MATH 1342 001 **Fall 2023**

Elementary Statistical Methods

Time: MWF 10 – 10:50
Room: ACR 204

Instructor: Eric Funasaki
Offices: ACR 109C (MWF mornings) and BAB 210 (MWF afternoons and TR all day)
Phone: 432-837-8109
e-mail: eric.funasaki@sulross.edu

Office hours:

MWF 8 – 8:50, MWF 11 – 11:50, or by appointment.

Textbook:

Beginning Statistics, 3rd edition, by Carolyn Warren, Kim Denley, and Emily Atchley.
ISBN: 978-1-64277-279-1 Software and eBook
978-1-64277-280-7 Software, eBook, and Textbook

Calculator:

TI-83 or TI-84 is required.

Course Description:

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing. Use of appropriate technology is recommended.

Course Objectives:

The student should be able to:
1. Gather, organize, calculate, and present data;
2. Work with probability distributions, both discrete and continuous, and recognize the proper distribution to use for different applications;
3. Estimate population proportions, means, variances, and standard deviations; and
4. Use hypothesis testing on population proportions, means, and standard deviations.

Course Assessment:

Your grade will be based on the following components:
10% In-class problems and participation
24% Homework assignments and quizzes
66% Exams

The grading scale will be:
90 – 100 A 80 – 89 B 70 – 79 C 60 – 69 D 0 – 59 F

Course Schedule (tentative):

Week 1

8/28	M	1.1 Getting Started, 1.2 Data Classification
8/30	W	1.2 Data Classification, 1.3 The Process of a Statistical Study
9/1	F	1.4 How to Critique a Published Study, 2.1 Frequency Distributions

Week 2

9/4	**M**	**Labor Day (no class)**
9/6	W	2.1 Frequency Distributions, 2.2 Graphical Displays of Data
9/8	F	2.2 Graphical Displays of Data, 2.3 Analyzing Graphs

Week 3

9/11	M	3.1 Measures of Center
9/13	W	3.1 Measures of Center, 3.2 Measures of Dispersion
9/15	F	3.2 Measures of Dispersion

Week 4

9/18	M	3.3 Measures of Relative Position
9/20	W	3.3 Measures of Relative Position
9/22	F	Review for Exam 1

Week 5

9/25	**M**	**Exam 1**
9/27	W	5.1 Discrete Random Variables
9/29	F	5.1 Discrete Random Variables

Week 6

10/2	M	5.2 Binomial Distribution
10/4	W	5.2 Binomial Distribution
10/6	F	6.1 Introduction to the Normal Distribution, 6.2 The Standard Normal Distribution

Week 7

10/9	M	6.2 The Standard Normal Distribution
10/11	W	6.3 Finding Probability Using a Normal Distribution
10/13	F	6.3 Finding Probability Using a Normal Distribution

Week 8

10/16	M	6.4 Finding Values of a Normally Distributed Random Variable
10/18	W	6.4 Finding Values of a Normally Distributed Random Variable
10/20	F	Review for Exam 2

Week 9

10/23	**M**	**Exam 2**
10/25	W	8.1 Estimating Population Means, 8.4 Estimating Population Proportions
10/27	F	8.4 Estimating Population Proportions

Week 10

10/30	M	8.4 Estimating Population Proportions 8.2 Student's *t*-Distribution 8.3 Estimating Population Means
11/1	W	8.3 Estimating Population Means
11/3	F	10.1 Fundamentals of Hypothesis Testing

Week 11

11/6	M	10.1 Fundamentals of Hypothesis Testing
11/8	W	10.4 Hypothesis Testing for Population Proportions
11/10	F	10.4 Hypothesis Testing for Population Proportions

Week 12

11/13	M	10.4 Hypothesis Testing for Population Proportions
11/15	W	10.3 Hypothesis Testing for Population Means
11/17	F	10.3 Hypothesis Testing for Population Means

Week 13

11/20	M	10.3 Hypothesis Testing for Population Means
11/22	**W**	**Thanksgiving (no class)**
11/24	**F**	**Thanksgiving (no class)**

Week 14

11/27	M	10.5 Hypothesis Testing for Population Variances
11/29	W	10.5 Hypothesis Testing for Population Variances
12/1	F	10.5 Hypothesis Testing for Population Variances

Week 15

12/4	M	Review for Exam 3
12/6	W	Review for Exam 3
12/8	**F**	**Exam 3 (10:15 am – 12:15 pm)**

Attendance Policy:

Role will be taken. You are responsible for all material covered in class as well as any assignments and announcements that are made. If you miss an assignment, exam, or quiz you will receive a grade of zero unless I have been notified in advance.

Sul Ross State University policy allows an instructor to drop a student with a grade of W or F when 9 hours of class are missed. For this course that is when you miss **9** classes.

Cheating:

Cheating will not be tolerated. Anyone caught cheating will receive a grade of zero on that assignment. This includes homework assignments where the student who copied another student's work and the student who allowed their work to be copied will both receive a grade of zero.

Cell Phones and Other Electronic Devices:

Your cell phone must be **off** while you are in class. You may not read or send text messages while class is in session. If there is an unusual situation where you simply must be able to read and send a message without delay, place your phone in vibrate mode and leave the room before reading and responding. No other electronic devices may be used during class without the permission on the instructor.

ADA Statement:

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 Schwartze Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email mschwartze@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112) and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832.

Department of Computer Science and Mathematics
Sul Ross State University
Box C-18
Alpine, TX 79832