STATISTICS: MATH 1342-003
ACR 205: 11:00-12:15 MW
Spring, 2015

Instructor: Dr. Sherill Easterling **Office: ACR 107C**
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Office Hours: 9:50-10:50 and 12:50-1:50 TR, 10:30-12:00 and 1:00-3:00 W or by appointment

Prerequisites: MATH 0301 or proper score on a placement exam.

Course Description: An introductory statistics course designed to give the student the critical thinking skills necessary to interpret statistical information. This course will prepare the student for further statistical work in his/her field. Topics include: organizing and graphing qualitative and quantitative data; measures of central tendency, variation and position; discrete and continuous probability distributions; estimation and confidence intervals; hypothesis testing of means, proportions ANOVA, goodness of fit, independence or homogeneity; and simple linear regression and correlation.

Learning Objectives: Upon successful completion of the course, students will be able to: (1) gather, organize, calculate, and present data; (2) be familiar with the probability distributions, both discrete and continuous, and be able to discern the proper distribution for application; (3) be able to estimate population proportions, means, variances, and standard deviations; (4) be able to write hypotheses and perform the proper statistical test, determining the conclusion for means, proportions, variances, analysis of variance, and linear regression; and (5) use regression and correlation to depict the nature of a set of data.

Grading Procedure: The final grade in the course will be the mean of the four major tests and one quiz and/or homework average. Quizzes will often be given at the beginning of the class period and may not be made up unless prior arrangements have been made. You may drop the two lowest quiz grades. No major test grade will be dropped. The final exam will be Test #4. The grading scale is: 90-100 A, 80-89 B, 70-79 C, 60-69 D, below 60 F.

Class Attendance: Class attendance is expected and necessary to pass this course. Lecture material often adds to the textbook so missing causes undue hardship. After four absences, two points for each absence will be deducted from your final grade, with the exception of school sponsored activities. You need to email me regarding any absence. Tardiness will result in a student not having sufficient time to complete quizzes.

Textbook & Calculator: "Introductory Statistics"; Prem S. Mann, Eighth Edition, Wiley. ISBN 978-0-470-90410-7. The TI-83 or TI-84 is strongly recommended for this course.

Conduct – Rudeness in any form to myself or other classmates will not be tolerated.

Cellphones & Headphones – Both of these must be turned off and put away during class.

Exams: Exam questions will be very similar to homework and quizzes. They will be closed book and closed notes. Once an exam starts, a student is not to leave the room.

Disabilities Accommodation: It is Sul Ross State University policy to provide reasonable accommodation to students with disabilities. If you would like to request such accommodation because of a physical, mental or learning disability, please contact the ADA Coordinator, Grace Petty, in Counseling & Accessibility Services, Ferguson Hall 112, 432-837-8203.

Class Schedule and Topics :

Date	Sections	
1/20		Chapter 1: Introduction; Basic Terms and Definitions
1/22	2.1-2.2.3	Organizing and Graphing Qualitative and Quantitative Raw Data
1/27	2.2.4-2.5	Histograms, Cumulative Frequency Distributions, Stem-and-leaf , Dotplots
1/29	3.1-3.2	Measures of Central Tendency and Dispersion for Ungrouped Data
2/3	3.3-3.4	Measures of Central Tendency and Dispersion for Grouped Data
2/5	3.5-3.6	Measures of Position, Box-and-Whisker Plot
2/10		Review for Test #1
2/12		TEST #1
2/17	5.1-5.3	Probability Distribution of Discrete Random Variable, Finding the Mean and Standard Deviation of Discrete Random Variable
2/19	5.4	Combinations, Binomial Probability Distribution
2/24	5.5-5.6	Hypergeometric and Poisson Probability Distributions
2/26	6.1-6.3	Continuous Probability, Normal, and Standard Normal Distributions and Applications of the Normal Distribution
3/3	6.4	Determining the z and x Values When Area Under Curve is Known
3/5		Review for Test #2
3/10		Test #2
3/12	7.1-7.3	Population and Sampling Distributions of Means, Type Errors
3/16-3/20		Spring Break
3/24	7.4	Applications of Sampling Distributions of Means
3/26	7.5-7.6	Population and Sampling Distributions of Proportions
3/31	8.1-8.3	Estimation, Point and Interval for Population Mean
4/2	8.4	Estimation of Population Mean and Proportion
4/7		Review for Test #3
4/9		Test #3
4/14	9.1-9.2	Hypothesis Tests Introduction, Tests about Population Means
4/16	9.3-9.4	Hypotheses Tests about Means and Population Proportions
4/21	10.4,12.1	Hypothesis Tests about Paired Samples, Analysis of Variance
4/23	12.2	ANOVA & Tukey's HSD Test
4/28	11.1-11.2	Chi-squared Distribution and Goodness-of-fit
4/30	11.3	Tests of Independence or Homogeneity
5/5		Review for Final
5/12 *		Final Exam (Test #4)