Math 1324-305CL Spring 2023
Mathematics for Business & Social Sciences
Course Semester (Spring 2023)
MTWRF 12:35-1:27

Instructor Information: Jerry Linch, jlinch@com.edu, 281-482-3413 ext. 3681

Student hours and location: MTWRF Class hours are weekdays from 12:35-1:27, 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:

Grading Formula:

The course grade will be determined by the following formula:

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

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. (Faculty may add additional statement requiring monitoring and communication expectations via Blackboard or other LMS)

You must log in and be active in MyMathLab at least three times each week. In addition to time spent in doing homework, taking quizzes and exams it will be necessary to study, using the course materials, at least 4 hours per week to be successful in the class.

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 at jlinch@com.edu. If, after discussing your concern with me, you continue to have questions, please contact Dr. Leslie Richardson at (409) 933-8329 or lrichardson@com.edu

Course outline: (include calendar with lecture topics, due dates)

Math 1324 Math of Business and Social Science Spring 2023 Calendar

Month	Week	Date	Day	Topic	Sections
Jan	0	5	Thur	Introductions to Class	Intro
	1	9	Mon	Functions	3.1
		11	Wed	Graphs of Functions	3.2
		13	Fri	Linear Functions	3.3
		16	Mon	**Student Holiday**	**Holiday**
	2	18	Wed	Quadratic Functions	3.4
		20	Fri	Polynomial Functions	3.5
		23	Mon	Exponential Functions	4.1
		25	Wed	Applications of Exponential Functions	4.2
	4	27	Fri	Logarithmic Functions	4.3
		30	Mon	Logarithmic and Exponential Equations	4.4
Feb		**1**	**Wed**	**Exam 1**	**Exam**
		3	Fri	Simple Interest and Discount	5.1
		6	Mon	Compound Interest	5.2
	6	8	Wed	Annuities, Future Values, and Sinking Funds	5.3
		10	Fri	Annuities, Present Value, Amortization	5.4
		13	Mon	Systems of Two Linear Equations	6.1
	7	15	Wed	Larger Systems of Linear Equations	6.2
		17	Fri	Applications of Systems of Linear Equations	6.3
		20	Mon	**Student Holiday**	**Holiday**
		22	Wed	Application of Matrices	6.4
	8	24	Fri	Matrix Products and Inverses	6.5
		27	**Mon**	**Exam 2**	**Exam**
Mar	9	1	Wed	Graphing Linear Inequalilties	7.1
		3	Fri	Linear Programming	7.2
		6	Mon	Applications of Linear Programming	7.3
	10	8	Wed	Simplex Method: Maximization	7.4
		10	Fri	Maximization Applications	7.5
		11-17	Mon-Fri	Spring Break Holiday	8.1
		20	Mon	Applications of Venn Diagrams	8.2
		22	Wed	Intro to Probability	8.3
	12	24	Fri	Probability	8.4
		27	Mon	Conditional Probability and Independent Events	8.5

		29	Wed	Bayes Formula	8.6
		31	**Fri**	**Exam 3**	**Exam**
	13	3	Mon	Probability Distributions and Expected Value	9.1
		5	Wed	Mult Principle, Permutations and Combinations	9.2
		7-10	Fri/Mon	**Student Holiday**	**Holiday**
Apr		12	Wed	Applications of Counting	9.3
		14	Fri	Binomial Probability	9.4
	15	17	Mon	Frequency Distributions	10.1
		19	Wed	Measures of Central Tendency	10.2
		21	Fri	Lab Day	Lab
		24	Mon	Review for Exam 4	Review
		26	**Wed**	**Exam 4**	**Exam**
		28	Fri	Lab Day	Lab
May	16	1-5	Mon-Fri	Review Final Exam	Review
		8	**Mon**	**Final Exam**	**FINAL**
		9	**Tue**	**Final Exam**	**FINAL**
*** W-day: April 24 ***					

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 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 March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2nd 8-week session is May 3.

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 deanofstudents@com.edu or communityresources@com.edu.