

Elementary Statistical Methods

Time: MWF 11 – 11:50
Room: ACR 204

Instructor: Eric Funasaki
Office: ACR 109C
Phone: 432-837-8109
e-mail: eric.funasaki@sulross.edu

Office hours:

MWF 8 – 8:50, MWF 10 – 10:50, TR 8:30 – 9:20, TR 11 – 11:50, or by appointment.

Textbook:

Elementary Statistics, 12th edition, by Mario F. Triola.

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 will 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 regression and correlation to understand to nature of a set of data.

Course Assessment:

Your grade will be based on the following components:

- 10% In-class problems and participation
- 30% Homework assignments and quizzes
- 60% 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

1/21 W 1-1 Review and Preview, 1-2 Statistical and Critical Thinking
1/23 F 1-3 Types of Data

Week 2

1/26 M 1-4 Collecting Sample Data
1/28 W 2-1 Review and Preview, 2-2 Frequency Distributions
1/30 F 2-2 Frequency Distributions

Week 3

2/2 M 2-3 Histograms

2/4	W	2-3 Histograms, 2-4 Graphs That Enlighten and Graphs That Deceive
2/6	F	3-1 Review and Preview, 3-2 Measures of Center
<u>Week 4</u>		
2/9	M	3-2 Measures of Center, 3-3 Measures of Variation
2/11	W	3-3 Measures of Variation
2/13	F	3-4 Measures of Relative Standing and Boxplots
<u>Week 5</u>		
2/16	M	3-4 Measures of Relative Standing and Boxplots
2/18	W	Review
2/20	F	Exam 1
<u>Week 6</u>		
2/23	M	5-1 Review and Preview, 5-2 Probability Distributions
2/25	W	5-2 Probability Distributions, 5-3 Binomial Probability Distributions
2/27	F	5-3 Binomial Probability Distributions
<u>Week 7</u>		
3/2	M	5-4 Parameters for Binomial Distributions
3/4	W	6-1 Review and Preview, 6-2 The Standard Normal Distribution
3/6	F	6-2 The Standard Normal Distribution
<u>Week 8</u>		
3/9	M	6-3 Applications of Normal Distributions
3/11	W	6-3 Applications of Normal Distributions
3/13	F	6-4 Sampling Distributions and Estimators
<u>Week 9</u>		
3/16	M	Spring Break (no class)
3/18	W	Spring Break (no class)
3/20	F	Spring Break (no class)
<u>Week 10</u>		
3/23	M	6-4 Sampling Distributions and Estimators
3/25	W	6-5 The Central Limit Theorem
3/27	F	6-5 The Central Limit Theorem
<u>Week 11</u>		
3/30	M	Review
4/1	W	Exam 2
4/3	F	7-1 Review and Preview, 7-2 Estimating a Population Proportion
<u>Week 12</u>		
4/6	M	7-2 Estimating a Population Proportion
4/8	W	7-3 Estimating a Population Mean
4/10	F	7-3 Estimating a Pop. Mean, 7-4 Estimating a Pop. Standard Deviation or Variance
<u>Week 13</u>		
4/13	M	7-4 Estimating a Population Standard Deviation or Variance
4/15	W	8-1 Review and Preview, 8-2 Basics of Hypothesis Testing
4/17	F	8-2 Basics of Hypothesis Testing
<u>Week 14</u>		
4/20	M	8-3 Testing a Claim About Proportion
4/22	W	8-3 Testing a Claim About Proportion, 8-4 Testing a Claim About a Mean
4/24	F	8-4 Testing a Claim About a Mean
<u>Week 15</u>		
4/27	M	8-5 Testing a Claim About Standard Deviation or Variance

4/29 W 10-1 Review and Preview, 10-2 Correlation
5/1 F 10-2 Correlation, 10-3 Regression

Week 16

5/4 M 10-3 Regression
5/6 W Review
5/8 F **Dead Day (no class)**

Week 17

5/11 M **(no class)**
5/13 W **Final Exam (10 am – 12:15 pm)**
5/15 F **(no class)**

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 is to assign a grade of F when 9 hours of class are missed by a student. For this course that is when you miss **9** classes.

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 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, TX 79832. Telephone: 432-837-8203. E-mail: mschwartz@sulross.edu.

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