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)
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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 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):

Week 1

1/18	W	1.1 Getting Started
1/20	F	1.2 Data Classification, 1.3 The Process of a Statistical Study

Week 2

1/23	M	1.4 How to Critique a Published Study, 2.1 Frequency Distributions
1/25	W	2.1 Frequency Distributions
1/27	F	2.2 Graphical Displays of Data

Week 3

1/30	M	2.2 Graphical Displays of Data, 2.3 Analyzing Graphs
2/1	W	3.1 Measures of Center
2/3	F	3.1 Measures of Center

Week 4

2/6	M	3.2 Measures of Dispersion
2/8	W	3.2 Measures of Dispersion
2/10	F	3.3 Measures of Relative Position

Week 5

2/13	M	3.3 Measures of Relative Position
2/15	W	Review for Exam 1
2/17	**F**	**Exam 1**

Week 6

2/20	M	5.1 Discrete Random Variables
2/22	W	5.1 Discrete Random Variables
2/24	F	5.2 Binomial Distribution

Week 7

2/27	M	5.2 Binomial Distribution
3/1	W	6.1 Introduction to the Normal Distribution, 6.2 The Standard Normal Distribution
3/3	F	6.2 The Standard Normal Distribution

Week 8

3/6	M	6.3 Finding Probability Using a Normal Distribution
3/8	W	6.3 Finding Probability Using a Normal Distribution
3/10	F	6.4 Finding Values of a Normally Distributed Random Variable

Week 9

3/13	**M**	**Spring Break (no class)**
3/15	**W**	**Spring Break (no class)**
3/17	**F**	**Spring Break (no class)**

Week 10

3/20	M	6.4 Finding Values of a Normally Distributed Random Variable
3/22	W	Review for Exam 2
3/24	**F**	**Exam 2**

Week 11

3/27	M	8.1 Estimating Population Means, 8.4 Estimating Population Proportions
3/29	W	8.4 Estimating Population Proportions
3/31	F	8.4 Estimating Population Proportions

Week 12

4/3	M	8.2 Student's *t*-Distribution, 8.3 Estimating Population Means
4/5	W	8.3 Estimating Population Means
4/7	F	8.3 Estimating Population Means

Week 13

4/10	M	8.3 Estimating Population Means, 10.1 Fundamentals of Hypothesis Testing
4/12	W	10.1 Fundamentals of Hypothesis Testing
4/14	F	10.1 Fundamentals of Hypothesis Testing

Week 14

4/17	M	10.4 Hypothesis Testing for Population Proportions
4/19	W	10.4 Hypothesis Testing for Population Proportions
4/21	F	10.4 Hypothesis Testing for Population Proportions

Week 15

4/24	M	10.3 Hypothesis Testing for Population Means
4/26	W	10.3 Hypothesis Testing for Population Means
4/28	F	10.3 Hypothesis Testing for Population Means

Week 16

5/1	M	10.5 Hypothesis Testing for Population Variances
5/3	W	10.5 Hypothesis Testing for Population Variances
5/5	F	10.5 Hypothesis Testing for Population Variances

Week 17

5/8	M	Review for Exam 3
5/10	W	Review for Exam 3
5/12	**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.

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