Elementary Statistical Methods (MATH 1314 9S1, 9S2, and 9S3)

INSTRUCTOR CONTACT INFORMATION

Instructor: Mrs. K. Herrera

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kimberly.herrera@silsbeeisd.org

Office Phone: Silsbee HS (409) 980-7877 ext 6232

Office Location: Silsbee High School room 232

Office Hours: Monday through Friday 3:30 to 4:00 pm

CREDIT

3 Semester Credit Hours (3 hours lecture)

MODE OF INSTRUCTION

Face-to-Face

PREREQUISITE/CO-REQUISITE:

A score of 350 or above on the TSI-Assessment placement test or a "C" or better in TMTH 0375.

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

Upon completion of this course, the student will be able to

- Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- Recognize, examine, and interpret the basic principles of describing and presenting data.
- Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinations.
- Explain the role of probability in statistics.
- Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.
- Describe and compute confidence intervals.
- Solve linear regression and correlation problems.
- Perform hypothesis testing using statistical methods.

CORE OBJECTIVES

- Critical Thinking Skills: To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- Communication Skills: To include effective development, interpretation and expression of ideas through written, oral, and visual communication.
- Empirical and Quantitative Skills: To include manipulation and analysis of numerical data or observable facts resulting in informed conclusions.



REQUIRED TEXTBOOK AND MATERIALS

- The online textbook may be found at https://openstax.org/details/books/introductory-statistics
- WebAssign Access Code
 - May be purchased online at https://www.webassign.net/
- A basic scientific calculator: please check with Mrs. Herrera as to the specific type of calculator required.

ATTENDANCE POLICY

Attendance is **mandatory**. If you are late, you will be marked tardy. Three (3) tardies will be counted as an absence. If you are more than 10 minutes late, you will be counted absent. If you leave class early, you will be counted absent. If you are sleeping or inattentive in class, you will be counted absent.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the <u>Academic Calendar</u>. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16- week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

DATE	TOPIC	ASSIGNMENTS
DATE		(Due on this Date)
8/21-8/25	Orientation (Optional)	Optional
	Section 1.1	Tuesday, August 29
	Section 1.2	Tuesday, August 29
	Section 1.3	Tuesday, August 29
	Section 1.4	Tuesday, August 29
8/28-9/1	Section 2.1	Wednesday, September 6
	Section 2.2	Wednesday, September 6
	Section 2.3	Wednesday, September 6
	Section 2.4	Wednesday, September 6
9/4-9/8	Section 2.5	Tuesday, September 12
	Section 2.6	Tuesday, September 12
	Section 2.7	Tuesday, September 12
9/11-9/15	Exam 1	Tuesday, September 19
	Section 12.2	Tuesday, September 19
	Section 12.3	Tuesday, September 19
	Section 12.5	
9/18-9/22	Section 3.1	Wednesday, September 27
	Section 3.2	Wednesday, September 27
	Section 3.3	Wednesday, September 27
	Experiment	Friday, September 29

9/25-9/29	Section 4.1	Tuesday, October 3
	Section 4.2	Tuesday, October 3
	Section 4.3	Tuesday, October 3
10/2-10/6	Exam 2	Tuesday, October 3
	Section 6.1	Wednesday, October 11
	Section 6.2	Wednesday, October 11
10/9-10/13	Section 7.1	Wednesday, October 18
	Section 7.2	Wednesday, October 18
	Section 7.3	Wednesday, October 18
10/16-10/20	Section 8.1	Tuesday, October 24
	Section 8.2	Tuesday, October 24
	Section 8.3	Tuesday, October 24
10/23-10/27	Exam 3	Tuesday, October 24
	Section 9.1	Tuesday, October 31
	Section 9.2	Tuesday, October 31
	Section 9.3	Tuesday, October 31
10/30-11/3	Section 9.4	Wednesday, November 8
	Section 9.5	Wednesday, November 8
	Experiment	Friday, November 10
11/6-11/10	Section 10.1	Tuesday, November 14
	Section 10.2	Tuesday, November 14
	Section 10.3	Tuesday, November 14
11/13-11/17	Section 10.4	Tuesday, November 28
	Section 10.5	Tuesday, November 28
11/27-12/1	Final Review	Tuesday, December 5
12/4-12/6	Final Exam	Tuesday, December 5

^{*}subject to change with or without notice*

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Exams60%
- Course Assignments......20%
- Comprehensive Final Exam......10%
- Participation......10%

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at

http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Specialpopulations (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

You may expect a response to emails within 24 hours. For emails sent after 3:30 pm on Friday, you may expect a response Monday morning. I will not accept late work for this course. All exams must be taken on the day they are assigned. For any unusual situations, please email me.