7

Description: Math 3302 includes the following topics: descriptive statistics, probability, random variables and distributions, estimation and hypothesis testing.

Student Learning

Objectives: Students will be able to explain the basic concepts and goals of statistics, demonstrate ways to organize and describe data sets, use data to predict the probability of an event, create/use probability distributions, recognize normal (bell-shaped) distributions and use their properties in real-life applications, explain inferential statistics, make estimates about population parameters and describe the significance of relationships between two variables when data are presented as ordered pairs.

Student Learning Outcomes: The student will be able to demonstrate content knowledge in the foundations of mathematics including discrete mathematics and geometry.

The student will be able to research a Humanistic mathematical topic and communicate their knowledge in writing.

The student will be able to research a Humanistic mathematical topic and communicate their knowledge orally.

Report: The written reports will be about David Kendall (1918-2007) and Francis Galton (1822-1911). At least two sources need to be cited for each report. Reports will be 1 – 2 typed pages. You can select the format. The reports must be submitted on Blackboard. You will not receive credit for work submitted past the due date and time.

Grading: Your grade will be based on five chapter quizzes (12% each), two review quizzes (10% each) and a two written reports (10% each). Grades will be assigned as follows:
A: 90%-100%, B: 80%-89%, C: 70%-79%, D: 60%-69%, F: below 60%.

Schedule: Math 3302 will cover Chapters 1 – 5.

Calculator: You will need a TI-83 or TI-84 graphing calculator.

Class Schedule:

July 1

Syllabus, Course Introduction

July 6

An Overview of Statistics, Data Classification, Experimental Design
View videos 1.1, 1.2, 1.3

July 8

Chapter 1 Quiz Due (page 32, problems 1 – 8) by midnight

July 10

Frequency Distributions and Their Graph, View video 2.1
More Graphs and Displays, View video 2.2

July 13

Measures of Central Tendency, View video 2.3
Written report (David Kendall) due on Blackboard by midnight.

July 15

Variation and Position, View video 2.4

July 16

Chapter 2 Quiz Due (Textbook page 120 “2 Chapter Quiz”, problems 1 – 7) by midnight

July 17

Basic Concepts of Probability and Counting, Conditional Probability, View videos 3.1, 3.2

July 20

Cumulative Review Quiz Chapters 1 & 2 Due (Textbook pages 126-127, problems 1, 4, 6a, 9, 15a)
by midnight.

July 22

The Addition Rule, Additional Topics, View videos 3.3, .34

July 23

Chapter 3 Quiz Due (Textbook page 184 “3 Chapter Quiz”, problems 1 – 5) by midnight
Probability Distributions, Binomial Distributions, View videos 4.1, 4.2

July 24

Chapter 4 Quiz Due (Textbook page 228 “4 Chapter Quiz”, problems 1, 2, 3) by midnight
Introduction to Normal Distributions, The Standard Normal Distribution, View videos 5.1, 5.2

July 27

Normal Distributions-Finding Probabilities, Central Limit Theorem, View videos 5.3, 5.4

July 29

Normal Approximations to Binomial, View video 5.5

July 30

Chapter 5 Quiz Due (Textbook page 290 “5 Chapter Quiz”, problems 1 – 12) by midnight

July 31

Written report (Francis Galton) due by midnight (Blackboard)

August 3

Cumulative Review Quiz Chapters 3, 4 and 5 Due (Textbook pages 294-295, problems 2a & c, 6, 12a, 14a, 16a) by midnight

Additional Information:

- 1. All assignments will be submitted on Blackboard. You will not receive credit for assignments submitted after the due date and time.**
2. Sul Ross State University Rio Grande College 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 the Student Support Specialist on their campus.
3. Office Location: Del Rio , Room 219
4. Office Hours: by appointment
5. **Distance Education Statement: Students enrolled in distance education courses have equal access to the university’s academic support services, library resources, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should submit online assignments through Blackboard which require secure login information to verify students’ identities and to protect students’ information. Exams will be taken at the RGC site in which you are officially registered. The procedures for filing a student complaint are included in the student handbook. 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.**