

Math 1324.221CL Math for Business and Social Science Fall 2023 STEM Bldg., Room 115 M/W 5:30 pm – 6:50 pm; 6:51 pm – 7:20 pm

Instructor Information: Ms. Smith

Email: jsmith56@com.edu -

Include your *course* & *section* in the subject line when emailing.

Office phone: 409-933-8647

Office: STEAM Bldg., Suite 325, room 10

Student Hours (Office Hours); Location: STEAM 325-10

1. 11:20 am - 1:20 pm; 4:00 pm - 4:45 pm Monday/Wednesday

2. 11:20 am - 12:20 pm, Tuesday/Thursday

Required Textbook: The textbook is <u>Finite Mathematics with Applications</u>, 12th edition, by Goldstein, Schneider and Siegel, Pearson Publishing Company. The e-text is provided with *MyLab Math* (*No purchase needed*). The student will need a computer and internet service outside of class to gain access to the online assignments on *MyLab Math*. Computers and internet access are available on campus during specified times. A Texas Instruments **TI84 plus** graphing calculator is required for this course.

Course Description: Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication will be embedded throughout the course.

Course Requirements:

MyLab Math (MLM) Online Assignments—Go to your Brightspace course. You can access D2L Brightspace at COM at http://com.brightspace.com.

Homework Assignments on *MyLab Math***:** There is a homework assignment for each unit covered. These are listed on the course outline in the syllabus and on the list of assignments on *MyLab Math*. Each day's homework assignments must be completed by 11:59 pm on the due date shown on both the course outline and on

the list of assignments on *MyLab Math*. You should do the assignments as soon as possible after participating in the lecture, reading the appropriate section in the text

book, and watching the associated video(s) on *MyLab Math*. Although the homework is online, and the answers are entered online, you should write your work on paper, neatly showing all steps, and keep it in your notebook with your notes for future reference, both as an aid for

preparing for quizzes and exams, and as a place to begin when seeking assistance from your professor, your peers, or the college tutoring center. The student has a limit of five attempts to answer a question correctly on the homework assignments.

Quizzes on MyLab Math: Four quizzes which relate to the student learning outcomes, will be taken on MyLab Math. Like the homework assignments, the due dates are shown on both the course outline in this syllabus and on the assignment list on MyLab Math. 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.

Chapter Exams: There are four exams which cover the chapters in the text book. 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:

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

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, and Extra-Credit Policy: There is a twenty (20) point penalty for all homework and quizzes submitted after the due date. Any homework assignments or quizzes that are not finished by the due date of the related exam will be given a grade of zero at that time. There are no make-up exams unless:

- 1) the student notifies the instructor before the exam due date that they will miss the exam, and
- 2) the reason for the requested make-up exam is extraordinary.

Extra-credit assignments may also be given throughout the course at the discretion of the instructor. It is never given at the end of the semester to bring up a poor grade. Do not even ask.

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. Students with excessive absences will be referred to Student Services. Students should consult information provided in My Math Lab and the course calendar when it becomes

necessary to miss a class in order to be prepared when they return to class. They are still responsible for work that is assigned during an absence and due dates still hold.

A student is tardy if they enter the class room after class begins. Punctuality is a matter of consideration for other people. When a student arrives to class late or leaves early, they create a distraction to their peers and the professor, delaying or disrupting the learning process. Students who repeatedly arrive late or leave early will be referred to Student Services.

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. I recommend downloading the Outlook app on your smartphone for easy access to COM email and to check your COM email at LEAST once per day

Table Mapping SLO's and Core Objectives:

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

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. Please 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 using the contact information previously provided. 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.

Additional Policies

Unattended Minors/Children in Class

For their safety, unattended minors of students are not permitted on campus while students are in class. In consideration of fellow classmates and staff, please do not bring children to class.

Productive Workplace

Students are expected to bring all tools necessary for success to class every day. These tools include writing implements, notebook/note paper, and an approved calculator. **Food and drinks, except for bottled water, are not allowed in classrooms.** All other items (backpacks, purses, bags, laptops, etc.) must be placed between your feet. In addition, headsets/wireless earbuds and cell phones are to be placed in your backpack, etc. before class starts.

Class Notes

Every week, class notes for each section to be covered that week will be posted on D2L for you to print and follow along during the lectures. It is highly suggested you have these notes for each class session.

Classroom Conduct Policy

Arriving on time, staying the entire class period, eliminating distractions like cell phones, using appropriate language (no cursing), respecting your classmates and the instructor, and cleaning up after yourself are all expectations for students in the classroom. Please abide by these expectations so that the class setting is enjoyable for all students. Regarding cell phones, they should be turned off or set on airplane mode and in your backpack/purse (not on your desk). It is extremely disruptive to the learning environment, so you will be asked to leave if it is a continuous problem. You are not allowed to use laptops during class. You may ONLY use a tablet for not taking purposes. Infractions may result in an automatic withdrawal from the class. Cell phones **cannot** be used during tests or quizzes and refer to testing policies for additional information. Please notify me before class if you have an emergency that requires you to answer your phone during class. Take an emergency phone call outside of the classroom.

Recording of Class

Students may not record all or part of class and/or all or part of a livestream without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Student Disability Services. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. If any instructor's recordings are provided, students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings may result in a disciplinary referral and/or disciplinary action.

Testing Policy

Prohibited devices include, but are not limited to:

- Cell phones; smart phones; smart watches
- Audio players/recorders, tablets, laptops, notebooks, or any other personal computing devices
- Separate timers
- Cameras or any other photographic equipment
- Any devices, including digital watches, that can be used to record, transmit, receive, or play back audio, photographic, text, or video content.

If your device makes a sound or is in your possession when the device goes off, you may be dismissed, and your score may be recorded as a zero.

<u>If you leave the classroom at any time during an exam, the exam must be submitted for grading.</u> Therefore, it is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

Course outline:

Tentative Schedule

Week	Topic	Due Date
	3.1 Functions	
1	3.2 Graphs of Functions	
	3.3 Applications of Linear Functions	Sep. 3
	3.4 Quadratic Functions and Applications	
	3.4 Quadratic Functions and Applications	
2	3.5 Polynomial Functions	Sep. 10
	3.6 Rational Functions	
	3.6 Rational Functions	
3	Quiz 1 (3.1 – 3.6)	Com 17
	4.1 Exponential Functions	Sep. 17
	4.2 Applications of Exponential Functions	
	4.3 Logarithmic Functions	
	4.3 Logarithmic Functions	
4	4.4 Logarithmic and Exponential Equations	Son 24
	Review for Exam 1	Sep. 24
	Exam 1 (3.1 – 4.4)	Sep. 25
5	5.1 Simple Interest and Discount	
	5.2 Compound Interest	(HW)
	5.3 Anuities, Future Value, and Sinking	Oct. 1
	Funds	
	5.3 Anuities, Future Value, and Sinking	
6	Funds (cont)	
	5.4 Annuities, Present Value, and	
	Amortization	Oct. 8
	Quiz 2 (5.1-5.4)	OC1. 0
	6.1 Systems: 2 Linear Equations in 2	
	Variables	
	6.2 Larger Systems of Linear Equations	
7	6.3 Applications of Systems of Linear	
	Equations	Oct. 15
	6.4 Basic Matrix Operations	

	6.5 Matrix Product and Inverses	(HW) Oct. 17
8	Review for Exam 2	
	Exam 2 (5.1 – 6.5)	Oct. 18
	7.1 Graphing Linear Inequalities in Two	
	Variables	
	7.1 Graphing Linear Inequalities in Two	
9	Variables (cont.)	
	7.2 Linear Programming	Oct. 29
	7.3 Applications of Linear Programming	
	7.4 The Simplex Method: Maximization	
10	7.5 Maximization Applications	Nov. 5
	Quiz 3 (7.2-7.5)	Nov. 3
	8.1 Sets	
	8.1 Sets	
11	8.2 Apps: Venn Diagrams, Contingency	Nov. 12
	8.3 Introduction to Probability	
	8.4 Basic Concepts of Probability	
12	8.5 Conditional Probability and	
	Independent Events	Nov. 19
	8.6 Bayes Formula	
	Review for Exam 3	
	Exam 3 (7.1 – 8.6)	Nov. 20
13	9.1 Probability Distributions and Expected	
	Value	(HW) Nov. 26
	9.2 Multiplication Principle, Permutations,	
	Combinations	
	9.3 Applications of Counting	
	9.3 Applications of Counting	
14	9.4 Binomial Probability	D 2
	Quiz 4 (9.1-9.4)	Dec. 3
	10.1 Frequency Distributions	
	10.1 Frequency Distributions	(HW) Dec. 5
15	10.2 Measures of Central Tendency	` '
	Review for Exam 4	
	Exam 4 (9.1 – 10.2)	Dec. 6
16	Review for Final Exam	Dec. 11
	Comprehensive Final Exam	Dec. 13

PLEASE NOTE: The syllabus is subject to change at the discretion of the instructor. W-Day – Nov 28th

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/docs/Student_Handbook_2023-2024_v2.pdf. 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 at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is located in the 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 11. The last date to withdraw from the 16-week session is November 28. The last date to withdraw for the 2nd 8-week session is December 7.

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.

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 <a href="maintenance-deanoft-de