



Math 1324.221H2
Mathematics for Business and Social Sciences
Fall 2025
Second 8-weeks
Hybrid (Lecture 75% and Online Learning 25%)
TTh 5:30 pm – 7:20 pm STEM119

Instructor Information: Dr. C. Harnsberry 409-933-8564
charnsberry@com.edu

Student hours and location: MTWR 1:45 pm – 2:45 pm in ICB-333
Also, by appointment

Required Textbook / Materials:

- The textbook is Finite Mathematics with Applications, 13th edition, by Lial, Hungerford, Holcomb, and Mullins, Pearson Publishing Company. The e-text is provided with *MyLabMath* through VitalSource, along with the video support and materials for doing the homework, quizzes, and exams. All these materials are available to the student on the first day of class through D2L Brightspace on the COM website. **Warning:** You will be given the opportunity to opt out of the e-text prior to census day. The problem with opting out of the e-text is that you lose access to all resources from *MyLabMath* and you will be unable to submit any of the assignments, homework or quizzes, and you will fail the course. So, **do not opt out of the e-text**. If you have already opted out, opt back in at the college bookstore immediately.
- Laptop or desktop computer as well as reliable internet service. Computers and internet access are available on campus during specified times.
- Scanner or mobile app for scanning/uploading written work for quizzes.
- Texas Instruments TI30XIIS scientific calculator is recommended (cost \$10 to \$15). Graphing calculators may **not** be used on quizzes or exams.

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.

Course Requirements:

Note: Electronic devices, including computers, I-pads, cellphones, ear-buds, audio recorders may not be used, and must be put away (off the student's desk and out of sight) during class.

Homework Assignments on *MyLabMath*: There is a homework assignment for each unit covered. Each homework assignment must be completed by 11:59 pm on or before the due date shown on both the course outline and on the list of assignments on *MyLabMath*. The student has a limit of **three** attempts to answer each question correctly on the homework assignments, so don't guess, and if you miss an answer, don't answer again until you have learned why your original answer was counted incorrect.

Quizzes on *MyLab Math*: Four quizzes which relate to the student learning outcomes, will be taken on *MyLabMath*. Like the homework assignments, the due dates are shown on both the course outline in the syllabus and on the assignment list on *MyLabMath*. Unlike the homework assignments, the quizzes must be taken in one sitting, they are timed, and the student gets only one attempt to answer each question. The quizzes may be retaken one time. The higher of the two grades will be used to determine the student's quiz average. The student must turn in their work for the quizzes following the instructions at the end of the syllabus.

Chapter Exams: There are three exams which cover the chapters in the textbook. The exams are taken in class on the due dates shown on the course outline in the syllabus. The student has 90 minutes to take each exam. Exams may not be retaken. However, if the grade on the final exam is higher than the lowest chapter exam grade, the final exam grade will replace the lowest chapter exam grade.

Comprehensive Final Exam: The final exam is taken in class on the due date shown on the course outline in the syllabus. The student has 90 minutes to take the final exam. The final exam may not be retaken.

Determination of Course Grade/Detailed Grading Formula:

Comprehensive Final Exam	20%
Average of Chapter Exams	60%
Homework Average	10%
Quiz Average	10%
Final Average	100%

Grade I: Given unforeseen circumstances that result in the student's inability to successfully complete the course objectives, an I-Contract may be requested from the instructor, assuming you meet the following criteria:

1. Have a passing overall average (70 or higher)
2. All work completed except for The Final Exam.

Grading Scale:

Grade A: Final Average is [89.5, 100]

Grade B: Final Average is [79.5, 89.5)

Grade C: Final Average is [69.5, 79.5)

Grade D: Final Average is [59.5, 69.5)

Grade F: Final Average is [0, 59.5)

Late Work, Make-Up Exams, and Extra-Credit Policy:

Late Work: There is a twenty (20) percent penalty for all homework and quizzes submitted after the due date. Any homework assignments or quizzes that are not submitted by the due date of the associated exam will receive a grade of zero at the time the exam is given. If a homework assignment or quiz has been partially completed by this deadline, the grade on the assignment (less 20%) will be applied to the homework assignment or quiz.

Make-Up Exams: There are no make-up exams unless:

Students are only allowed to make-up one exam in the semester, given that any necessary paperwork is provided. If you are permitted to make-up the exam, there is a deadline for completing the exam, and if the deadline is not met, the score for the exam will be recorded as a zero. Exams may not be retaken. However, if the grade on the Final Exam is higher than the lowest chapter exam grade, the Final Exam will replace your lowest Exam score. If and only if you have attended class at least 22 days.

Attendance Policy: Students at COM are expected to attend and participate in every session of all classes for which they are registered. College of the Mainland recognizes no excused absences other than those prescribed by law. If a student arrives late, it is their responsibility to notify the instructor, at the end of lecture, of their late arrival. Students with excessive absences will be referred to Student Services. Students should consult information provided in MyLab Math and the course calendar when it becomes necessary to miss a class to be prepared when they return to class. The student is still responsible for work that is assigned during an absence and due dates still hold.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

The preferred method of communication in this course is in person. If that is not possible, an email or phone call will be satisfactory, but do not leave a message on my phone. If you cannot reach me by phone, email me. Be sure to include your name, the course in which you are enrolled, and state your question completely.

Table Mapping SLO's and Core Objectives:

Student Learner Outcomes	Maps to Core Objective	Assessed via this assignment
1. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.	Empirical and Quantitative Skills (EQS)	Exam
2. Apply basic matrix operations, including linear programming methods, to solve application problems.	Critical Thinking Skills (CT)	Exam
3. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.	Visual Communication Skills (CS)	Exam
4. Apply matrix skills and probability analyses to model applications to solve real-world problems.	Critical Thinking Skills (CT)	Quiz

Academic Dishonesty: College of the Mainland is committed to a high standard of academic integrity. All students are responsible for honesty and independent effort. Incidents of academic and scholastic dishonesty (including cheating, plagiarism, and collusion) will be dealt with in a manner that is consistent with College Policy and the Student Handbook. Any student found to have been academically dishonest on an assignment, quiz or exam will receive a zero for that assignment, quiz or exam and he or she will be referred to the Office of Student Conduct for further disciplinary action. Read the sections of *Standards of Student Conduct and Discipline and Penalties* in the on-line Student Handbook

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me. If, after discussing your concern with me, you continue to have questions, please contact Mr. Leslie Richardson, Math Department Chair, at 409-933-8329 or lrichardson@com.edu.

Course outline:

Week	Date	Sections
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|-------|-------|--|
| 1 | 10/14 | <u>In Class Lectures and complete MLM Assignments:</u>
Orientation Exercises Due 10/17
3.1 Functions Due 10/17
<u>Watch the online videos and complete MLM Assignments:</u>
3.2 Graphs of Functions Due 10/17 |
| 10/16 | | <u>In Class Lectures and complete MLM Assignments:</u>
3.3 Applications of Linear Functions Due 10/20
3.4 Quadratic Functions and Applications Due 10/20
<u>Watch the online videos and complete MLM Assignments:</u>
3.5 Polynomial Functions Due 10/20
Quiz 1 (3.1, 3.3, 3.4) Due 16/20 |
| 2 | 10/21 | <u>In Class Lectures and complete MLM Assignments:</u>
3.6 Rational Functions Due 10/24
4.1 Exponential Functions Due 10/24
<u>Watch the online videos and complete MLM Assignments:</u>
4.2 Applications of Exponential Functions Due 10/24 |
| 10/23 | | <u>In Class Lectures and complete MLM Assignments:</u>
4.3 Logarithmic Functions Due 10/27
4.4 Logarithmic and Exponential Equations Due 10/27
<u>Watch the online videos and complete MLM Assignments:</u>
Review for Exam 1 Due at the beginning of class 10/28 |

- 3 10/28 **In Class Lectures and complete MLM Assignments:**
Exam 1 (3.1 – 4.4) Due 10/28
5.1 Simple and Compound Interest Due 10/31
Watch the online videos and complete MLM Assignments:
5.2 Annuities, Future Value, and Sinking Funds Due 10/31
- 10/30 **In Class Lectures and complete MLM Assignments:**
5.3 Consumer Loans and Amortization Due 11/3
6.1 Systems: 2 Linear Equations in 2 Variables Due 11/3
Watch the online videos and complete MLM Assignments:
6.2 Larger Systems of Linear Equations Due 11/3
Quiz 2 (5.1 – 5.3) Due 11/3
- 4 11/4 **In Class Lectures and complete MLM Assignments:**
6.2 Larger Systems of Linear Equations Due 11/7
6.3 Applications of Systems of Linear Equations Due 11/7
Watch the online videos and complete MLM Assignments:
6.4 Basic Matrix Operations Due 11/7
- 11/6 **In Class Lectures and complete MLM Assignments:**
6.5 Matrix Products and Inverses Due 11/10
7.1 Graphing Linear Inequalities in Two Variables Due 11/10
Watch the online videos and complete MLM Assignments:
7.2 Linear Programming: The Graphing Method Due 11/10
Review for Exam 2 Due at the beginning of class 11/11
- 5 11/11 **In Class Lectures and complete MLM Assignments:**
Exam 2 (5.1 – 6.5) Due 11/11
7.3 Applications of Linear Programming Due 11/14
Watch the online videos and complete MLM Assignments:
7.4 The Simplex Method: Maximization Due 11/14
- 11/13 **In Class Lectures and complete MLM Assignments:**
7.4 The Simplex Method: Maximization Due 11/17
7.5 Maximization Applications Due 11/17
Watch the online videos and complete MLM Assignments:
8.1 Sets Due 11/17
Quiz 3 (7.2 – 7.5) Due 11/17

- 6 11/18 **In Class Lectures and complete MLM Assignments:**
 8.2 Apps: Venn Diagrams, Contingency Tables Due 11/21
 8.3 Introduction to Probability Due 11/21
 Watch the online videos and complete MLM Assignments:
 8.4 Basic Concepts of Probability Due 11/21
- 11/20 **In Class Lectures and complete MLM Assignments:**
 8.5 Conditional Probability and Independent Events Due 11/24
 9.1 Probability Distributions and Expected Value Due 11/24
 Watch the online videos and complete MLM Assignments:
 9.2 Mult. Principle, Permutations, Combinations Due 11/24
 Review for Exam 3 Due at the beginning of class 11/25
- 7 11/25 **In Class Lectures and complete MLM Assignments:**
 Exam 3 (7.1 – 8.5) Due 11/25
 9.3 Applications of Counting Due 12/1
 Watch the online videos and complete MLM Assignments:
 9.4 Binomial Probability Due 12/1
 Quiz 4 (9.1 – 9.4) Due 12/1
- 11/27 HOLIDAY
- 8 12/2 **In Class Lectures and complete MLM Assignments:**
 Review for Comprehensive Final Exam Due at the beginning of
 class 12/4
 Watch the online videos and complete MLM Assignments:
 Review for Comprehensive Final Exam Due at the beginning of
 class 12/4
- 12/4 **Comprehensive Final Exam Due 12/4**

The syllabus is subject to change at the discretion of the instructor.

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook

<https://www.com.edu/student-services/student-handbook.html>. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 1. The last date to withdraw from the 16-week session is November 14. The last date to withdraw for the 2nd 8-week session is November 25.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Academic Success Resources:

Tutoring:

The Tutoring Center is here to support your academic success! We offer free, personalized academic assistance through one-on-one tutoring, available both in person and online. Need help after hours? Tutor.com provides 24/7 support and is accessible through your D2L course shell. Whether you're looking to master course material or boost your learning habits, we're here to help. For more information, visit <https://www.com.edu/tutoring>, email us at tutoringcenter@com.edu, or contact us at 409-933-8703

Success Coaching:

The Math Success Coach is here to help you navigate this course and stay on track both academically and personally. Support is offered through one-on-one coaching sessions covering topics such as time management, goal setting, stress management, study habits, and motivation. Whether you're overcoming challenges or aiming to improve your performance, the Math Success Coach provides encouragement, accountability, and practical tools for success. Email successcoaching@com.edu for more information.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.

Steps for Uploading Work

1. Open your PDF converter app. Then take pictures in batch mode of your work pages in numeric order to convert to a **single** PDF file (single document). Make sure this is ONE single PDF file, and the pages are upright and readable with questions numbered and in order.
2. Email the **single** PDF file to yourself and save on your computer.
3. Click on the assignment link, Quiz 1 work, within D2L Brightspace.
4. Click on “Add a File” and choose your saved PDF file.
5. Click submit. File will not be submitted without completing this last step.

DEADLINE: YOUR WORK IS REQUIRED TO BE SUBMITTED WITHIN 20 MINUTES OF SUBMITTING ONLINE QUIZ ON MYLABMATH. Any work submitted after this deadline will not be accepted.