Math 1342 003 – Spring 2024, UT Tyler

Lecturer: Chris Chappa
Email: cchappa@uttyler.edu
Office: Graduate Student Lounge inside the Mathematics Learning Center
Office Hours: By appointment. Student meetings may be conducted in person, over Zoom, by text, by phone call, or by FaceTime. Meetings can be held at any time mutually available to the professor and the student.

Class Times: MW 5:40 PM – 7:05 PM
Classroom: RBN 4025

Required Text: *Statistics – Unlocking the Power of Data, Third Edition*, Lock, Lock, Lock, Lock, and Lock. ISBN: 978-1-119-67416-0

Prerequisite: Satisfactory TSI completion or exemption

Catalog Description of Course: Measures of central tendency and dispersion, sampling, probability, testing of hypothesis, correlation and regression, and analysis of variance.

Grades: Your grade will be calculated according to the following weights.

Test average: 50%
Final exam: 20%
Quiz average: 20%
Project: 10%

Calculators: Calculators are required for this course. The recommended calculator is the TI-34. More advanced calculators can be used but are not necessary. Please do not use any pre-packaged statistical functions in your calculator. On tests, you will be asked to show all your work. Using such statistical functions on your calculator on a test will result in a noticeable loss of points.

In-Class Exams: There will be three exams at the conclusions of Chapters 2, 4, and 6.

Homework and Quizzes: Homework will be assigned daily. At the end of each week, a quiz will be available in Canvas over any homework assigned that week. Students will have two attempts at each quiz.

Final Exam: The Final Exam is comprehensive. The exact date and time will be announced later in the semester.

Projects: You are expected to complete one project this the semester. It will require the gathering and/or interpreting of data, organizing that data using Microsoft Excel, and presenting a written summary of your results. I will give you specifics for the project when the time arrives.

Attendance Policy: I do not have an official attendance policy. You are university students; you should know the value of attending class. I have seen students in the past try to attend sparsely, usually test days. I like to call those students "people who ended up having to take this class again". Don't be one of them. It's a waste of your time and money to not attend class.

Plagiarism and Academic Dishonesty: If I have irrefutable evidence of academic dishonesty, I will follow through according to the student catalog, to the fullest extent I am allowed. Don't mistake caution for weakness. I will not pursue allegations without rock-solid evidence. But with solid evidence, I will take action. You have been warned.

Make-up Policy: If you know that you will be away from campus for a required UT Tyler activity, let me know as soon as possible (preferably at the beginning of the semester). Missed quizzes can be made up in these instances.

Computers, Phones, and Personal Electronic Devices: My policy is as follows.

1. Computers, phones, tablets, and other personal electronic devices are allowed during class for note-taking and researching purposes only.
2. Students who wish to use such devices during class for texting, social media, video streaming, gaming, or any other purpose unrelated to class will be asked to leave. Such activity distracts the teacher and your classmates, thus wasting their time and money.
3. Do not listen to music during class. It is incredibly disrespectful. As such, no earbuds or headphones are allowed to be worn during class.

Mathematics Learning Center (MLC): The Department of Mathematics provides a free tutoring service for UT Tyler students taking lower level mathematics courses (Intermediate Algebra through Calculus II) in the Mathematics Learning Center located in RBN 4021. The MLC is generally open 8am-10pm Monday through Thursday and 8am-5pm on Fridays. During these hours students have access to free tutoring, access to computers for online homework and Mathematica labs, and have a place to work on homework. Upon entering the MLC students are asked for their student ID which will be scanned for attendance and held until the student wishes to be scanned out before leaving the lab. The MLC is a place to do work related to your mathematics courses - it is not a general access lab used for surfing the internet and checking email (this will be monitored by the tutors). As such, you should expect the tutors to help you with your homework. However, this doesn't mean that they remember how to do all of the different types of problems. Sometimes it will be necessary for the tutor to ask for your book to review some material before helping you. If a tutor cannot figure something out, then they will consult with a faculty member. Occasionally things go wrong in the MLC and we need to hear about it. If you feel that you are not getting the help that you need (tutors ignoring your requests for help or refusing to help due to ignorance of a subject) or if the environment is too distracting (loud talking, someone playing music, etc), then go to your instructor to report your problem. It is especially important to remember the day and time that the incident occurred. All complaints will be kept anonymous.

<u>**University Policies**</u>

Students Rights and Responsibilities: To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:

http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html

UT Tyler COVID Statement: It is important to take the necessary precautions to ensure a healthy and successful year. UT Tyler continues to urge you to protect yourselves against the flu, COVID and any new threats that may be developing. Be diligent about preventive measures such as washing hands, covering sneezes/coughs, social distancing and vaccinations, which have proven to be successful in slowing the spread of viruses. Encourage those who don't feel well to stay home, and if they show symptoms, ask them to get tested for the flu or COVID. Self-isolation is important to reduce exposure (CDC quarantine/isolation guidelines). Please work with your faculty members to maintain coursework and please consult existing campus resources for support.

Conceal Carry Policy: The law of the State of Texas allows students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at

http://www.uttyler.edu/about/campus-carry/index.php

In addition, Section 4, a-1 of SB 11 states "a license holder commits an offense if the license holder carries a partially or wholly visible handgun, regardless of whether the handgun is holstered, on or about the license holder's person"

Grade Replacement/Forgiveness: If you are repeating this course for a grade replacement, you must file intent to receive grade forgiveness with the registrar by Friday, September 1st. Failure to do so will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates will receive grade forgiveness (grade replacement) for only three course repeats; graduates, for two course repeats during his/her career at UT Tyler.

State-Mandated Course Drop Policy: Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the 12th day of class (See Schedule of Classes for the specific date). Exceptions to the 6-drop rule include, but are not limited to, the following: totally withdrawing from the university; being administratively dropped from a course; dropping a course for a personal emergency; dropping a course for documented change of work schedule; or dropping a course for active duty service with the U.S. armed forces or Texas National Guard.   Petitions for exemptions must be submitted to the Registrar's Office and must be accompanied by documentation of the extenuating circumstance. Please contact the Registrar's Office if you have any questions.

Disability/Accessibility Services: In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Tyler at Texas offers accommodations to students with learning, physical and/or psychological disabilities.

If you have a disability, including non-visible a diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit

https://hood.accessiblelearning.com/UTTyler

and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at

http://www.uttyler.edu/disabilityservices,

the SAR office located in the University Center, # 3150 or call 903.566.7079.

Student Absence due to Religious Observance: Students who anticipate being absent from class due to a religious observance are requested to notify the instructor of such absences by the second class meeting of the semester. Missed quizzes can be made up in these instances.

Student Absence for University-Sponsored Events and Activities: If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement: It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

Student Learning Outcomes:

By the end of this course, the successful Statistics student should be able to do the following:

- 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.
- Examine, analyze and compute confidence intervals and perform hypothesis testing using bootstrap and randomized sampling distributions.
- Describe and compute confidence interval using statistical methods.
- Perform hypothesis testing using statistical methods
- Solve linear regression and correlation problems.

Sections Covered in Textbook and Tentative Dates

1/17/24:   1.1 The Structure of Data
            1.2 Sampling from a Population

1/22/24:   1.2 Sampling from a Population
            1.3 Experiments and Observational Studies

1/24/24:   2.1 Categorical Variables
            2.2 One Quantitative Variable: Shape and Center

1/29/24:   2.2 One Quantitative Variable: Shape and Center
            2.3 One Quantitative Variable: Measure of Spread

1/31/24:   2.4 Boxplots and Quantitative/Categorical Relationships

2/5/24:   2.5 Two Quantitative Variables: Scatterplot and Correlation
            2.6 Two Quantitative Variables: Linear Regression

2/7/24:   2.6 Two Quantitative Variables: Linear Regression
            Review for TEST 1

2/12/24:   TEST 1 (Chapters 1 and 2)

2/14/24:   3.1 Sampling Distributions

2/19/24:   3.2 Understanding and Interpreting Confidence Intervals

2/21/24:   3.3 Constructing Bootstrap Confidence Intervals

2/26/24:   3.4 Bootstrap Confidence Intervals Using Percentiles

2/28/24:   4.1 Introduction to Hypothesis Testing

3/4/24:   4.2 Measuring Evidence with P-Values

3/6/24:   4.3 Determining Statistical Significance

3/18/24:   4.4 A Closer Look at Testing

3/20/24:   Review for TEST 2

3/25/24:   TEST 2 (Chapters 3 and 4)

3/27/24:   5.1 Hypothesis Testing Using Normal Distributions

4/1/24:   5.2 Confidence Intervals Using Normal Distributions

4/3/24:   6.1 Inferences for a Proportion
- Distribution
- Confidence Interval
- Hypothesis Testing

4/8/24:   6.2 Inferences for a Mean
- Distribution
- Confidence Interval
- Hypothesis Testing

4/10/24:   6.3 Inferences for a Difference in Proportions
- Distribution
- Confidence Interval
- Hypothesis Testing

4/15/24:   6.4 Inferences for a Difference in Means
- Distribution
- Confidence Interval
- Hypothesis Testing

4/17/24:   6.5 Paired Difference in Means

4/22/24:   Review for TEST 3

4/24/24:   TEST 3 (Chapters 5 and 6)

4/29/24:   Final Exam Review

5/1/24:   Final Exam