



MATH 1324.304CL
Mathematics for Business & Social Sciences
Spring 2022
MTWRF 9:38-10:30

Instructor Information: Jerry Linch, jlinch@fisdk12.net, 281-482-3413 ext. 3681

Student hours and location: Class hours are weekdays from 9:38-10:30, office hours by request will be offered in the same classroom location at Friendswood High School, room 1038 by request from 8:00am-8:30am.

Required Textbook/Materials: Finite Mathematics with Applications, twelfth edition, by Lial, Hungerford, Holcomb, and Mullins and appropriate Math Lab account.

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.

Course requirements:

Homework Assignments

There is assigned homework for each section to be done online using MyMathLab. They are due one week after the date assigned. Any late homework can be completed by the quiz or test date for a 20% reduction.

Quizzes and Exams

There are four quizzes to be done online using MyMathlab. You need to show work on paper that will be turned in to the instructor. You can retake each quiz just once to improve your score; the highest score will be the one that counts. There will be one algebra review exam, four chapter exams and a comprehensive final. There are no retakes on any of the exams.

Determination of Course Grade/Detailed Grading Formula:

The course grade will be determined by the following formula:

$$\text{Final Average} = 64\% \text{Chapter Exam Average} + 16\% \text{Final Exam} + 10\% \text{Homework Average} + 10\% \text{Quiz Average}$$

Grading Scale:

Grade A: Final Average in [89.5, 100]

Grade B: Final Average in [79.5, 89.5)

Grade C: Final Average in [69.5, 79.5)

Grade D: Final Average in [59.5, 69.5)

Grade F: Final Average in [0, 59.5)

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

Will be determined at the discretion of the instructor based on the circumstances of the student. If you are unable to make a scheduled chapter exam, you will be allowed to make up the exam outside of class **provided you notify the instructor prior to the exam and have a legitimate reason for the absence.**

Attendance Policy: Attendance and classroom participation is required. Excessive absenteeism may result in a student being withdrawn from the course. More than three absences is considered excessive.

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.

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. Please read the sections on *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 contact Leslie Richardson, Department Chair at 409-933-8329 or lrichardson@com.edu.

Course outline:

Course Calendar

Week	Month	Date	Day	Topic	Sections
1	Jan	7	Fri	Introductions to Class	Intro
		10	Mon	Purchase Math Lab	Math Lab
		11	Tue	Functions	3.1
		13	Thur	Graphs of Functions	3.2
		14	Fri	Linear Functions	3.3
2		17	Mon	Quadratic Functions	3.4
		19	Wed	Polynomial Functions	3.5
3		21	Fri	Polynomial Functions	3.5
		25	Tue	Exponential Functions	4.1
4		27	Thur	Applications of Exponential Functions	4.2
	31	Mon	Logarithmic Functions	4.3	
	2	Wed	Logarithmic and Exponential Equations	4.4	
5	Feb	4	Fri	Exam 1	Exam
		8	Tue	Simple Interest and Discount	5.1
		10	Thur	Compound Interest	5.2
6		14	Mon	Annuities, Future Values, and Sinking Funds	5.3
		16	Wed	Annuities, Present Value, Amortization	5.4
7		18	Fri	Systems of Two Linear Equations	6.1
		22	Tue	Larger Systems of Linear Equations	6.2
8		24	Thur	Applications of Systems of Linear Equations	6.3
		Mar	2	Wed	Application of Matrices
4			Fri	Matrix Products and Inverses	6.5

9		7	Mon	Lab Day	Lab	
		9	Wed	Exam 2	Exam	
		10	Thur	Graphing Linear Inequalities	7.1	
Spring Break		14-18	Off	Spring Break	no school	
10		22	Tue	Linear Programming	7.2	
		24	Thur	Applications of Linear Programming	7.3	
11		29	Tue	Simplex Method: Maximization	7.4	
		31	Thur	Maximization Applications	7.5	
12		Apr	5	Tue	Sets	8.1
			7	Thur	Applications of Venn Diagrams	8.2
13		11	Mon	Intro to Probability	8.3	
		13	Wed	Probability	8.4	
		15	Fri	Conditional Probability and Independent Events	8.5	
14		19	Tue	Bayes Formula	8.6	
		21	Thur	Lab Day	Lab	
		22	Fri	Exam 3	Exam	
15		25	Mon	Probability Distributions and Expected Value	9.1	
		27	Wed	Mult Principle, Permutations and Combinations	9.2	
		29	Fri	Applications of Counting	9.3	
16	May	2	Mon	Binomial Probability	9.4	
		3	Tue	Frequency Distributions	10.1	
		4	Wed	Measures of Central Tendency	10.2	
		5	Thur	Lab Day	Lab	
17		6	Fri	Exam 4	Exam	
		20	Tue	Lab Day	Lab	
		11	Wed	Final Exam	Final	
		13	Fri	Final Grades Posted	Grades	

**** W-day: April 25 ****

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://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.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.
https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college career. 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 Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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 is March 2nd for the 1st 8-week session, April 25 for the 16-week session, and May 4th.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N 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 F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention is 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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive

Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.