



**Math 1324.101CL**  
**Mathematics for Business & Social Sciences**  
**Spring 2024**  
**STEAM Building, Room 119**  
**MW 9:30 - 10:50pm; F 10:00am – 10:50am**

**Instructor Information:** Theophilus, Boye, [tboye@com.edu](mailto:tboye@com.edu), 409-933-8758

**Student hours:** MW: 11:00- 12:30am; TTh: 3:30 – 6:00pm

**Office location:** STEAM 325-3

**Required Textbook/Materials:** Minimally, you are required to purchase the access code for MyLab Math to access the eText for the textbook and all course assignments. A hard copy of the textbook is recommended, but not required.

**ISBN:** 9780134767611

**Title:** Finite Mathematics with Applications in the Management, Natural, and Social Sciences

**Author:** Lial, Hungerford, Holcomb, and Mullins

**Edition:** 12

**Copyright:** 2019

**Publisher:** Pearson

**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:** 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:** Four quizzes will be given. Cumulatively, the quizzes will count as 10% of your final grade.
- **Unit Exams:** Four exams will be given, and you will be provided with a review to prepare for each exam. Each test will count as 16% of your 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 16% of your grade and will replace your lowest exam grade if it is higher.

- **Required Technology:** A TI-84 Plus graphing calculator is required for this course.
  - A TI-89 or higher or a TI-Nspire are **not permitted**. Internet capability is also required to gain access to course materials and online assignments via MyLab Math software.
- **MyLab Math** (MLM) contained within Brightspace is required for this class. All Homework and Quizzes will be done in MyLab Math. You can access D2L Brightspace at <http://com.brightspace.com>

## Determination of Course Grade/Detailed Grading Formula:

### *Grading Formula:*

$$\text{Final Average} = .64(\text{Exam Average}) + .16(\text{Final Exam}) + .10(\text{Homework}) + .10(\text{Quizzes})$$

### *Grading Scale:*

The course grade will be determined using the following scale:

Grade A: Final Average [89.5, 100]

Grade B: Final Average [79.5, 89.5)

Grade C: Final Average [69.5, 79.5)

Grade D: Final Average [59.5, 69.5)

Grade F: Final Average [0, 59.5)

**Late Work, Make-Up, and Extra-Credit Policy:** If you are unable to make a scheduled 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. All makeup exams must be taken in the Testing Center by appointment. The late penalty for past due assignments is 20% of your grade. Extra credit assignments will not be available.

**Attendance Policy:** Attendance is required for all class meetings. When students are not actively participating (e.g., contributing to discussions and completing weekly online homework), the faculty member can initiate an instructor drop and, subsequently, the student will receive a **W** for the course.

**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.

**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 Conduct. 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 section on Standards of Student Conduct and Discipline and Penalties in the online 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 at [lrichardson@com.edu](mailto:lrichardson@com.edu).

### **Electronic Device Policies**

You may use your laptop or tablet for taking notes during lecture; however, that privilege will be lost if I find that you are using them for non-course-related reasons (e.g., news, social media, shopping).

All other electronic devices should be **silenced and hidden**. If there is an emergency and your phone must be on/visible, please inform me of this at the beginning of class

### **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. 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.

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

### **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
- 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.

**If you leave the classroom at any time during an exam, the exam must be submitted for grading.**

It is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

**Table Mapping SLO's and Core Objectives**

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

**Course outline:**

Week	Dates	Topics	Sections	Due
1	Jan 16 – 19	Functions	3.1	Jan 22
		Graph of Functions	3.2	
2	Jan 22 – 26	Linear Functions	3.3	Jan 29
		Quadratic Functions	3.4	
		Polynomial Functions	3.5	
3	Jan 29 – Feb 2	Rational Functions	3.6	Feb 5
		<b>Quiz 1: Chapter 3</b>		
		Exponential Functions	4.1	
		Application of Exponential Functions	4.2	
4	Feb 5 – 9	Logarithmic Functions	4.3	Feb 12
		Logarithmic and Exponential Equations	4.4	
		<b>Exam 1: Chapter 3, 4</b>		
5	Feb 12 – 16	Simple Interest and Discount	5.1	Feb 19
		Compound Interest	5.2	
		Annuities, Future Value, and Sinking Funds	5.3	
6	Feb 19 – 23	Annuities, Present Value, and Amortization	5.4	Feb 26
		<b>Quiz 2, Chapter 5</b>		
		Systems of Two Linear Equations in Two Variables	6.1	
		Larger Systems of Linear Equations	6.2	
7	Feb 26 – Mar 1	Applications of Systems of Linear Equations	6.3	Mar 4
		Basic Matrix Operations	6.4	
		Matrix Products and Inverses	6.5	
8	Mar 4 – 8	<b>Exam 2: Chapters 5, 6</b>		
	<b>Mar 11 - 17</b>	<b>Spring Break</b>		
9	Mar 18- 22	Graphing Linear Inequalities in Two Variables	7.1	Mar 25
		Linear Programming: The Graphical Method	7.2	
10	Mar 25 - 29	Applications of Linear Programming	7.3	April 1
		The Simplex Method: Maximization	7.4	
		Maximization Applications	7.5	

Week	Dates	Topics	Sections	Due
11	Apr 1- 5	<b>Quiz 3, Chapter 7</b>		Apr 8
		Sets	8.1	
		Applications of Venn Diagrams	8.2	
12	Apr 8 - 13	Introduction to Probability	8.3	Apr 15
		Basic Concepts of Probability	8.4	
		Conditional Probability and Independent Events	8.5	
		Bayes' Formula	8.6	
13	Apr 15 - 20	<b>Exam 3: Chapter 7, 8</b>		Apr 22
		Probability Distributions and Expected Value	9.1	
14	Apr 22 - 27	The Multiplication Principle, Permutations and Combinations	9.2	Apr 29
		Applications of Counting	9.3	
		Binomial Probability	9.4	
15	Apr 29 – May 3	<b>Quiz 4: Chapter 9</b>		May 6
		Frequency Distributions	10.1	
		Measures of Center	10.2	
		Review for Exam 4		
16	May 6 – 10	<b>Exam 4 Chapter 9, 10</b>		May 8
		Review for Final Exam		
		<b>Final Exam (comprehensive)</b>		

\*W-Day is April 22

\*Class ends on May 8

\*Calendar is subject to change

## 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](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](mailto: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 1<sup>st</sup> 8-week session is February 28. **The last date to withdraw from the 16-week session is April 22.** The last date to withdraw for the 2<sup>nd</sup> 8-week session is May 1. The last date to withdraw for spring mini session is May 29.

**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](mailto:deanofstudents@com.edu)