McLENNAN COMMUNITY COLLEGE

WACO, TEXAS

COURSE SYLLABUS

AND

INSTRUCTOR PLAN

Math for Business and Social Sciences

Math 1324 Section 043

MARK CRENWELGE, M.A.

NOTE: This is a 16-week course.
NOTE: This is a Face-to-Face course.

Course Description:

The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

Prerequisites and/or Corequisites:

MATH 0311 or consent of division chair. Semester Hours 3 (3 lec)

Instructor Information:

Instructor Name:	Mark Crenwelge, M.A.
MCC E-mail:	mcrenwelge@mclennan.edu
Office Phone Number:	254-299-8874
Office Location:	M222
Office/Teacher Conference Hours:	Posted in Brightspace
Other Instruction Information:	Email is the best way to communicate with me.

Required Text & Materials:

YOUR COURSE IS DESIGNATED AS IA.

Because your course is IA (Inclusive Access) the cost for the MML access will be covered in your tuition and you do not need to purchase any Access item. You will need a TI 84 calculator or smartphone app.

(Graphing calculator options will be discussed in class)

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

Methods of Teaching and Learning:

In class lecture and problem solving will occur. MyMathLab is the online component that will house the course information. Homework and Tests will be done online in this environment. Lecture notes, reference materials and videos are available there as well.

Course Objectives and/or Competencies:

- Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
- Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans
- Apply basic matrix operations, including linear programming methods, to solve application problems
- Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
- Apply matrix skills and probability analyses to model applications to solve real-world problems.

- **Communications**: Students participate in assignments involving topics related to finite math or other mathematics with an emphasis on business and social science application problems. 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 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 manipulation and analysis of numerical data or observable facts as presented in application problems and /or problem skill sets in which students demonstrate their ability to reach informed conclusions using mathematical processes.

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.

In this class attendance will be taken and recorded in Brightspace each class period. The Census date this semester is **September 10, 2025**. If a student has not attended class by this date they will be dropped from the roster as stated above.

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.

The 60% point this semester occurs on **October 27,2025**. If a student has missed 25% (7 classes) before this date will be withdrawn as stated above.

Course Outline or Schedule:

Any changes to this schedule will be announced or emailed.

Dates	Lecture/Work	Tests/Objectives
Wk 1	2.1 Solution of Linear Systems by the Echelon Method	
Wk 2	2.2 Solution of Linear Systems by the Gauss-Jordan Method 2.3 Addition and Subtraction of Matrices 2.4 Multiplication of Matrices	
Wk 3	2.5 Matrix Inverses 2.6 Input-Output Model	Test 1 Ch. 2
Wk 4	3.1 Graphing Linear Inequalities 3.2 Solving Linear Programming Problems Graphically 3.3 Applications of Linear Programming 4.1 Slack Variables and the Pivot	
Wk 5	4.2 Maximization Problems	Test 2 Ch. 3,4
Wk 6	7.1 Sets 7.2 Applications of Venn Diagrams 7.3 Introduction to Probability 7.4 Basic Concepts of Probability	
Wk 7	8.1 The Multiplication Principle; Permutations 8.2 Combinations 8.3 Probability Applications of Counting Principles 8.4 Binomial Probability	
Wk 8	8.4 Binomial Probability 8.5 Probability Distributions; Expected Value	Test 3 Ch. 7,8
Wk 9	9.1 Frequency Distributions; Measures of Central Tendency 9.2 Measures of Variation 9.3 The Normal Distribution	
Wk 10	10.1 Properties of Functions 10.2 Quadratic Functions; Translation and Reflection	
Wk 11	10.3 Polynomial and Rational Functions 10.4 Exponential Functions	
Wk 12	10.5 Logarithmic Functions 10.6 Applications: Mathematics of Finance	
Wk 13	11.1 Limits 11.2 Continuity 11.3 Rates of Change 11.4 Definition of the Derivative	
Wk 14		Test 4 Ch. 9,10,11
Wk 15	Review for Final	
Wk 16	Final – Dec. 11	FINAL EXAM

Course Grading Information:

Your course grade will be based on Assignments (including homework, classwork, any projects and quizzes), Chapter Tests, and a Cumulative Final Exam.

The relative weights of each of these factors is as follows:

Assignments	**30%**
Tests (projected 4@ 10% -- if other, the weights will total 40%)	**50%**
Final Exam	**20%**

Assignments will include Online Homework problems on MyMathLab, Quizzes (if any) given in class or online, Classwork (if any) taken for a grade, and any Projects or Group assignments that are given. These will count for 30% of the final grade.

Success in this class depends on keeping up with the assignments. Learning is directly correlated to the amount of practice completed on the topics we cover. Homework problems will be assigned and worked online using MyMathLab. The deadline for each set of homework will be the scheduled time of the test over the sections covered by the homework. After the due date the problems can still be completed but there will be a 10% penalty for late work**.**

Generally, there will be a test after each two chapters online in MyMathLab. If you must miss one test for one of the reasons given in MCC's General Catalog, and you have provided a documented excuse for doing so, the Final exam will also count as your make-up test for that chapter. If it is necessary for you to miss more than one test, you should discuss the situation with me. Unexcused absences from tests will not be made up. I reserve the right to make changes in extreme circumstances. The Test average will count as 50% of the final grade.

The final exam will be cumulative. It is scheduled for **Thursday December 11, 2025 from 11:10-1:10.** Please plan accordingly. Your grade on the final may also count in place of your one lowest test grade, if that is to your advantage. The Final exam will count as 20% of the final grade.

The letter grade received in this course will be based on the customary 90-80-70-60 scale.

This course will use a variety of internal and external assessments. A faculty developed comprehensive final exam may assess the core objectives of critical thinking and empirical/quantitative analysis. These core objectives may also be assessed using parts of a standardized test (CAAP). A faculty designed rubric will be used to assess communication skills as well. Review of such items such as GPA, retention levels, and success in following course may be used to evaluate the effectiveness of student learning.

Late Work and Make Up Work Policies:

Due dates for assignments will be clearly communicated and extensions not given (with the exception of the 10% penalty on Homework assignments). It is my policy to replace a student's lowest test grade with their final exam grade if it is higher at the end of the semester. For this reason, **I do not give makeup tests**. A missed test will be recorded as a 0 and then replaced with the final exam at the end of the semester. If a student is aware of a future absence on a test date, they may ask to arrange to take the test early.

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.

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.

06/24/2025

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 Accommodations (Disability Services) as soon as possible to begin the steps for requesting accommodations. 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 Accommodations (Disability Services). 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)299-8122
Room 319, Student Services

Title IX:

Title IX of the Education Amendments of 1972 is a Federal civil rights law that prohibits discrimination on the basis of sex in educational programs and activities that receive Federal funds. 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 a Title IX incident are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling, Dr. Claudette Jackson, (Accommodations/Title IX) at (254) 299-8465.

Additionally, Title IX provides rights and protections for pregnant and newly parenting students which can include educational accommodations such as excused absences

and the opportunity to make up assignments and tests. Lactation spaces are also available on campus. Please email titleix@mclennan.edu for more information.

MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Faculty and Staff may email titleix@mclennan.edu to submit a report.

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 may report sexual harassment anonymously by visiting https://www.lighthouse-services.com

Visit McLennan's Title IX webpage at https://www.mclennan.edu/titleix/ to learn more about Title IX protections, reporting, and resources.

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/

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to https://calendly.com/paulannespantry-mcc/15min.

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/)

Success Coaching Services is here for you.

We know life can be overwhelming sometimes—and that challenges outside the classroom can impact your success inside it. That's why our Success Coaches provide personalized support to help you navigate it all.

Success Coaching is available to every MCC student, no matter where you're starting from. Whether you're looking for direction, need quick advice, or just want someone to talk to, our coaches are here to listen, celebrate your strengths, and help you move forward with confidence. At Success Coaching Services, your voice is heard, your goals matter, and your future is our focus.

To learn more or schedule an appointment, visit www.mclennan.edu/successcoaching, call 254-299-8226, or email success@mclennan.edu.

College personnel also recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources and other essential resources, we encourage you to contact the CREW - Campus Resources Education Web by calling 254-299-8561 or emailing crew@mclennan.edu.

Success Coaching Services, the CREW, and Paulanne's Pantry are located on the second floor of the Student Services building in Success Coaching Services, suite 249.

The Student Counseling Center offers confidential mental health counseling to currently enrolled students at no charge. Counselors are trained to help students with problems related to personal, social, and emotional concerns. Sessions focus on short-term goals in order to facilitate students college success and adjustment. This service is available to students in person or through Zoom.

Make an appointment to meet with a counselor by visiting the center in the Wellness & Fitness building, room 101, calling 254-299-8210, or emailing counseling@mclennan.edu.

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/scholarships-and-resources/emergencygrant.html

MCC Academic Integrity Statement:

Please view our Academic Integrity statement for more 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:
For online and blended/hybrid courses, students must have access to a reliable computer and internet. For more information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system go to: https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-StaffCommons/requirements.html

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 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.