Elementary Statistical Methods

Time: TR 11 – 12:15
Room: ACR 205

Instructor: Eric Funasaki
Office: ACR 109C
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Office hours:

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 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, 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 T  1-1 Review and Preview, 1-2 Statistical and Critical Thinking, 1-3 Types of Data
8/30 R  1-4 Collecting Sample Data, 2-1 Review and Preview, 2-2 Frequency Distributions
Week 2
9/4  T  2-2 Frequency Distributions, 2-3 Histograms
9/6  R  3-1 Review and Preview, 3-2 Measures of Center

Week 3
9/11 T  3-2 Measures of Center, 3-3 Measures of Variation
9/13 R  3-4 Measures of Relative Standing and Boxplots

Week 4
9/18 T  3-4 Measures of Relative Standing and Boxplots, 5-1 Review and Preview
9/20 R  5-2 Probability Distributions, Review for Exam 1

Week 5
9/25 T  Exam 1
9/27 R  5-2 Probability Distributions, 5-3 Binomial Probability Distributions

Week 6
10/2  T  5-3 Binomial Probability Distributions, 5-4 Parameters for Binomial Distributions
10/4  R  6-1 Review and Preview, 6-2 The Standard Normal Distribution

Week 7
10/9  T  6-2 The Standard Normal Distribution, 6-3 Applications of Normal Distributions
10/11 R  6-4 Sampling Distributions and Estimators, 6-5 The Central Limit Theorem

Week 8
10/16 T  6-5 The Central Limit Theorem, 7-1 Review and Preview
10/18 R  7-2 Estimating a Population Proportion, Review for Exam 2

Week 9
10/23 T  Exam 2
10/25 R  7-2 Estimating a Population Proportion, 7-3 Estimating a Population Mean

Week 10
10/30 T  7-3 Estimating a Population Mean
11/1  R  7-4 Estimating a Population Standard Deviation or Variance

Week 11
11/6  T  7-4 Estimating a Population Standard Deviation or Variance
11/8  R  8-2 Basics of Hypothesis Testing

Week 12
11/13 T  8-2 Basics of Hypothesis Testing, 8-3 Testing a Claim About Proportion
11/15 R  8-3 Testing a Claim About Proportion

Week 13
11/20 T  8-4 Testing a Claim About Mean
11/22 R  Thanksgiving (no class)

Week 14
11/27 T  8-4 Testing a Claim About Mean
11/29 R  8-5 Testing a Claim About Standard Deviation or Variance

Week 15
12/4  T  Review for Exam 3
12/6  R  Dead Day (no class)
Week 16  
12/10  M  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 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.

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 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.

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