Math 1324.136CL
Math for Business and Social Science
Spring 2024
MW   11:00 am – 12:20 pm   ST107
MW   12:30 pm – 1:50 pm   ST107
F   11:00 am – 11:50 am   ST107

Instructor Information: James Griffiths   jgriffiths@com.edu   409-933-8225

Student hours and location: MW 10:00 am – 11:00 am in ST325-08
MW   2:00 pm –   3:00 pm in Tutoring Center
MW   4:15 pm –   5:00 pm in ST325-08
TTh   8:30 am –   9:30 am in ST325-08

Required Textbook: The textbook is <u>Finite Mathematics with Applications</u>, 12th edition, by Goldstein, Schneider and Siegel, Pearson Publishing Company. The e-text is provided with *MyLab Math*. The student will need a computer and internet service outside of class to gain access to the online assignments on *MyLab Math*. Computers and internet access are available on campus during specified times.

Course Description: Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication will be embedded throughout the course.

Course Requirements:
Supplies: A Texas Instruments TI30XIIS scientific calculator is recommended. Graphing calculators may be used in Math 1324. A pencil is required for all assignments. A ruler is required for sketching graphs.

Note: Electronic devices, including computers, I-pads, cellphones, ear-buds, audio recorders must be put away (off the student's desk and out of sight) during class. If the instructor sees one of these items during class, the student will be told to leave class.

Homework Assignments on *MyLab Math*: There is a homework assignment for each unit covered. These are listed on the course outline in the syllabus and on the list of assignments on *MyLab Math*. Each day's homework assignments must be completed by 11:59 pm on the due date shown on both the course outline and on the list of assignments on *MyLab Math*. You should do the assignments as soon as possible after participating in the lecture, reading the appropriate section in the text book, and watching the associated video(s) on *MyLab Math*. Although the homework is online and the answers are entered online, you should write your work on paper, neatly showing all steps, and keep it in your notebook with your lecture notes for future reference, both as an aid for preparing for quizzes and exams, and as a place to begin when seeking assistance from your professor, your peers, or the college tutoring center. The student has a limit of **three** attempts to answer each question correctly on the homework assignments.

Quizzes on *MyLab Math*: **Four** quizzes which relate to the student learning outcomes, will be taken on *MyLab Math*. Like the homework assignments, the due dates are shown on both the course outline in this syllabus and on the assignment list on *MyLab Math*. Unlike the homework assignments, the quizzes must be taken in one sitting, they are timed, and the student gets only **one** attempt to answer each question. The quizzes may be retaken **one** time. The higher of the two grades will be used to determine the student's quiz average.
It is important that the student read and understand the warnings on page 2 of the Orientation Notes, about taking quizzes or exams on MyLab Math. Failing to follow the suggestions presented in that document can cause a quiz or exam to be terminated. The instructor will not change a grade on any assignment on MyLab Math. Nor will the instructor reopen a quiz or exam from which the student has been locked out. The Orientation Notes can be found among the major tabs for this course on Brightspace D2L.

Chapter Exams: There are **four** exams which cover the chapters in the textbook. The exams are taken in class on the due dates shown on the course outline in the syllabus. The student has **90** minutes to take each exam. **Exams may not be retaken**. However, if the grade on the final exam is higher than the lowest chapter exam grade, the final exam grade will replace the lowest chapter exam grade.

Comprehensive Final Exam: The final exam is taken in class on the due date shown on the course outline in the syllabus. The student has **90** minutes to take the final exam. **The final exam may not be retaken**.

Determination of Course Grade/Detailed Grading Formula:
Comprehensive Final Exam   20%
Average of Chapter Exams   60%
Homework Average   10%
Quiz Average   10%
Final Average   100%

Grade I: Given unforeseen circumstances that result in the inability to successfully complete the course objectives, an I-Contract may be requested from the instructor, assuming you meet the following criteria:
 1. Have a passing overall average (**70** or higher)
 2. All work completed except for The Final Exam.

Grading Scale:
Grade A: Final Average is [89.5, 100]
Grade B: Final Average is [79.5, 89.5)
Grade C: Final Average is [69.5, 79.5)
Grade D: Final Average is [59.5, 69.5)
Grade F: Final Average is [0, 59.5)

Late Work, Make-Up Exams, and Extra-Credit Policy:
Late Work: There is a twenty (20) point penalty for all homework and quizzes submitted after the due date. Any homework assignments or quizzes that are not finished by the due date of the associated exam will be given a grade of zero at the time the exam is given.

Make-Up Exams: There are **no make-up exams** unless:
 1) the student notifies the instructor before the exam due date that they will miss the exam, and
 2) the reason for the requested make-up exam is extraordinary, such as the death of a close family member, or the student's admittance to the hospital. (Transportation problems, minor illness, or scheduled doctor appointments are not extraordinary reasons for missing an exam.) Students will **not** be permitted to make up more than **one** exam.

Extra Credit: Three points extra credit is given on exams if the student earns a score of **100** on the review. Extra-credit assignments may also be given throughout the course at the discretion of the instructor. Extra credit is never given at the end of the semester to bring up a poor grade. Do not even ask.

Attendance Policy: Students at COM are expected to attend and participate in every session of all classes for which they are registered. College of the Mainland recognizes no excused absences other than those prescribed by law. Students with excessive absences will be referred to Student Services. Students should consult information provided in MyLab Math and the course calendar when it becomes necessary to miss a class to be prepared when they return to class. The student is still responsible for work that is assigned during an absence and due dates still hold.
A student is tardy if they enter the classroom after class begins. Class begins and ends based on the time on the clock in the classroom. Punctuality is a matter of consideration for other people. When a student arrives to class late or leaves early, they create a distraction to their peers and the professor, delaying or disrupting the learning process. Students who repeatedly arrive late or leave early will be referred to Student Services.

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.
The **preferred** method of communication in this course is in person. If that is not possible, an email or phone call will be satisfactory, but do not leave a message on my phone. If you cannot reach me by phone, email me. Be sure to include your name, the course in which you are enrolled, and state your question completely.

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 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 of *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 Mr. Leslie Richardson, Math Department Chair, at 409-933-8329 or lrichardson@com.edu.

Course outline:

Week	Date	Sections
1	1/15	HOLIDAY
	1/17	0315 - Orientation Assignment Due 1/21
		0315 - 1.5 Operations w/Variables, Grouping Symbols Due 1/21
		0315 - 1.6 Evaluating Variable Exp. & Formulas Due 1/21
	1/19	0315 - 2.1 First Degree Equations with One Unknown Due 1/21
2	1/22	0315 - 2.4 Solving Word Problems Due 1/26
		0315 - 2.6 Linear Inequalities Due 1/26
	1/24	0315 - 2.3 Absolute Value Equations Due 1/28
		0315 - Quiz 1 (1.5, 1.6, 2.1, 2.3, 2.4) Due 1/28
		0315 - 2.8 Absolute Value Inequalities Due 1/28
	1/26	0315 - 3.1 Graphing Linear Inequalities Due 1/28
		0315 - Review for Exam 1 Due 1/29
3	1/29	0315 - Exam 1 (1.5 – 2.8) Due 1/29
		0315 - 3.2 Slope of a Line Due 2/2
	1/31	0315 - 3.3 Equations of Lines Due 2/4
		0315 - Quiz 2 (3.1 – 3.3) Due 2/4
		0315 - 4.1 Systems of Linear Equations Due 2/4
	2/2	0315 - 4.3 Applications of Systems of Equations Due 2/4
		0315 - Review for Exam 2 Due 2/5
4	2/5	0315 - Exam 2 (3.1 4.3) Due 2/5
		0315 - 1.4 Rules of Exponents (omit scientific notation) Due 2/9
	2/7	0315 - 5.1 Polynomials: Add, Subtract, Multiply Due 2/11
		0315 - 5.3 Synthetic Division Due 2/11
		0315 - Quiz 3 (1.4, 5.1, 5.3) Due 2/11
	2/9	0315 - 5.4 GCF & Factoring by Grouping Due 2/11
5	2/12	0315 - 5.4 GCF & Factoring by Grouping Due 2/16
		0315 - 5.5 Factoring Trinomials Due 2/16
	2/14	0315 - 5.6 Special Case Factoring Due 2/18
		0315 - 5.8 Solving Equations Using Factoring Due 2/18
	2/16	0315 - 6.1 Simplify, Multiply, Divide Rational Exp. Due 2/18
		0315 - Review for Exam 3 Due 2/19

6	2/19	0315 - Exam 3 (1.4, 5.1 – 5.8) Due 2/19
		0315 - 6.2 Add, Subtract Rational Expressions Due 2/23
	2/21	**1324 - Orientation Exercises Due 2/25**
		1324 - 3.1 Functions Due 2/25
		1324 - 3.2 Graphs of Functions Due 2/25
	2/23	0315 - 3.6 Graphing Functions Due 2/25
7	2/26	**1324 - 3.3 Applications of Linear Functions Due 3/1**
		1324 - 3.4 Quadratic Functions and Applications Due 3/1
	2/28	**1324 - 3.5 Polynomial Functions Due 3/3**
		1324 - 3.6 Rational Functions Due 3/3
		1324 - Quiz 1 (3.1 – 3.6) Due 3/3
	3/1	0315 - 7.2 Radical Expressions and Functions Due 3/3
8	3/4	**1324 - 4.1 Exponential Functions Due 3/8**
		1324 - 4.2 Applications of Exponential Functions Due 3/8
	3/6	**1324 - 4.3 Logarithmic Functions Due 3/10**
		1324 - 4.4 Logarithmic and Exponential Equations Due 3/10
	3/8	0315 - 7.3 Simplify Add Subtract Radical Expressions Due 3/10

********** SPRING BREAK **********

9	3/18	**1324 - 5.1 Simple Interest and Discount Due 3/19**
		1324 - 5.2 Compound Interest Due 3/19
		1324 - Review for Exam 1 Due 3/20
	3/20	**1324 - Exam 1 (3.1 – 4.4) Due 3/20**
		1324 - 5.3 Anuities, Future Value, and Sinking Funds Due 3/24
	3/22	0315 - 7.4 Multiply, Divide Radical Expressions Due 3/24
		0315 - Quiz 4 (7.2 – 7.4) Due 3/24
10	3/25	**1324 - 5.4 Annuities, Present Value, & Amortization Due 3/28**
		1324 - Quiz 2 (5.1 – 5.4) Due 3/28
		1324 - 6.1 Systems: 2 Linear Equations in 2 Variables Due 3/31
	3/27	**1324 - 6.2 Larger Systems of Linear Equations Due 3/31**
		1324 - 6.3 Apps of Systems of Linear Equations Due 3/31
	3/29	HOLIDAY

11	4/1	**1324 - 6.4 Basic Matrix Operations Due 4/2**
		1324 - 6.5 Matrix Products and Inverses Due 4/2
		1324 - Review for Exam 2 Due 4/3
	4/3	**1324 - Exam 2 (5.1 – 6.5) Due 4/3**
		1324 - 7.1 Graphing Linear Inequalities Two Variables Due 4/7
	4/5	0315 - 7.6 Complex Numbers Due 4/7
		0315 - Review for Exam 4 Due 4/12

12	4/8	**1324 - 7.2 Linear Programming: Graphing Method Due 4/12**
		1324 - 7.3 Applications of Linear Programming Due 4/12
	4/10	**1324 - 7.4 The Simplex Method: Maximization Due 4/14**
		1324 - 7.5 Maximization Applications Due 4/14
		1324 - Quiz 3 (7.2 – 7.5) Due 4/14
	4/12	0315 - Exam 4 (6.1 – 7.6) Due 4/12
		0315 - Review for Comprehensive Final Exam Due 4/19

13	4/15	**1324 - 8.1 Sets Due 4/19**
		1324 - 8.2 Apps: Venn Diagrams, Contingency Tables Due 4/19
	4/17	**1324 - 8.3 Introduction to Probability Due 4/21**
		1324 - 8.4 Basic Concepts of Probability Due 4/21
	4/19	0315 - Comprehensive Final Exam Due 4/19

********** W-Day April 22, 2024 **********

14	4/22	**1324 - 8.5 Conditional Probability Independent Events Due 4/23**
		1324 - 8.6 Bayes Formula Due 4/23
		1324 - Review for Exam 3 Due 4/24
	4/24	**1324 - Exam 3 (7.1 – 8.6) Due 4/24**
		1324 - 9.1 Probability Dist. & Expected Value Due 4/28
	4/26	**1324 - 9.2 Multiplication Principle, Permutations, Combinations Due 4/28**

15	4/29	**1324 - 9.3 Applications of Counting Due 5/3**
		1324 - 9.4 Binomial Probability 5/3
		1324 - Quiz 4 (9.1 – 9.4) Due 5/3
	5/1	**1324 - 10.1 Frequency Distributions Due 5/5**
		1324 - 10.2 Measures of Center Due 5/5
	5/3	**1324 - Review for Exam 4 Due 5/6**

16   5/6   **1324 - Exam 4 (9.1 – 10.2)   Due 5/6**
                 1324 - Review for Comprehensive Final Exam   Due 5/8
        5/8   **1324 - Comprehensive Final Exam   Due 5/8**

The syllabus is subject to change at the discretion of the instructor.

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 February 28. The last date to withdraw from the 16-week session is April 22. The last date to withdraw for the 2nd 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 or communityresources@com.edu.