

MATH 1324-304C3 Math for Business and Social Sciences Fall 2024

Instructor Information: Christopher Billot, cbillot@com.edu, 281-482-3413 ext. 3654

Student hours and location:

Class hours: MTWRF from 10:27 am-11:17 am in room 2429

Office hours: Tuesday &Thursday from 11:17 – 11:47 am in room 2429

Required Textbook/Materials:

1. Textbook: Finite Mathematics with Applications, twelfth edition, by Lial, Hungerford, Holcomb, and Mullins

2. Access to a desktop computer or laptop and internet service outside of class is required to gain access to the necessary online assignments.

- 3. MyLab Math(MLM) software is required for Math 1324
- 4. MyLab provides access to the eText for the textbook and all course assignments. (No Purchase Necessary)
- 5. TI-84 Plus graphing calculator is recommended for this course. A TI-89 or higher or a TI-Nspire is not permitted.

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:

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

- **Homework:** Homework assignments will be given each week for every section covered in the course. Homework assignments will count as 10% of your final grade.
- Quizzes: Seven quizzes will be given online using MyLab. You need to show work on paper that will be turned in to the instructor. You retake each quiz just once to improve your score. The retake must be completed on the same day that the quiz was given. You will have until the end of the day to complete the retake. The highest score from either the original or retake will be the one that counts. Cumulatively, the quizzes will count as 15% of your final grade.
- **Exams:** Four exams will be given, and you will be provided with a review to prepare for each exam. The exams will be taken in person and on paper. Each exam will count as 15% of your final grade.
- **Final Exam:** The comprehensive final exam will be given at the end of the course during Week 16. The final exam will count as 15% of your final grade and will replace your lowest exam grade if it is higher.

Grading Formula:

The course grade will be determined by the following formula:

Final Average:	60%	Chapter Exam Average	Grading Scale:	Grade A: Final Average [89.5 – 100]
	15%	Final Exam		Grade B: Final Average [79.5 – 89.5)
	15%	Quiz Average		Grade C: Final Average [69.5 – 79.5)
	10%	Homework Average		Grade D: Final Average [59.5 – 69.5)
				Grade F: Final Average [0 – 59.5)

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

- Homework: You are expected to complete your work by the due date. Late work will not be accepted for any assignment.
- Quizzes: You cannot make up a quiz. A specified deadline will be given, and you will not be allowed to submit late.
 - o If a quiz or homework assignment is not submitted by the deadline, a grade of zero will be recorded for the grade.
- **Unit Exams**: Generally, there are no make-up exams. A make-up exam will only be allowed at the discretion of the instructor and only under extenuating circumstances and is limited to one make-up chapter exam. If it is necessary to miss an exam:
 - 1. You are required to petition the instructor in writing using your COM email <u>before</u> the exam is given to be considered for a make-up exam.
 - 2. Only in extenuating circumstances of a serious nature that are documented will be considered.

Realize not being prepared for the exam is not a legitimate reason for a make-up exam nor is scheduling work/appointments/vacations during the class period.

All other missed tests will be assigned a zero, and the zero(s) will be used to calculate the overall grade in the course.

Extra Credit: Occasionally, extra credit points will be offered to the entire class; however, individually, extra credit assignments will not be available.

Attendance Policy: Attendance and classroom participation is required. Excessive absenteeism may result in a student being withdrawn from the course. More than three absences are considered excessive. Students will also be counted absent:

- 1. Arriving to class 10 minutes late or later.
- 2. Taking a break during the class period for a significant amount of time (more than 10 minutes) or multiple breaks.
- 3. Sleeping during the class period.
- 4. Leaving early (10 minutes or longer).
- 5. Using cellphone(s) and /or earbuds/headsets during the class period unless authorized by the instructor.

You cannot make up classes, and it is your responsibility to be punctual and regular at attending class. If you find that you are having trouble arriving on time, adjust your schedule accordingly. Also, please be advised that it is **your** responsibility to get caught up when a class is missed.

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 statements requiring monitoring and communication expectations via Blackboard or other LMS.)

You must log in and be active in MyLab at least three times each week. In addition to time spent 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.

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 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 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 online 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 Mr. Leslie Richardson at (409) 933-8329 or lrichardson@com.edu.

Additional Policies

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. All other items (backpacks, purses, bags, laptops, etc.) must be placed under your desk. In addition, headsets/wireless earbuds are to be placed in your backpacks and cell phones will need to be placed in the cellphone rack before class starts.

Recording of Class

Students may not record all or part of class and/or part of a livestream without advanced written consent of the instructor. If you have or think you 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 result in a disciplinary referral and/or disciplinary action.

Testing Policy

- 1. Prohibited devices include, but are not limited to:
 - Cell phones and smart watches
 - Audio players/recorders, tablets, laptops, notebooks, or any other personal computing devices
 - 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.
- 2. 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.
- 3. If you leave the classroom at any time during an exam, the exam must be submitted for grading.
 - Therefore, it is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

Math 1324 Math for Business and Social Sciences Fall 2024 Calendar

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Month	Wee k	Date	Day	Торіс	Sections
		12	Monday	Student Holiday	Holiday
		13	Tuesday	Introductions to Class	Intro
	1	14	Wednesday	Purchase Math Lab	Intro
		15	Thursday	Functions	3.1
		16	Friday	Lab Day	Lab
		19	Monday	Graphs and Functions	3.2
	2	20	Tuesday	Lab Day	Lab
August		21	Wednesday	Linear Functions	3.3
		22	Thursday	Lab Day	Lab
		23	Friday	Quadratic Functions	3.4
		26	Monday	Lab Day	Lab
		27	Tuesday	Polynomial Functions	3.5
	3	28	Wednesday	Lab Day	Lab
		29	Thursday	Quiz 1 (Ch. 3)	Quiz
		30	Friday	Exponential Functions	4.1
		2	Monday	Student Holiday	Holiday
		3	Tuesday	Applications of Exponential Functions	4.2
	4	4	Wednesday	Lab Day	Lab
		5	Thursday	Logarithmic Functions	4.3
		6	Friday	Logarithmic and Exponential Equations	4.4
		9	Monday	Review for Exam 1	Review
		10	Tuesday	Review for Exam 1	Review
	5	11	Wednesday	Exam 1 (Ch. 3 & 4)	Exam
		12	Thursday	Exam 1 (Ch. 3 & 4)	Exam
		13	Friday	Simple Interest and Discount	5.1
September		16	Monday	Student Holiday	Holiday
		17	Tuesday	Compound Interest	5.2
	6	18	Wednesday	Lab Day	Lab
		19	Thursday	Annuities, Future Value, and Sinking Funds	5.3
		20	Friday	Lab Day	Lab
		22			Lub
		23	Monday	Annuities, Present Value, and Amortization	5.4
		24	Monday Tuesday	Annuities, Present Value, and Amortization Lab Day	
	7		,	Lab Day Quiz 2 (Ch.5)	5.4
	7	24	Tuesday	Lab Day	5.4 Lab
	7	24 25 26 27	Tuesday Wednesday	Lab Day Quiz 2 (Ch.5)	5.4 Lab Quiz 6.1 6.2
	7	24 25 26 27 30	Tuesday Wednesday Thursday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables	5.4 Lab Quiz 6.1
	7	24 25 26 27	Tuesday Wednesday Thursday Friday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations	5.4 Lab Quiz 6.1 6.2
	7	24 25 26 27 30 1 2	Tuesday Wednesday Thursday Friday Monday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day	5.4 Lab Quiz 6.1 6.2 Lab
		24 25 26 27 30 1 2 3	Tuesday Wednesday Thursday Friday Monday Tuesday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations	5.4 Lab Quiz 6.1 6.2 Lab 6.3
		24 25 26 27 30 1 2 3 4	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day	5.4 Lab Quiz 6.1 6.2 Lab 6.3
		24 25 26 27 30 1 2 3	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4
October	8	24 25 26 27 30 1 2 3 4 7	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations Matrix Products and Inverses	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4
October		24 25 26 27 30 1 2 3 4 7 8	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations Matrix Products and Inverses Lab Day Review for Exam 2 Review for Exam 2	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4 6.5 Lab
October	8	24 25 26 27 30 1 2 3 4 7 8 9	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday Truesday Wednesday Thursday Monday Tuesday Wednesday Thursday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations Matrix Products and Inverses Lab Day Review for Exam 2 Review for Exam 2 Exam 2 (Ch. 5 & 6)	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4 6.5 Lab Review Review Exam
October	8	24 25 26 27 30 1 2 3 4 7 8 9 10 11	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Tuesday Friday Wednesday Thursday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations Matrix Products and Inverses Lab Day Review for Exam 2 Review for Exam 2 Exam 2 (Ch. 5 & 6) Exam 2 (Ch. 5 & 6)	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4 6.5 Lab Review Review Exam Exam
October	8	24 25 26 27 30 1 2 3 4 7 8 9 10 11	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday Truesday Wednesday Thursday Monday Tuesday Wednesday Thursday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations Matrix Products and Inverses Lab Day Review for Exam 2 Review for Exam 2 Exam 2 (Ch. 5 & 6)	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4 6.5 Lab Review Review Exam 7.1
October	8	24 25 26 27 30 1 2 3 4 7 8 9 10 11	Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Tuesday Friday Wednesday Thursday	Lab Day Quiz 2 (Ch.5) Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day Applications of Systems of Linear Equations Lab Day Basic Matrix Operations Matrix Products and Inverses Lab Day Review for Exam 2 Review for Exam 2 Exam 2 (Ch. 5 & 6) Exam 2 (Ch. 5 & 6)	5.4 Lab Quiz 6.1 6.2 Lab 6.3 Lab 6.4 6.5 Lab Review Review Exam Exam

Month	Week	Date	Day	Торіс	Sections
October		18	Monday	Student Holiday	Holiday
		19	Tuesday	Linear Programming: The Graphical Method	7.2
	11	20	Wednesday	Lab Day	Lab
		21	Thursday	Applications of Linear Programming	7.3
		22	Friday	Friday The Simplex Method: Maximization	
		25	Monday	Lab Day	Lab
		26	Tuesday	Maximization Applications	7.5
	12	27	Wednesday	Review for Exam 3	Review
		28	Thursday	Exam 3 (Ch. 7)	Exam
		29	Friday	Exam 3 (Ch. 7)	Exam
		1	Monday	Sets	8.1
		2	Tuesday	Applications of Venn Diagrams and Contingency Tables	8.2
	13	3	Wednesday Introduction to Probability		8.3
		4	Thursday	Basic Concepts of Probability	8.4
		5	Friday	Conditional Probability and Independent Events	8.5
	14	8	Monday	Bayes' Formula	8.6
		9	Tuesday	Quiz 3 (Ch. 8)	Quiz
November		10	Wednesday	Probability Distributions and Expected Value	9.1
		11	Thursday	Multiplication Principle, Permutations, and Combinations	9.2
		12	Friday	Applications of Counting	9.3
	15	15	Monday	Binomial Probability	9.4
		16	Tuesday	Review for Exam 4	Review
		17	Wednesday	Review for Exam 4	Review
		18	Thursday	Exam 4 (Ch. 8 & 9)	Exam
		19	Friday	Exam 4 (Ch. 8 & 9)	Exam
	16	22	MTWRF	Thanksgiving Break	Holiday
		23	Monday	Review for Final Exam	Review
		24	Tuesday	Review for Final Exam	Review
December	17	25	Wednesday	Final Exam	FINAL
		26	Thursday	Final Exam	FINAL
		29	Friday	Finalize Grades	

W-Day November 15, 2024

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_2024-2025_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, 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 2. The last date to withdraw from the 16-week session is November 15. The last date to withdraw for the 2nd 8-week session is November 26.

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.

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.