

# Math 1324.136CL Math for Business and Social Science Fall 2021

**Instructor Information:** James Griffiths 409-933-8225 COM phone **igriffiths@com.edu** COM email

**Student hours and location:** MW 9:00 am - 9:30 am, 10:30 am - 11:00 am

 $12:00 \text{ pm} - 12:30 \text{ pm}, \quad 4:00 \text{ pm} - 5:00 \text{ pm}$ 

TTh 11:00 am – 12:30 pm F 10:00 am – 11:00 am

All student hours are in my office, 325-08 in the STEAM building.

Required Textbook: The textbook is <u>Finite Mathematics with Applications</u>, twelfth edition, by Goldstein, Schneider and Siegel, Pearson Publishing Company. The <u>access code</u> for MyMathLab may be purchased with the textbook or may be purchased separately at mymathlab.com. You need the access code and the course code (the course code is **griffiths53089**) to gain access to MyMathLab today. A calculator is needed for this course. A Texas Instruments TI84 plus is required. You will need computer access to the internet to use MyMathLab. If you do not have a computer and/or dependable internet access, contact your professor immediately so that you may discuss any options that may be available to you through the college.

**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:**

Homework Assignments on MyMathLab: There is a homework assignment for each unit covered. These are listed on the course outline of this syllabus. Each day's homework assignments must be completed by 11:59 pm on the due date shown on the course outline in this syllabus, on the list of assignments on MyMathLab, and on the weekly announcements on MyMathLab.

Quizzes on MyMathLab: There are four quizzes that will be done on MyMathLab. Like the homework assignments, the due dates are shown on the course outline in this syllabus, on the list of assignments on MyMathLab, and on the weekly announcements on MyMathLab. 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.

**Chapter Exams:** There are four exams which cover the chapters in the text book that will be taken in class on the dates shown on the course outline in this syllabus, on the list of assignments on MyMathLab, and on the weekly announcements on MyMathLab. Exams may not be retaken. However, if the grade on the comprehensive 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 comprehensive final exam is taken in class on the date shown on the course outline in this syllabus, on the list of assignments on MyMathLab, and on the weekly announcements on MyMathLab. The student has two hours to complete the final exam. The final exam may not be retaken.

### **Determination of Course Grade/Detailed Grading Formula:**

Homework Average	10%
Quiz Average	10%
Average of Chapter Exams	60%
Comprehensive Final Exam	20%
Final Average	100%

**Grade I**: Given unforeseen circumstances that result in the student's inability to successfully complete the course objectives, an I-Contract may be requested from the instructor assuming the following criteria have been met:

- 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, and Extra-Credit Policy: There is a twenty-point penalty for all homework and quizzes submitted after the due date.

There are no make-up exams unless:

- 1) the student notifies the instructor before the exam due date, and
- 2) the reason for the requested make-up exam is extraordinary.

Extra-credit may be given on assignments from time to time throughout the course at the discretion of the instructor.

**Attendance Policy:** Students at COM are expected to attend class regularly, to arrive on time, and to stay the entire class. Arriving to class late or leaving class early may result in the student being counted absent.

**Communicating with your instructor:** The best way to communicate with the instructor is in person. 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.

Table Mapping SLO's and Core Objectives:

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

**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
6	9/27	Math 0320
	9/29	3.1 Functions Due 10/4
		3.2 Graphs of Functions Due 10/4
		3.3 Applications of Linear Functions Due 10/4
	10/1	Math 0320
7	10/4	3.4 Quadratic Functions and Applications Due 10/8
		3.5 Polynomial Functions Due 10/8
		3.6 Rational Functions Due 10/8
		Quiz 1 (3.1 – 3.6) Due 10/8
	10/6	4.1 Exponential Functions Due 10/11
		4.2 Applications of Exponential Functions Due 10/11
	10/8	Math 0320
8	10/11	4.3 Logarithmic Functions Due 10/15
		4.4 Logarithmic and Exponential Equations Due 10/15
	10/13	5.1 Simple Interest and Discount Due 10/18
		5.2 Compound Interest Due 10/18
		Review for Exam 1 Due 10/18
	10/15	Math 0320
9	10/18	Exam 1 (3.1 – 4.4) Due 10/18
		5.3 Anuities, Future Value, and Sinking Funds Due 10/22
		5.4 Annuities, Present Value, and Amortization Due 10/22
		Quiz 2 (5.1 – 5.4) Due 10/22
	10/20	6.1 Systems: 2 Linear Equations in 2 Variables Due 10/25
		6.2 Larger Systems of Linear Equations Due 10/25
		6.3 Applications of Systems of Linear Equations Due 10/25
	10/22	Math 0320
10	10/25	6.4 Basic Matrix Operations Due 10/27
		6.5 Matrix Products and Inverses Due 10/27
	10/27	7.1 Graphing Linear Inequalities in Two Variables Due 11/1
		Review for Exam 2 Due 11/1
	10/29	Math 0320

11	<ul><li>11/1</li><li>11/3</li><li>11/5</li></ul>	Exam 2 (5.1 – 6.5) Due 11/1 7.2 Linear Programming: The Graphing Method Due 11/5 7.3 Applications of Linear Programming Due 11/5 7.4 The Simplex Method: Maximization Due 11/8 7.5 Maximization Applications Due 11/8 Quiz 3 (7.2 – 7.5) Due 11/8 Math 0320
12	11/8 11/10	<ul> <li>8.1 Sets Due 11/12</li> <li>8.2 Apps: Venn Diagrams, Contingency Tables Due 11/12</li> <li>8.3 Introduction to Probability Due 11/12</li> <li>8.4 Basic Concepts of Probability Due 11/15</li> </ul>
	11/12	8.5 Conditional Probability & Independent Events Due 11/15 <i>Math 0320</i>
13	11/15	8.6 Bayes Formula Due 11/17 Review for Exam 3 Due 11/17
	11/17 11/19	Exam 3 (7.1 – 8.6) Due 11/17  9.1 Probability Distributions and Expected Value Due 11/22  9.2 Mult. Principle, Permutations, Combinations Due 11/22  Math 0320
14	11/22	<ul> <li>9.3 Applications of Counting Due 11/29</li> <li>9.4 Binomial Probability 11/29</li> <li>Quiz 4 (9.1 – 9.4) Due 11/29</li> </ul>
	11/24	10.1 Frequency Distributions Due 11/29 10.2 Measures of Center Due 11/29
	11/26	HOLIDAY
15	11/29 12/1 12/3	Review for Exam 4 Due 12/1 <b>Exam 4 (9.1 – 10.2) Due 12/1</b> <i>Math 0320</i>
16	12/6 12/8 12/10	Review for Comprehensive Final Exam Due 12/8 <b>Comprehensive Final Exam Due 12/8</b> <i>Math 0320</i>

\*\*\*\* W-Day: November 19, 2021 \*\*\*\*

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.

<a href="https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf">https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf</a>. 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. <a href="https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf">https://build.com.edu/uploads/sitecontent/files/student\_services/Student\_Handbook\_2019-2020v5.pdf</a>

**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 Holly Bankston at 409-933-8520 or <a href="https://hbankston@com.edu">hbankston@com.edu</a>. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or <a href="mailto:hbankston@com.edu">hbankston@com.edu</a>. Counseling services are available on campus in the student center for free and students can also email <a href="mailto:counseling@com.edu">counseling@com.edu</a> to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

**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 is October 6<sup>th</sup> for the 1st 8-week session, November 19th for the 16-week session, and December 2<sup>nd</sup> for the second 8-week session.

 $\mathbf{F}_N$  **Grading:** The  $F_N$  grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The  $F_N$  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  $F_N$  grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an  $F_N$  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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at <a href="www.com.edu/coronavirus">www.com.edu/coronavirus</a>. In compliance with <a href="Governor Abbott's May 18 Executive Order">Governor Abbott's May 18 Executive Order</a>, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit <a href="com.edu/coronavirus">com.edu/coronavirus</a> for future updates.

#### **Success Tips:**

Schedule your study time and be diligent in sticking with it. It is recommended that you allocate two hours outside of class for each hour in class.

Find a study partner.

Studying with another person can help keep you motivated and on task.

Be an active learner.

Attend all your classes and be on time.

Listen carefully, take good notes and participate in class.

Review your class notes regularly

Read the textbook.

Do all the assignments.

Study for all the exams using the reviews provided. Rework homework problems.

Seek help when something is unclear, don't put it off.

Have a positive attitude. You can learn math!

Use resources that are available.

Use the instructor's office hours.

Use the free tutoring that is available in the Math Lab, TVB 1306

#### To register for MyMathLab,

Use a reliable web platform (Google or Firefox are recommended for windows) and go to **mymathlab.com**.

Under Register Now, click on student.

Read the new page and click on **OK! Register Now**.

Under Enter course ID, enter griffiths53089 and click on continue.

Read the new page.

- --If you have a Pearson account, enter **user name** and **password** and click **sign in**.
- --If you do not have a Pearson account, click **create**. On the new page enter the requested information (follow their lead), accept the license agreement, and click **create account**.

Read the new page.

- -- If you have the course access code, click access code, enter it, and click finish.
- --If you do not have the course access code, you can either:
- --pay for your access to MyMathLab using a credit card or Pay Pal, click the amount, enter the requested information, and follow their lead, or
- --take advantage of the 14 day free trial offer. In the sentence toward the bottom of the page, click **Get temporary access without payment for 14 days**, on the next page, click **yes**. Warning! If you choose this option and fail to pay within the 14 days, you will be dropped from MyMathLab and you will lose all the grades you have earned.

#### To Read the e-text on MyMathLab,

Log onto MyMathLab.

Click on your course.

Click on Multimedia Library on the menu on the left.

Select the chapter using the drop down menu.

Check the Multimedia Textbook box.

Click Find Now.

Scroll down. Click on the section you wish to read.

Begin reading.

You can move forward or backward through the pages using the right arrow or left arrow at the top of the page toward the left.

#### To Watch a Video on MyMathLab,

Log onto MyMathLab.

Click on your course.

Click on Multimedia Library on the menu on the left.

Select the chapter using the drop down menu.

Select the unit using the drop down menu.

Check the <u>section video lecture</u> box **and** the <u>video</u> box .

Click Find Now.

Click on the video title you wish to watch, (there may be more than one).

### To do a homework assignment on MyMathLab,

- 1. Log into My Math Lab:
- Go to www.mymathlab.com
- Click the Log In button and enter your Login Name and Password
- Click on the appropriate class
- Click on the ALL ASSIGNMENTS button
- Click on the homework assignment or quiz you wish to do.
  - 2. Read the question and instructions for entering the answer carefully, and show all appropriate work in your notebook.
  - 3. Enter your answer in the box provided, and then click the CHECK ANSWER button.
  - 4. If needed, click the SIMILAR EXERCISE button to redo the exercise.
  - 5. If the submitted answer is correct, click on the SAVE button to send your results to the gradebook. Your grade will show up in the GRADEBOOK and will be automatically accessible by both you and your professor.
  - 6. Click on the next question to continue.