



WACO, TEXAS

**COURSE SYLLABUS
AND
INSTRUCTOR PLAN**

Elementary Statistical Methods

Mathematics - 1342 - 87

Holly Webb

NOTE: This is an Online course.

NOTE: This is a Summer course.

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. 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.

Access to a computer with reliable internet and Microsoft Excel with a data analysis package is required.

Instructions for free download of Excel and Microsoft Office can be found at the following link: <https://www.microsoft.com/en-us/education/products/office>

Prerequisites and/or Corequisites:

Prerequisite: TSIA2 math complete or MATH 0308 or completion of college-level math course or consent of division chair.

Semester Hours 3 (3 lec)

Course Notes and Instructor Recommendations:

The main mode of instruction will be lecture videos located on Brightspace, meetings with the instructor via Zoom, and the interactive textbook located on Pearson MyStatsLab. The lecture videos should be the first place you go for instruction.

We are all in this together and I look forward to helping you this semester. You can get plenty of help from your instructor via Zoom or contact me for an appointment if you want to meet face to face at MCC.

After watching instructional videos, I recommend that you visit me during Zoom office hours, to get some help while working on your homework. You can stay in contact with your classmates via Brightspace.

This is a 6-week summer course, so we will have to move quickly. Due dates for assignments are not start dates. I have tried to set due dates so that you can work ahead and everything will be opened at the beginning of the semester. I strongly recommend that you **work ahead of due dates**.

Begin working on the orientation assignments and chapter 1 no later than July 10, which is the first day of class. Expect to work on this class 5 or 6 days a week and set a goal

of completing at least two (2) assignments, quizzes or tests each day Monday-Friday. You should expect to spend at least 16 hours per week working on this course. This time includes actively watching lecture videos, note-taking, Zoom participation, homework, tests and quizzes. More time may be necessary if you find you require more assistance.

Instructor Information:

Instructor Name: Holly Webb

MCC E-mail: hwebb@mclennan.edu

Zoom Number: 254-299-8878

Office Phone: 254-299-8878

Office location: Your computer, smart phone or tablet on Zoom or at MCC Math building by appointment

Office hours: Mondays 2pm-3pm, Wednesdays 7pm-8pm, Thursdays 7:00-8:00pm on Zoom @ 254-299-8878. Drop-in for help and for Zoom participation during the office hours listed above.

Other office hours on Zoom or face to face are available by appointment. Email me if you wish to make an appointment.

Required Text & Materials:

This is an Inclusive Access Course. Access to MyStatLab learning software and the interactive e-book are included with tuition. You will need the following to succeed; reliable internet, Zoom capabilities and **access to a full version of Microsoft Excel**. Excel and Microsoft Office can be accessed for free with your MCC email at the following link: <https://www.microsoft.com/en-us/education/products/office>.

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

Methods of Teaching and Learning:

The best way to approach this class is to follow these steps in order;

1. Complete orientation exercises by their due date. Visit your instructor on Zoom during the first week. Contact me if face to face office hours are required.
2. Plan for meeting with your instructor at least twice during the semester to fulfill participation requirements.

3. Watch the section videos located on Brightspace while taking notes and following along on Excel. (Print out PDF notes from Brightspace if desired).
4. Do the section homework located on Pearson MyStatsLab after watching **all section videos**. (contact your instructor if you need assistance).
5. Repeat steps 3 and 4 for each section of homework until you finish with a chapter.
6. After completing all sections of homework in a chapter attempt the chapter quiz located on Pearson MyStatsLab. (You will have two chances to take each quiz, so contact your instructor to review if you are not satisfied with your quiz grade.)
7. After attempting all required quizzes for a unit, attempt the unit exam located on Pearson MyStatsLab.
(You will have two chances to take each exam, so contact your instructor to review if you are not satisfied with your exam grade.)

Course Objectives and/or Competencies:

The following code is used for core objectives in assessing college effectiveness, (ACE).

COM=Communication Skills, CT=Critical Thinking Skills, EQS=Empirical Quantitative Skills

Upon successful completion of this course, students will:

1. Explain the use of data collection and statistics as tools to reach reasonable conclusions. (COM)(CT)(EQS)
2. Recognize, examine and interpret the basic principles of describing and presenting data. (COM)(CT)(EQS)
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics. (EQS)
4. Explain the role of probability in statistics. (COM)(EQS)
5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables. (COM)(CT)(EQS)
6. Describe and compute confidence intervals. (COM)(EQS)
7. Solve linear regression and correlation problems. (EQS)
8. Perform hypothesis testing using statistical methods. (EQS)(CT)

Course Outline or Schedule:

<u>Due Date</u>	<u>Assignments due by 11:59pm CST</u>
Wednesday, July 12	Course Orientation <ul style="list-style-type: none"> • Register with Pearson MyStatsLab • Syllabus search • Discussion post
Friday, July 14	1-1 Statistics and Critical Thinking 1-2 Types of Data 1-3 Collecting Sample Data Chapter 1 Quiz
Monday, July 17	2-1 Frequency Distributions and Organizing Data 2-2 Histograms 2-3 Graphs that enlighten and Graphs that Deceive 2-4 Scatterplots, Correlation, and regression
Wednesday July 19	Chapter 2 Quiz 3-1 Measures of Center 3-2 Measures of variation 3-3 Measures of relative standing and box plots
Friday, July 21	Quiz chapter 3 Exam Unit 1 chapters 1-2-3
Monday , July 24	4-1 Basics of probability 4-2 Addition and multiplication rule. 4-3 Compliments and Conditional probability Quiz 4
Wednesday, July 26	5-1 Probability distributions. 5-2 Binomial probability distributions Quiz 5 6-1 Standard Normal model
Friday, July 28	Exam Unit 2 Chapters 4-5 6-2 Applications of Standard normal model 6-3 Sampling Distributions as Estimators
Monday, July 31	6-4 Central limit theorem 6-5 Assessing Normality Quiz 6 7-1 Estimating population proportions

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Wednesday, Aug 2	7-2 Estimating population mean 7-3 Estimating population standard deviation and variance Quiz 7 Exam Unit 3 Chapters 6-7
Friday, Aug 4	8-1 Intro to hypothesis testing 8-2 Hypothesis testing about proportions 8-3 Hypothesis testing about means
Monday, Aug 7	8-4 Hypothesis testing about standard deviation and variance Quiz 8 9-1 Two proportion test 9-2 Two independent means test
Wednesday, Aug 9	9-3 Two dependent samples (matched pairs) test 9-4 Two standard deviations or means (F test) Quiz 9 Exam Unit 4 Chapters 8-9
Thursday , August 10	Final Exam

Course Grading Information:

Course Orientation 10%
Zoom Participation 5%
Online Homework 20%
Chapter Quizzes 10%
Unit Exams (4 of them) 40%
Final exam 15%

Course Orientation: This is an online course. The orientation activities are designed to help you succeed in this course and in online courses in general. The orientation will consist of:

1. Reading the online syllabus and completing a syllabus quiz on Brightspace.
2. Participating in a discussion board to get to know your classmates and instructor.
3. Completing an online class survey to begin the process of gathering and thinking about data and statistics.

This component is worth 10% of course grade.

Zoom Participation: Each student is required to meet **at least twice** with Ms. Webb on Zoom. The first meeting must take place **between July 10 and July 21** The second meeting must take place **between July 22 and August 10**. Students should come to

these meetings prepared to discuss progress with Ms Webb, ask questions, and answer a question to show understanding of current material.

While only two Zoom meetings are required, students are encouraged to attend Zoom office hours as often as needed to gain understanding and achieve success. The zoom participation requirement can be fulfilled during two of these office hour visits.

Face to face meetings can also be arranged by appointment to fulfill the participation portion of the grade. Contact Ms. Webb to set up an appointment for a face to face meeting or a Zoom meeting at a different time if needed.

This component is worth 5% of course grade.

Homework: Homework is to be completed online using Pearson MyStatsLab. **Online homework for each quiz must be completed with at least 70% in order to take the quiz.**

Homework may be completed after the due date with an overall late penalty of 10% off.

This component is worth 20% of course grade.

Chapter Quizzes: Chapter quizzes are to be completed on MyStatsLab, will be open note and will help you prepare for exams. **All homework for the chapter must be completed with at least 70% in order to gain access to the chapter quiz.** The lowest three (3) quiz grades will be dropped.

This component is worth 10% of your grade.

Exams: There will be four (4) exams for this course. Exams are open-note to be completed on Pearson MyStatsLab. Exams will cover the material discussed and involve similar questions to homework and quizzes. Exams can be completed early, but must be completed by 11:59 on the due date listed. Exams will be timed (90 minutes standard for each exam). Each exam may be taken twice.

One make up exam will be allowed during the semester. (Contact your instructor if a makeup exam is needed).

All homework for an exam must be completed with at least 70% in order to take the exam.

This component is worth 40% of the course grade.

Final Exam: The final exam will be open note and must be completed on MyStatsLab no later than 11:59pm on Thursday, August 10. The final exam will be cumulative.

This component is worth 15% of the course grade.

Grading Scale:

100%-90%=A, 89%-80%=B, 79%-70%=C, 69%-60%=D, ≥ 59 =F

Late Work and Make Up Work Policies:

See Grade information above for Late work and Make Up work policies.

Student Behavioral Expectations or Conduct Policy:

- While students are encouraged to work together on homework and other assignments, quizzes and exams are to be representative of each student's independent work.
- Examples of cheating include: having another student complete your homework or exam, or receiving help on an exam that is not authorized by the instructor.
- Any documented instances of cheating will be reported to administration and will result in a grade of zero (0) for the assignment or test.

[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)

(<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.

Attendance in this class means disciplining yourself to get the work done by the due date. Attendance will be checked daily and recorded weekly on Brightspace. Students will be counted present if progress is shown weekly in Pearson MyStatsLab assignments, quizzes and/or tests and/or if students attend a zoom session with the instructor. In order to receive credit for the course, you must be in attendance at least 75% of the time scheduled for the class. If you show no progress in the course for more than 1 week, you may be dropped from the course for lack of participation. **If you do not show progress in the course by Monday, July 17 you will be dropped from the course for lack of participation.**

Updated 11/04/2022



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 254-
2998122
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, (Diversity, Equity & Inclusion/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 from 7:30 am - 6:00 pm Monday through Thursday and 7:30 am - 5:00 pm on Friday. You can contact the Academic Support and Tutoring team via Zoom (<https://mclennan.zoom.us/j/2542998500>) or email (ast@mclennan.edu) during the above mentioned times.

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.

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

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/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.