MᶜLENNAN COMMUNITY COLLEGE

WACO, TEXAS

INSTRUCTOR PLAN

INTRODUCTION TO STATISTICS

MATH 1342-004

Yumei Wu

8:00am-9:25am, MW, Math 114

NOTE: This is a Face to Face course.

Fall 2023

INTRODUCTION TO STATISTICS

1342.004

Greetings Statistics Students! On the next pages you will find the syllabus.
Please read it carefully. <mark>Try to complete the steps below by 4:00pm August 19th, 202</mark>3

Step	Action
1.	Ensure that you correspond with me using your MCC email address. Any trouble to access, please contact MCC tech support 254-299-9077 or helpdesk@mclennan.edu
2.	Access the online website Brightspace via www.mclennan.edu.
3.	Now you are on the website, click your Math1342-01, Elementary Statistical Methods, click each item on the first row, such as, Announcement, Content, Discussion, Class-list, Assessment, and more. Find To-Dos in Announcement weekly, access Content, where you shall visit and work all the time for homework, grades, quizzes, videos, and more. You shall be assigned to Discussion and work on the signed one. Class list, where to find your classmates.
4	For all assignments, go to Content-MyLab Statistics Students Link-MyLab Statistics All Assignments, you may start to work on the first one. Quizzes are also posted there when the time comes.
5	Send an email from your MCC email to my email address ywu@mclennan.edu with the Subject: 1342-004. Verify the following: 1. Check if you have successfully enrolled in the course at the website. 2. Watch the orientation video in the announcement in Brightspace. 3. Introduced yourself on the discussion tab. 4. Understand the due dates do not mean you should start the assignments on that day but complete them by then. 5. Understand the build in opportunities for managing your grade-such as taking the unit tests twice, working homework problems as much as needed until you make 100%, but you must complete up to 70% the assignment in order to access the next assignment. 6. Know you will use the Zoom program to have your video conference or office hours and that this requires WiFi access and a computer with camera and mic or a smart phone or tablet or a campus visit. 7. Complete the Online Homework Orientation found under the content of BS. 8. Tell me – the time you will visit me for office hours in Zoom – Zoom meeting ID: 2542998809. 9. Begun Lesson by clicking on the Lesson tab in Brightsppace(BS).

Course Description:

Provides a study of statistical description of frequency distributions; sampling; elementary principles of probability distributions, both binomial and normal; estimation of parameters; tests of hypotheses; linear regression and correlation; independence of variables by Chi Square analysis; and an introduction to a statistics software package. Graphing calculator required. You may download the free graphing calculator to your cell, and we have one in our classroom installed in each computer.

Prerequisites and/or Corequisites:

Prerequisite: TSI math complete or MATH 0308, or completion of college-level math course or consent of division chair. Semester Hours 3 (3 lectures)

Course Notes and Instructor Recommendations:

Math 1342-01 in a F2F format involves face to face in classroom, optional meetings during office hours via Zoom, and mandatory online discussions. Videos are done by the instructor lecture videos. Class notes and lecture videos will be available in Brightspace to assist student success, https://brightspace.mclennan.edu/d2l/login. Online homework assignments will be located at the link Mylab & Mastering Links. The weekly To-Dos list will be announced on each Sunday morning what you should do for the coming week. So, make sure you read my announcement each Sunday, so you will not miss the week activities.

Instructor Information:

Instructor Name: Yumei Wu
MCC E-mail: ywu@mclennan.edu
Office Phone Number: 254-299-8809
Cell Phone Number: 254-3667857 (Text your name, course, and question. I will respond ASAP.)
Office Location: Monday Math212.
Office Hours: Monday & Wednesday at Math212, 1:20pm-3:45pm or via Zoom Zoom ID 2542998809. Other time is possible by making appointments.

Required Text & Material: (you shall have all the materials once you registered in my class and you may download the graphic calculator to your cell phone)

Title: *Elementary Statistics*
Author: Mario F. Triola
Edition: 13th edition
Publisher: Pearson

Required graphing calculator – TI-83, TI-83 Plus, TI-84, or TI-84 Plus

TI 83/84 Graphing Calculator Required

[MCC Bookstore Website](http://www.mclennan.edu/bookstore/) http://www.mclennan.edu/bookstore/

MCC Bookstore Website: http://www.mclennan.edu/bookstore/

Methods of Teaching and Learning:

Math1342-01 course is taught face to face in the classroom. Students work on homework assignments and quizzes online via mymathlab through Brightspace. The major tests and final test are done in the classroom during our class time. Students may be required to engage with the instructor and other students through discussion boards, email, chat group or video conferencing. The course video lectures, video notes, graphing calculator tips, formulas and problem solving will be provided in Content in https://brightspace.mclennan.edu/d2l/login .

Students will be required to read section or chapter prior to the homework. The PowerPoint is posted in https://brightspace.mclennan.edu/d2l/login . Students may choose to view videos from https://brightspace.mclennan.edu/d2l/login for further review and learning enhancement.   All students will be required to submit homework on MyMathLab (must score at least 70% to receive credit). The due for all homework is December 4th, 11:59pm. Reviews are provided for exams. There is no extra credit. Active participation in the course (asking questions, answering questions based on reading and lecture through internet) leads to improved test scores, rendering extra credit unnecessary.

Course Objectives and/or Competencies:

Upon completion of Math 1342, the students should be able to:
1. Analyze data graphically and numerically to determine and interpret patterns and departures from patterns **(1, 2, 4, 5, 6),**

2. Summarize the center, spread, and position of distributions of univariate data **(1, 2, 4, 6),**

3. Solve problems using the rules of elementary probability **(1, 2, 3, 4, 8),**

4. Create probability models of real-world situations **(1, 2, 4, 6, 8),**

5. Compute expected value, variance, standard deviation of probability models and real- world data sets **(1, 2, 4),**

6. Verify properties of normally distributed populations and use normal distributions to solve application problems, including applications of the Central Limit Theorem **(1,2,4,5,6),**

7. Construct confidence intervals and perform significance tests for a population parameter, including both independent and paired data **(1, 2, 3, 4, 5, 8),**

8. Use Correlation and regression to analyze data **(1, 2, 3, 4, 5, 6).**

9. Recognize appropriate times for using Normal, Student - t or Chi-square distributions to solve problems (**1, 2, 4, 5, 6, 8),**

10. Input data into a statistical program and interpret/analyze output **(1, 2, 4, 5, 8).**

Course Attendance/Participation Guidelines:

If a student is not in attendance in accordance with the policies/guidelines of the class as outlined in the course syllabus as of the course census date, faculty are required to drop students from their class roster prior to certifying the respective class roster. A student's financial aid will be re-evaluated accordingly and the student will only receive funding for those courses attended as of the course census date.

Before the 60% point of the semester, a student who is absent for 25% or more of a face-to-face or blended course or who misses 25% or more of assigned work for an online course will be withdrawn from the course with a grade of W. A student may also request to be withdrawn with a grade of W before the 60% point of the semester. After the 60% point of the semester, the student may request to be withdrawn if the student is passing, or be assigned the final grade earned at the end of the semester after grades have been updated to reflect missing work.

Note, the above paragraph is required in all Instructor Plans. ***Provide details on how course attendance and participation will be determine for this course and at what point the instructor will withdraw a student from a course for absences or non-participation.***

<u>Course Outline or Schedule</u>:

To be successful in this course, I strongly urge you to do the following each week:
1. Go to Brightspace, click on the Component you are working on.

2. Complete the To-Dos list weekly. You may make your own schedule based on the list so you will not miss any weekly work. The course is designed to help you move through the material as efficiently as possible.
3. Give yourself enough time for the videos and homework, never push to last minutes.
4. Make sure you do not miss tests and quizzes.
5. Remember Due Dates are NOT Start Dates.
6. It is always easier to keep up than to catch up. Consequently, you may want to work ahead to build in a buffer for when "life happens", as it usually does, at the most inopportune time.

_____

Course Outline or Schedule:

Week	Sec.	Topic	
1	1.1	Statistical and Critical Thinking	
	1.2	Types of Data	
	1.3	Collecting Sample Data	
		Quiz 1 on Ch.1	
2	2.1	Frequency Distributions	
	2.2	Histograms	
	2.3	Graphs That Enlighten & Graphs That Deceive	
3	2.4	Scatterplots, Correlation and Regression	
		Quiz on Ch.2	
4		Review for Exam 1 & **Exam 1 (Chapters 1 & 2)**	
4	3.1	Measures of Center	
	3.2	Measures of Variation	
5	3.3	Measures of Relative Standing & Boxplots	
5		Quiz on Ch.3 &	
5	4.1	Basic Concepts of Probability	
	4.2	Addition Rule and Multiplication Rule	
6	4.3	Complements, Conditional Probability & Bayles's Theorem	
	4.4	Counting & Quiz 4	
		Review Exam 2 (Ch 3 & 4)	
7	5.1	Probability Distributions	
		Exam 2 (Ch 3 & 4)	
8	5.2	Binomial Probability Distributions	
	5.3	Parameters for Binomial Distributions	
		Quiz 5,	
8	6.1	The Standard Normal Distribution	
	6.2	Real Applications of Normal Distributions	
9	6.3	Sampling Distributions and Estimators	
	6.4	The Central Limit Theorem	

	6.5	Assessing Normality	
10	6.6	Normal as Approximation to Binomial & Quiz 6	
		Review Exam 3 (Ch 5 & 6)	
11	7.1	Estimating a Population Proportion	
11		**Exam 3 (Ch 5 & 6)**	
12	7.2	Estimating a Population Mean	
12	7.3	Estimating a Population Std. Dev. or Variance	
		Quiz 7,	
13	8.1	Basics of Hypothesis Testing	
	8.2	Testing a Claim about a Proportion	
14	8.3	Testing a Claim about a Mean	
		Quiz 8 & Review T4	
15		Test 4 & Final Review	
16		Final Test	
		Final Exam Monday 12/4/2023 at 8am in classroom	

The schedule is subject to change. Should a change become necessary, students will be notified about changes verbally, during class.

Course Grading Information:

In courses with performance or skill assessments, explain the primary components that contribute to the student's earning a particular grade or attach actual grading sheet or scoring rubric. Include penalties for violations of academic integrity and define those (i.e., give your definition of "cheating", "plagiarism", etc.)

- Communications: Students participate in assignments involving topics related to Statistics or other mathematics. They then share their results with their instructor and/or colleagues in class via written, oral, and visual methods.
- Critical Thinking: Critical thinking is the essence of all mathematical studies. Through inductive and deductive reasoning, students explore probability and statistics problems using the logical process of inquiry, analysis, evaluation, and synthesis.
- Empirical and Quantitative Skills: Students work on various mathematical problem-solving skills throughout the course. The course focuses on the analysis of numerical data as presented in application problems. Students use simulation and apply statistical principles to demonstrate their ability to reach informed conclusions. Communication Assignment Rubric

Course name/number/section:
Student name/number:
Type of Communication Event:
___Boardwork
___Classtime explanation
___Personal interview
___Case study presentation
___Poster board project presentation
___Small group presentation
___Online presentation

The final class average will be determined by the following guidelines:

4 major Tests & Final . . . . ………… 60%

Quizzes ……………………………………………………… 15%

Homework…………………………………………………25%

A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: < 60

By the end of the semester: we drop lowest test grade, two lowest quiz grades and three lowest homework grades.

Late Work, and Make Up Work Policies:

There will be no makeup exams. If you miss a test, grade of the missed test is zero. Then this is the one you drop by the end of the semester. If you know in advance you will be gone on exam day, please plan to take the exam before you leave. There is some homework with one set of questions for each section. You need to gain at least 70% of the credit to work on the next section. Each homework has the same due day: 12/03/2023, it does not mean you can work on it few days before 12/03, since the quiz for each chapter has the due and you must complete the homework for the chapter to at least 70% to be able to access the quiz for the chapter, each quiz only lasts for three days.

It should be noted that enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student.

Student Behavioral Expectations or Conduct Policy:

Students are expected to maintain classroom decorum that includes respect for other students and the instructor. Students should demonstrate an attitude that seeks to take full advantage of the

education opportunity. For more details of College Conduct Policy, see the Highlander Student Guide.

Having someone else do your online homework assignment and quizzes are both violations of the academic integrity policy and either may result in failing grades and/or being dropped from the class. Infractions such as these will be reported to the administration for tracking and possible college action. Students should keep careful notes of all work done in class and have them available for the instructor's review when requested.

Click Here for the MCC Attendance/Absences Policy

(https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

MCLENNAN COMMUNITY COLLEGE

ACADEMIC RESOURCES/POLICIES

Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu 2542998122   Room 319, Student Services Center

Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the acting Title IX Coordinator at titleix@mclennan.edu or by calling, Dr. Claudette Jackson, (Accommodations/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center at (254) 299-8210. The MCC Student Counseling Center is a

confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting http://www.lighthouse-services.com/mclennan/. Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at http://www.mclennan.edu/campus-resource-guide/

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom. You can contact the Academic Support and Tutoring team via Zoom or email (ast@mclennan.edu) by going to our website (https://www.mclennan.edu/academic-support-and-tutoring/).

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing crew@mclennan.edu or a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to https://mclennan.co1.qualtrics.com/jfe/form/SV_07byXd7eB8iTqJg. Both the Completion Center and Paulanne's Pantry are located on the second floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html to find out more about the emergency grant. The application can be found at https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf.

MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating. The unauthorized use of artificial intelligence (AI) for classwork can be a violation of the College's General Conduct Policy. Whether AI is authorized in a course and the parameters in which AI can be used in a course will be outlined by each instructor.

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to https://www.mclennan.edu/center-for-teachingandlearning/FacultyandStaffCommons/requirements.html for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

Email Policy:

McLennan Community College would like to remind you of the policy (http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are

expected to read and, if needed, respond in a timely manner to college emails. For more information about your student email account, go to www.mclennan.edu/studentemail.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- Email Setup for iPhones and iPads
- Email Setup for Androids

Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

For more helpful information about technology at MCC, go to MCC's Tech Support Cheat Sheet or email helpdesk@mclennan.edu.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.