Math 1324-305CL
Mathematics for Business & Social Sciences
Course Semester (Fall 2023)
8:40-9:33 (MTWRF)

Instructor Information: Christopher Billot, cbillot@com.edu, 281-482-3413

Student hours and location: MTWRF Class hours are weekdays from 8:40-9:33, office hours will be offered in the same classroom location at Friendswood High School, room 1469 from 8:00am-8:30am.

Required Textbook/Materials:
Textbook: Finite Mathematics with Applications, twelfth edition, by Lial, Hungerford, Holcomb, and Mullins and appropriate Math Lab account.
Calculator: TI 83 Plus or TI-84 plus is **recommended**
           TI-89, TI Nspire, or higher is **prohibited**.

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, linear programing, and probability, including expected value.

Course requirements:

Homework Assignments
There is assigned homework for each section to be done online using MyMathLab. Students are expected to have their work completed by the due date. Late work will not be accepted.

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.

Grading Formula:
The course grade will be determined by the following formula:

Final Average:	64%	**Chapter Exam Average**	**Grading Scale:**	Grade A: Final Average [89.5 – 100]
	16%	**Final Exam**		Grade B: Final Average [79.5 – 89.5)
	10%	**Homework Average**		Grade C: Final Average [69.5 – 79.5)
	10%	**Quiz Average**		Grade D: Final Average [59.5 – 69.5)
				Grade F: Final Average [0 – 59.5)

The Final Exam score will replace the lowest Chapter Exam Score when it is larger.

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 programing 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 od 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 questions or concerns about any aspect of this course, please contact me at cbillot@com.edu. If after discussing your concern with me and 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 Fall 2023 Calendar

Month	Week	Date	Day	Topic	Sections	Month	Week	Date	Day	Topic	Sections
August	1	14	Monday	Student Holiday	Holiday	October	11	23	Monday	The Simplex Method: Maximization	7.4
		15	Tuesday	Introductions to Class	Intro			24	Tuesday	Lab Day	Lab
		16	Wednesday	Purchase Math Lab	Intro			25	Wednesday	Maximization Applications	7.5
		17	Thursday	Functions	3.1			26	Thursday	Quiz 3 (7.1-7.5)	Quiz
		18	Friday	Lab Day	Lab			27	Friday	Sets	8.1
	2	21	Monday	Graphs of Functions	3.2	November	12	30	Monday	Applications of Venn Diagrams and Contingency Tables	8.2
		22	Tuesday	Lab Day	Lab			31	Tuesday	Lab Day	Lab
		23	Wednesday	Linear Functions	3.3			1	Wednesday	Introduction to Probability	8.3
		24	Thursday	Lab Day	Lab			2	Thursday	Basic Concepts of Probability	8.4
		25	Friday	Quadratic Functions	3.4			3	Friday	Lab Day	Lab
	3	28	Monday	Polynomial Functions	3.5		13	6	Monday	Conditional Probability and Independent Events	8.5
		29	Tuesday	Quiz 1 (3.1 – 3.4)	Quiz			7	Tuesday	Lab Day	Lab
		30	Wednesday	Exponential Functions	4.1			8	Wednesday	Bayes' Formula	8.6
		31	Thursday	Lab Day	Lab			9	Thursday	Review for Exam 3	Review
September	4	1	Friday	Applications of Exponential Functions	4.2			10	Friday	Exam 3 (Ch. 7 & 8)	Exam
		4	Monday	Student Holiday	Holiday		14	13	Monday	Probability Distributions and Expected Value	9.1
		5	Tuesday	Logarithmic Functions	4.3			14	Tuesday	Lab Day	Lab
		6	Wednesday	Lab Day	Lab			15	Wednesday	The Multiplication Principle, Permutations, and Combinations	9.2
		7	Thursday	Logarithmic and Exponential Equations	4.4			16	Thursday	Applications of Counting	9.3
		8	Friday	Lab Day	Lab			17	Friday	Quiz 4 (9.1-9.2)	Quiz
	5	11	Monday	Review for Exam 1	Review		15	20-24	MTWHF	Thanksgiving Holiday	Holiday
		12	Tuesday	Exam 1 (Ch. 3 & 4)	Exam		16	27	Monday	Binomial Probability	9.4
		13	Wednesday	Simple Interest and Discount	5.1			28	Tuesday	Lab Day	Lab
		14	Thursday	Lab Day	Lab			29	Wednesday	Frequency Distributions	10.1
		15	Friday	Compound Interest	5.2			30	Thursday	Lab Day	Lab
	6	18	Monday	Student Holiday	Holiday	December		1	Friday	Measures of Center	10.2
		19	Tuesday	Annuities, Future Value, and Sinking Funds	5.3		17	4	Monday	Lab Day	Lab
		20	Wednesday	Lab Day	Lab			5	Tuesday	Review for Exam 4	Review
		21	Thursday	Annuities, Present Value, and Amortization	5.4			6	Wednesday	Review for Exam 4	Review
		22	Friday	Lab Day	Lab			7	Thursday	Exam 4 (Ch. 9 & 10)	Exam
	7	25	Monday	Quiz 2 (5.1-5.4)	Quiz			8	Friday	Exam 4 (Ch. 9 & 10)	Exam
		26	Tuesday	Systems of Two Linear Equations in Two Variables	6.1		18	11	Monday	Review for Final Exam	Review
		27	Wednesday	Lab Day	Lab			12	Tuesday	Review for Final Exam	Review
		28	Thursday	Larger Systems of Linear Equations	6.2			13	Wednesday	Final Exam	FINAL
		29	Friday	Lab Day	Lab			14	Thursday	Final Exam	FINAL
October	8	2	Monday	Applications of Systems of Linear Equations	6.3			15	Friday	Finalize Grades	
		3	Tuesday	Lab Day	Lab					***WITHDRAWL DAY: NOVEMBER 28, 2023 ***	
		4	Wednesday	Basic Matrix Operations	6.4						
		5	Thursday	Lab Day	Lab						
		6	Friday	Matrix Products and Inverses	6.5						
	9	9	Monday	Review for Exam 2	Review						
		10	Tuesday	Exam 2 (Ch. 5 & 6)	Exam						
		11-13	WRF	Student Holiday	Holiday						
	10	16	Monday	Graphing Linear Inequalities in Two Variables	7.1						
		17	Tuesday	Lab Day	Lab						
		18	Wednesday	Linear Programing: The Graphical Method	7.2						
		19	Thursday	Lab Day	Lab						
		20	Friday	Applications of Linear Programming	7.3						

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