MATH 1342 001/ALP Spring 2024

Elementary Statistical Methods

Time: MW 12:30 – 1:45

Room: ACR 204

Instructor: Eric Funasaki

Offices: ACR 109C (MW afternoons) and BAB 210 (MTWRF mornings and TRF afternoons)

Phone: 432-837-8109

e-mail: eric.funasaki@sulross.edu

Office hours:

MW 11 - 12:30, MW 3 - 4:30, 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 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 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

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):

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Week 1
   1/17 W 1.1 Getting Started, 1.2 Data Classification
Week 2
   1/22 M 1.3 The Process of a Statistical Study, 1.4 How to Critique a Published Study
   1/24 W 2.1 Frequency Distributions, 2.2 Graphical Displays of Data
Week 3
   1/29 M 2.2 Graphical Displays of Data, 2.3 Analyzing Graphs
   1/31 W 3.1 Measures of Center
We<u>ek 4</u>
   2/5
         M 3.2 Measures of Dispersion
   2/7
          W 3.3 Measures of Relative Position
Week 5
   2/12 M Review for Exam 1
   2/14 W Exam 1
Week 6
  2/19
          M 5.1 Discrete Random Variables
  2/21
          W 5.2 Binomial Distribution
Week 7
  2/26
          M 5.2 Binomial Distribution, 6.1 Introduction to the Normal Distribution
          W 6.2 The Standard Normal Distribution
  2/28
Week 8
  3/4
          M 6.3 Finding Probability Using a Normal Distribution
  3/6
          W 6.4 Finding Values of a Normally Distributed Random Variable
Week 9
          M Spring Break (no class)
  3/11
  3/13
          W Spring Break (no class)
W<u>eek 10</u>
  3/18
          M Review for Exam 2
  3/20
          W Exam 2
Week 11
          M 8.1 Estimating Population Means, 8.4 Estimating Population Proportions
  3/25
  3/27
          W 8.4 Estimating Population Proportions
W<u>eek 12</u>
  4/1
          M 8.4 Estimating Population Proportions
  4/3
          W 8.2 Student's t-Distribution, 8.3 Estimating Population Means
<u>Week 13</u>
  4/8
          M 8.3 Estimating Population Means
  4/10
          W 10.1 Fundamentals of Hypothesis Testing
Week 14
  4/15
          M 10.1 Fundamentals of Hypothesis Testing
  4/17
          W 10.4 Hypothesis Testing for Population Proportions
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<u>Week 15</u>		
4/22	Μ	10.4 Hypothesis Testing for Population Proportions
4/24	W	10.3 Hypothesis Testing for Population Means
<u>Week 16</u>		
4/29	М	10.3 Hypothesis Testing for Population Means
5/1	W	Review for Exam 3
Week 17		
5/7	Т	Exam 3 (12:30 pm – 2:30 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.