

Sul Ross State University Rio Grande College
Math 3302
Probability and Statistics I

Location: Web
Term: Spring 2017

Lecturer: Patricia Nicosia, Ph.D.
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EXAMS: (1) **Day/Time: Tuesday, March 7 from 11 – 12:15 pm in the RGC Computer Testing/Teaching Labs. Room numbers at each campus are: Uvalde B107, Del Rio 302, Eagle Pass D101**
(2) **Day/Time: Tuesday, May 2 from 11 – 12:15 pm in the RGC Computer Testing/Teaching Labs. Room numbers at each campus are: Uvalde B107, Del Rio 302, Eagle Pass D101**

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.

Exams: Test dates are fixed and will not change. No make-up examinations will be given except for genuine emergencies. The student is responsible for providing the instructor with written justification for the emergency absence. All documentation will be reviewed and then a decision will be made. **The written exams will be taken at one of the RGC Computer Teaching/Testing Labs at each site on Tuesday, March 7 from 11 – 12:15 pm (Exam I) and Tuesday, May 2 from 11 – 12:15 pm (Exam II). You can use your textbook and graphing calculator. You need to bring a number 2 pencil with you to each exam.**

Report: The written report will be about Pierre Fermat. It will be 1 – 2 typed pages. The report

will be submitted on Blackboard. Sources need to be cited. It is due on April 25 before midnight. You will not receive credit for work submitted late.

Grading: Your grade will be based on two exams (20% each), five chapter quizzes (10% each), and a written report (10%). 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.

Test dates: Exam I / March 7 / **RGC Computer Testing/Teaching Labs** / 11 – 12:15 pm / Chapters 1 & 2
Exam II / May 2 / **RGC Computer Testing/Teaching Labs** / 11 – 12:15 pm / Chapters 4 & 5

Class Schedule:

January 17

Syllabus, Course Introduction

January 24

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

January 31

Chapter 1 Quiz Due (page 32, problems 1 – 8) before midnight
Select the RGC testing location (Uvalde B107, Del Rio 302, or Eagle Pass D101) for Exam I & II and email your decision to pnicosia@sulross.edu by midnight.

February 7

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

February 14

Measures of Central Tendency, View video 2.3

February 21

Variation and Position, View video 2.4

February 28

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

March 7

Exam I (Chapters 1 & 2), **RGC Computer Testing/Teaching Labs**
Basic Concepts of Probability and Counting, Conditional Probability, View videos 3.1, 3.2

March 21

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

March 28

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

April 4

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

April 11

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

April 18

Normal Approximations to Binomial, View video 5.5

April 25

Chapter 5 Quiz Due (Textbook page 290 “5 Chapter Quiz”, problems 1 – 12) before midnight
Written report due before midnight (Blackboard)

May 2

Exam II (Chapters 4 & 5), **RGC Computer Testing/Teaching Labs**

Additional Information:

- 1. All assignments will be submitted on Blackboard. You will not receive credit for assignments submitted after the due date.**
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:
Monday: 9 – 9:30 am, 11 – 12 pm
Tuesday: 9 – 9:30 am, 11 - 12 pm
Wednesday: 9 – 9:30 am, 11 – 12 pm
Thursday: 9 – 9:30 am, 11 - 12 pm
Also available anytime I’m in my office and by appointment.
***If I am teaching at another location, I will be available at that site.*
5. You must notify me your site choice for the exams (either Del Rio 302, Uvalde B107 or Eagle Pass D101) by January 31.
6. **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.**