WACO, TEXAS

COURSE SYLLABUS

AND

INSTRUCTOR PLAN

Linked Foundations of Mathematics and Elementary Statistics

Math 0308.L003/Math 1342.L003

HOLLY WEBB

NOTE: These are 16 week courses

These two linked courses are worth a total of 6 hours credit.

Course Description:

Math 0308: Foundations is a quantitative literacy-based course designed to provide students with the skills and conceptual understanding for success in a college-level statistics or quantitative literacy course. It is organized around big mathematical and statistical ideas. Foundations will help students develop conceptual understanding and acquire multiple strategies for solving problems.

Semester Hours: 3 (3 lec)

Math 1342: 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

Semester Hours: 3 (3 lec)

Prerequisites and/or Corequisites:

Minimum TSI Score for developmental math. Concurrent enrollment in math 0308 L003 and math 1342 L003

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Course Notes and Instructor Recommendations:

This courses Math 0308.L01 and Math 1342. L01 are linked. You are concurrently enrolled in these courses to support your development as a learner of mathematics and your success in Math 1342. We will be in class together Monday and Wednesday from 8am-11am. This will give the class time to work together to build and strengthen math background knowledge, and to cover the statistics concepts needed.

The best way to progress through this course is:

1. Attend each class for the full class period (3 hours with a 10-minute break Monday and Wednesday)
2. Participate in all activities and discussions.
3. Complete assignments both in-class and out side of class by the due date provided.
4. Make sure you have access to Microsoft office with Excel.
5. Utilize resources on Brightspace including example videos, PDF notes, and notes on Excel.
6. Visit your instructor in person or on zoom during office hours to get help as needed.

Studies have shown that most successful students spend 2-3 hours working outside of class for every hour spent in class. Since this linked class is worth 6 hours of credit you should expect to spend 12 to 18 hours per week working on this course outside of class time. This time may include; tutoring sessions, online homework, or online tests and quizzes. More time may be necessary if you find that you require more assistance.

Instructor Information:

Instructor Name: Holly Webb
MCC E-mail: hwebb@mclennan.edu
Office Location: Math, Health and Wellness Building 208
Office Phone: 254-299-8878
Office Zoom: 254-299-8878
Ms. Webb's office hour: See Brightspace for office hour information.

Required Text & Materials:

Access to a computer with reliable internet and Microsoft Excel 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.

This is an inclusive access course. Access to Pearson MyStatsLab and the online interactive textbook are included with tuition and fees. You do not need to make other purchases for the course.

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

Methods of Teaching and Learning:

Math 0308: (a face to face course) will meet Monday and Wednesday from 8am-9:25am. Discussions, activites and assignments will focus on building foundational knowledge necessary to succeed in math 1342.

Math 1342: (a face to face course) will meet Monday and Wednesday 9:35am-11:00am. Discussion, activities and assignments will focus on building understanding of the fundamentals of data gathering, analysis and hypothesis testing.

Students should expect to spend much of class time actively engaged in understanding and communicating mathematical ideas though reading, writing, discussion and calculation.

A portion of time in most class periods will be used in learning and practicing mathematical and statistical operations with Microsoft Excel.

Course Objectives and/or Competencies:

Math 0308:

This course follows a 'just-in-time' format and will present topics and materials in relation to the content of the linked MATH 1342 course.

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

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

Learning Outcomes from the Texas Higher education Coordinating Board's Spring 2018 LowerDivision Academic Course Guide Manual: Upon successful completion of this course, students will:

1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts. (COM) (CT)

2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts. (COM) (EQS)

3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations. (COM) (EQS)

4.Apply algebraic reasoning to manipulate expressions and equations to solve real world problems. (CT) (EQS)

5. Use graphs, tables, and technology to analyze, interpret, and compare data sets. (COM) (CT) (EQS)

7. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions. (COM) (CT) (EQS)

Math 1342:

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 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.

Make attendance a priority. You are actually enrolled in 2 classes, Math 0308 meets from 8am-9:25am in math 225. Math 1342 meets from 9:35am-10:55am in math 225. Attendance will be checked each day at 8am for math 0308 and at 9:35 for Math 1342. Attendance will be recorded weekly on Brightspace. Students will be dropped from a course if they are absent 25% of the time (a total of 7 absences), or if they fail to show progress on Pearson MyStatsLab by Wednesday September 6. Students dropped from one of the linked classes will automatically be dropped from the other.

Course Outline or Schedule:

Week of	**Math 0308**	**Math 1342**
8/21	Orientation Discussing Data **Assignment 1**	Orientation 1-1 Stats and Critical Thinking 1-2 Types of Data 1-3 Collecting Data
8/28	Understand frequency distributions, histograms and other types of graphs **Assignment 2**	Quiz 1 2-1 Frequency distributions 2-2 Histograms 2-3 Graphs
9/4 9/4 Labor day Holiday	Understand Correlation and regression **Assignment 3**	2-4 Scatter Plots Quiz 2 3-1 Measures of center
9/11	Basic algebra review. **Assignment 4** Unit 1 Review Chapters 1,2,3 **Assignment 5**	3-2 Measures of Variation 3-3 Measures of relative standing Quiz 3

9/18	Unit 1 Review Basic probability Practice	**Unit 1 Exam chpaters 1,2,3 9/18** 4-1 Basic Probability 4-2 Addition and multiplication rule
9/25	Probabilty practice **Assignment 6** Understanding inequalities **Assignment 7**	4-3 Complements and conditional probability Quiz 4 5-1 Descrete Probability distributions 5-2 Binomial probability distributions Quiz 5
10/2	Unit 2 Review Chapters 4 and 5 **Assignment 8** 6-1,6-2 Uniform and Normal distribution **Assigment 9**	**Unit 2 Exam 10/2** 6-1 Standard Normal Distribution 6-2 Applications of normal distribution

10/9	6-3,6-4 understanding sampling distribution **Assignment 10** 6-5 Understanding Ways to assess normality **Assignment 11**	6-3 Sampling distributions as estimators 6-4 Using Sampling distribution of means (CLT) 6-5 Assessing Normality Quiz 6
10/16	7-1, 7-2, 7-3 Understanding confidence intervals **Assignment 12**	7-1 Estimating Poulation Proportions 7-2 Estimating Population Means 7-3 Estimating Population Standard deviation Quiz 7
10/23	Unit 3 Review Chapter 6 and 7 **Assignment 13**	Unit 3 review chapter 6 and 7 **Unit 3 Exam 10/25**
10/30	8-1 Basics of Hypothesis testing **Assignment 14**	8-2 Testing claims about proportions

		8-3 Testing claims about means 8-4 Testing claims about standard deviatioins Quiz 8
11/6	9-1, 9-2, 9-4 Understanding hypothesis testing with two samples **Assingment 15** 9-3 Understanding hypothesis testing with matched pairs **Assignment 16**	9-1 Two proportions 9-2 Two Independent means 9-3 Matched pairs 9-4 Two Variances or Standard deviations Quiz 9
11/13	Unit 4 Exam Review **Assignment 17**	Unit 4 Exam Review **Unit 4 Exam 11/15**
11/20 11/22 Thanksgiving Holiday	Final Exam Review	Final Exam Review
11/27	Final exam Review **Assignment 18**	Final exam Review

12/4	**Final Exam 12/4** **8am-10am**

Course Grading Information:

Course Grading Information Math 0308:

Grading in this course (Credit or No Credit)
70% = your final grade in MATH 1342
15% = points earned in MATH 0308 for in-class or take-home assignments
15% = attendance as recorded in Brightspace
Final grade for math 0308 Credit ≥ 60%, No Credit<60%

Course Grading Information Math 1342:

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

Course Orientation: The orientation activities are designed to help you succeed in this course. Activities include:

1. Reading the course syllabus and taking a syllabus Quiz.
2. Emailing the instructor through campus email.
3. Taking a class survey

Orientation activities can be completed after the due dates with a penalty of 5% per day late.

This component is worth 10% of course grade.

Homework: Homework is to be completed online using Pearson MyStatsLab. The structure of this linked class will allow us time, on some days, to work on homework during class. **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 a grade of at least 70% on each section in order to gain access to the chapter quiz**. The lowest three (3) quiz grades will be dropped.

This component is worth 20% of your grade.

Exams: There will be four (4) exams for this course. Exams will be timed and proctored in the classroom or testing center for those requiring extended time. Exams are open-note on Pearson MyStatsLab. Exams will cover the material discussed and involve similar questions to homework and quizzes.

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 timed and proctored in the classroom or testing center for those requiring extended time. It will be open note and will be completed on MyStatsLab on or before Monday December 4. The final exam will be cumulative

This component is worth 10% of the course grade.

Late Work, and Make Up Work Policies:
See course grading information for late work policies. In this class, there are expectations of doing daily assignments whether you attend class or are absent. My

intent is for students to complete assignments each day after a lesson is presented. There are weekly deadlines for the lessons taught during a week.

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.

Student Behavioral Expectations or Conduct Policy:

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity. Students are expected to come to class prepared and with supplies necessary to participate actively in each class meeting.

Updated 07/18/2023

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.