MATH 1342.011 - Statistics
Fall 2024

Instructor:
Dr. Robin Ragland

Office: RBN 4006

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Office Hours: (Student Hours)
MW 11:15am-12:15pm
TR 10:00am-10:50am

Class Schedule:
MWF 10:10am-11:05am RBN 4032

Course Purpose and Description

Can you trust the statistics that you read online? Your doctor wants you to make a decision, but only gives you statistics. How do you make the decision? You have to make a critical decision at work. You look at the results of a statistical study. What should you do?

The course will explain the inner workings of statistics. You will learn the meaning of measurements of central tendency and dispersion, sampling, probability, testing of hypothesis, correlation and regression, and analysis of variance. More importantly, you will learn how you can use statistics to improve your life and conduct your work.

The prerequisite for this course is an appropriate score on ACT, SAT STAAR, TSI, or special permission.

Online Textbook, Homework, Videos, and Examples

We will be using WileyPlus, an online teaching and learning platform, in this course. You must purchase this service to do your homework. The service allows you to access an online textbook, online homework, supplemental videos and homework. You may choose to purchase a downloadable copy of the textbook or a loose-leaf version of the textbook for additional money. You may want to start by using the free 14 day trial. That way, if your course schedule changes, you won't have any extra expenses.

Learning Outcomes

At the conclusion of this course, you will be able to

1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.

2. Recognize, examine and interpret the basic principles of describing and presenting data.

3. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.

4. Describe and compute confidence intervals.

5. Solve linear regression and correlation problems.

6. Perform hypothesis testing using statistical methods.

Grading Policies

The grading scheme for this course will be no more harsh than

90-100 A

80- less than 90 B

70- less than 80 C

60- less than 70 D

less than 60 F

The categories for grading are as follows:

Homework 10%

Quizzes 10%

Exams 20% each (3 exams)

Final Exam 20%

Extra Credit

A student who turns in all homework on time, takes all exams, and earns all nonzero scores on homework and exams will automatically qualify to re-place their lowest grade on an in-class exam with their grade on the final, if that improves their score.

Make-ups

If you must miss an exam for any reason, please contact your instructor at least one week in advance. Make-up exams must be scheduled **before** the regularly scheduled exam. Exceptions for emergencies will be handled on a case-by-case basis.

Attendance

Class attendance is mandatory. If you want to do well in this class, you will need to attend every class meeting and come prepared with all the materials (pencil, paper, calculator, etc) that you will need for learning.

Calculator Policy

Non-graphing calculators will be needed in the course and will be allowed on exams. You may not use your phone. All work must be shown.

Cell Phones and other electronic devices

Please set your cell phones to silent mode. If you are expecting an emergency call, please notify your instructor in advance, sit near the door, and answer the phone outside. You will not be allowed to wear electronic devices (except hearing aids) during an exam. During exams, cell phones must be turned off and placed in sight on your desk.

Academic Dishonesty

Your work must be your own. Violations will be processed according to the established guidelines of the department, college, and university. Violations of academic integrity include, but are not limited to, cheating, fabrication, or plagiarizing. A range of academic sanctions may be taken against a student who engages in academic dishonesty. Below are ideas related to academic integrity.

Resources you are encouraged to utilize in this course include the textbook and unassigned problems, notes from class, assigned homework problems, your fellow Math 1342 students, the Math Learning Center, and your instructor. Email is the best way to contact me. I reply to emails from 9:00 A.M.– 4:00 P.M. Monday–Friday.

Exam Dates

Exam 1: Friday, Sept. 27

Exam 2: Friday, Oct. 25

Exam 3: Friday, Nov. 22

Final Exam: Wednesday, Dec 11 10:15am-12:15pm

A.I.

UT Tyler is committed to exploring an using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. Al uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and student must not use protected information, date, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, AI is not permitted at all. In order to get the most of this course, you must complete all assignments without the aid of any AI tools. Refrain from using AI tools to generate any course context (e.g., text, video, audio, images, code, etc.) for any assignment or classroom assignment.