STATISTICS I

MATH 1342.004 | FALL 2023

Instructor: Dr. Deborah Koslover

Office: RBN 4010

Email: dkoslover@uttyler.edu

Classroom: RBN 3039

Meeting Time: MW 2:30 – 3:55 PM

Office Hours: MWF 10:40 – 11:40 AM or by appointment.
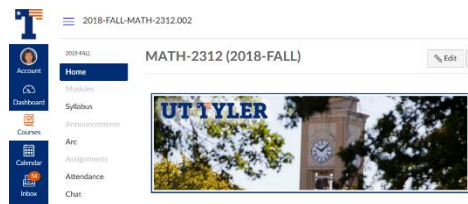
Course Description

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?

This 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.

Website

You will be using Canvas. Go to www.uttyler.edu/canvas to log into Canvas using your regular patriots account. If you have enrolled in the course, you will have access to the website.

You will find important documents, grades, lecture notes, and announcements on Canvas. In general, I will notify you by email and on Canvas if there are any disruptions or changes to our class.

Textbook, Homework, Videos and Examples

We will be using WileyPlus, an online teaching and learning platform, in this course. You must buy this service to do your homework. The service allows you to access an online textbook, online homework, supplemental videos and homework. The bookstore has a loose-leaf copy of the textbook with a registration code needed to access the homework. You may *choose* to simply purchase a downloadable copy of the textbook instead which comes with access to Wiley Plus homework site.

Attendance is mandatory and records will be kept. Notify Dr. Koslover in advance if you must miss a class, be late or leave early. (University Policy: Class attendance is the responsibility of the student. When a student has a legitimate absence, the instructor may permit the student to complete missed assignments. In many cases class participation is a significant measure of performance, and non-attendance may adversely affect a student's grade. When a student's absences become excessive, the instructor may recommend that the student initiate a withdrawal.)

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.

Course Evaluation

At the end of the semester, you will find your final grade on my.uttyler.edu. It will also be posted on Canvas.
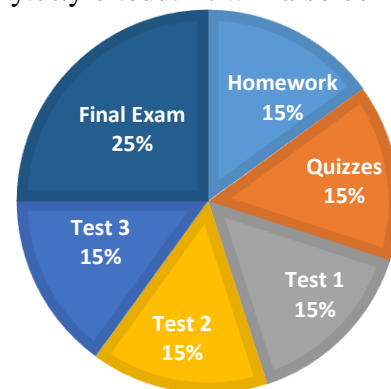A final course grade of
  90% is guaranteed to be at least an A
  80% is guaranteed to be at least a B
  70% is guaranteed to be at least a C
  60% is guaranteed to be at least a D.
All grades below 60% will be F.

The Plan

(15%): Homework will be assigned each class period via the online platform WileyPlus. You can access the homework assignments through Canvas.

  In general, a new homework assignment will become available after each class. It will be due by 5:00 A.M. Thursday of the following week. The WileyPlus system provides you with instant feedback on your answers, as well as multiple attempts to complete most problems. You should use this to your advantage. However, you will not be able to submit solutions after the due date. When computing your final homework grade, I will use your total score on all the WileyPlus problems. For example, if there are a total of 150 points throughout the semester, and you successfully complete 120 of them, your homework grade will be 80%. The WileyPlus system is not flawless, so the grading will be adjusted somewhat at the end of the semester to take into account glitches. If you suspect a problem, let me know, but I will not alter your grade until the end of the semester.
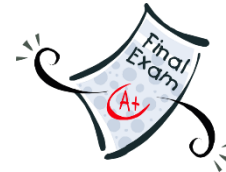
Striving for success without hard work is like trying to harvest where you haven't planted. __David Bly

QUIZZES **(15%)**: There will be seven quizzes. Please see the calendar at the end of the syllabus for dates. The quizzes will be easier than the tests. Your lowest quiz score will be dropped. If you have 3 or fewer unexcused absences, your second lowest quiz grade will be dropped.

It's not that I'm so smart, it's just that I stay with problems longer. __Albert Einstein

TESTS **(15% each) and** **FINAL EXAM** **(25%):** There will be three tests and a final exam. These exams will test your knowledge of the material taught in the class and practiced on the homework. The final exam will be comprehensive, but will emphasize material in the final weeks of the course. No tests will be dropped. See Important Dates below for the schedule.
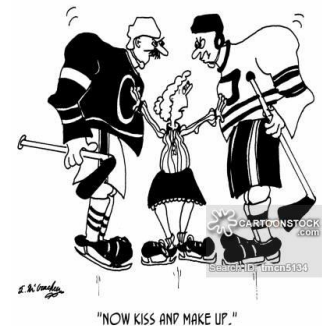
Success is dependent on effort. __Sophocles

- Test 1 – Wednesday, September 13
- Test 2 – Wednesday, October 11
- Test 3 – Wednesday, November 8

Final Exam: (Tentative) Wednesday, December 6, 2:45 – 4:45 PM

Please don't plan to start your holiday travel before the date the final exam is scheduled!

Make-ups

Make-ups for **documented** absences that are **required** as part of a UT Tyler obligation (e.g. athletes participating in an event, participating in a debate contest, etc.) or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required. Other make-ups are granted only in extreme cases such as hospitalization and at the sole discretion of the instructor.

Make-ups will be allowed for the following excused absences.
1) Illnesses, with a doctor's note, no exceptions.
2) Your child's illness, with a doctor's note.
3) Court appearances, including citizenship court, with documentation
4) Weddings, funerals or military advancement with documentation **and** a photograph showing that you attended the event.

Other important information

Now is the time to think about what grade you "need" to make in this class. Three weeks before the end of the semester is too late to realize that you are not on the road to earning that grade. There will be no extra credit or special assignments for any reason. No tests will be dropped. Take this class seriously. Attend every session and study. Make use of my office hours and the tutoring that is available to you.

For those of you who took statistics in high school, this class is taught in a very different style from that which you have seen before. Do not expect to pass without attending and doing the work. Your "easy A" can very easily turn into a C or even a failing grade.

OTHER HELP

Supplemental Instruction (SI): TBA
http://www.uttyler.edu/si/includes/sub-nav.php
Math Learning Center (MLC): RBN 4021. Drop-in homework help.
PASS Center: LIB 401. Free individual tutoring appointments
https://www.uttyler.edu/tutoring

Other Details

Calculator Policy: Non-graphing calculators will be needed in the course and will be allowed on tests. You may not use your phone. However, all work must be shown. Many different types of calculators, including many simple four function calculators with a square root key will be sufficient. I have some calculators to lend, but not enough for everyone.

Cell phones and other electronic devices: Please set your cell phones to silent mode. If you are expecting an emergency call, please notify the professor 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 tests, cell phones must be turned off and placed in sight on your desk.

Calendar

AUGUST

MON	WED	FRI
21	23	25
First Day		
28	30	
	Quiz 1	

December 6
Final Exam
2:45 – 4:45 PM

SEPTEMBER

MON	WED	FRI
		1
		Census date
4	6	8
Labor Day	Quiz 2	
11	13	15
	Test 1	
18	20	22
25	27	29
	Quiz 3	

OCTOBER

MON	WED	FRI
2	4	6
	Quiz 4	
9	11	13
	Test 2	
16	18	20
23	25	27
	Quiz 5	
30		
Drop Day		

NOVEMBER

MON	WED	FRI
	1	3
	Quiz 6	
6	8	10
	Test 3	
13	15	17
20	22	24
Thanksgiving		
27	29	Dec 1
	Quiz 7	