Elementary Statistical Methods

Time: TR 9:30 – 10:45
Room: ACR 204

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

Office hours:
MWF 10 – 10:50, TR 8:30 – 9:20, TR 11 – 12:15, or by appointment.

Textbook:
ISBN: 978-0-321-83696-0

Calculator:
TI-83 or TI-84 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 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
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
- **1/16** T 1-1 Review and Preview, 1-2 Statistical and Critical Thinking, 1-3 Types of Data
- **1/18** R 1-4 Collecting Sample Data, 2-1 Review and Preview, 2-2 Frequency Distributions

### Week 2
- **1/23** T 2-2 Frequency Distributions, 2-3 Histograms
- **1/25** R 2-3 Histograms

### Week 3
- **1/30** T 3-1 Review and Preview, 3-2 Measures of Center
- **2/1** R 3-3 Measures of Variation

### Week 4
- **2/6** T 3-4 Measures of Relative Standing and Boxplots
- **2/8** R Review for Exam 1

### Week 5
- **2/13** T **Exam 1**
- **2/15** R 5-1 Review and Preview, 5-2 Probability Distributions

### Week 6
- **2/20** T 5-2 Probability Distributions, 5-3 Binomial Probability Distributions
- **2/22** R 5-3 Binomial Probability Distributions, 5-4 Parameters for Binomial Distributions

### Week 7
- **2/27** T 6-1 Review and Preview, 6-2 The Standard Normal Distribution
- **3/1** R 6-2 The Standard Normal Distribution, 6-3 Applications of Normal Distributions

### Week 8
- **3/6** T 6-4 Sampling Distributions and Estimators
- **3/8** R 6-5 The Central Limit Theorem

### Week 9
- **3/13** T Spring Break (no class)
- **3/15** R Spring Break (no class)

### Week 10
- **3/20** T Review for Exam 2
- **3/22** R **Exam 2**

### Week 11
- **3/27** T 7-1 Review and Preview, 7-2 Estimating a Population Proportion
- **3/29** R 7-2 Estimating a Population Proportion, 7-3 Estimating a Population Mean

### Week 12
- **4/3** T 7-3 Estimating a Population Mean
- **4/5** R 7-4 Estimating a Population Standard Deviation or Variance
Week 13
4/10 T 8-1 Review and Preview, 8-2 Basics of Hypothesis Testing
4/12 R 8-2 Basics of Hypothesis Testing, 8-3 Testing a Claim About Proportion

Week 14
4/17 T 8-3 Testing a Claim About Proportion
4/19 R 8-4 Testing a Claim About a Mean

Week 15
4/24 T 8-4 Testing a Claim About a Mean
8-5 Testing a Claim About Standard Deviation or Variance
4/26 R 8-5 Testing a Claim About Standard Deviation or Variance

Week 16
5/1 T Review for Exam 3

Week 17
5/7 M Exam 3 (8 am – 10 am)

Attendance:
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 the instructor has been notified in advance.
Sul Ross State University policy is 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 6 classes.

Cheating:
Cheating will not be tolerated. Anyone caught cheating will receive a grade of zero on that assignment, exam, or quiz. 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.

Homework Assignments:
A homework assignment is due 2 class periods after it is assigned. A late homework assignment will be penalized at least 50% or not accepted. All homework assignments, as well as all exams and quizzes, must be done in pencil.

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, please 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 of 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 Schwartze, 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: 432-837-8691. E-mail: mschwartze@sulross.edu.