

### MATH 1332-102 H2

# Contemporary Mathematics – Quantitative Reasoning FALL 2024

Lecture: 2:00pm - 3:50pm TTH STEAM Room 103

Instructor Information: Gabriela Peña, gpena3@com.edu

Office: **STEAM 325-07** 

Office Phone #: 409-933-8182

Student hours and location: Schedule your time via https://calendly.com/gpena3

Monday & Wednesday 12:00pm – 2:00pm **STEAM 325-07** Wednesday 11:00am – 12:00pm **Tutoring Center** 

Tuesday & Thursday 11:00am – 12:15pm **Online/ STEAM 325-07** 

**Required Textbook:** A Survey of Mathematics With Applications, 11<sup>th</sup> edition, by Angel, Abbot, and Runde, Pearson Education, 2021. Textbooks and/or courseware will be available through VitalSource digitally. Cost of the course materials: \$92.45, which has already been paid for with your tuition. The course materials will be available on the first day of class and you will be given the opportunity to opt-out of the e-book prior to the census day of the class. If you choose to opt out then you will not be able to submit any of your assignments, which will lead to not being successful in the class. You will receive an email with more information about the use of the course materials closer to the start of the semester. The homework and quizzes as well as the e-text and videos for this course are online at mymathlab through Brightspace.

**Textbook Purchasing Statement:** E-Book via MyLab Math in Brightspace - D2L (No Purchase Necessary, unless you Opt Out)

**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.

**Delivery of Course:** This course is a Hybrid course, meaning that you will be attending class Tuesdays **and** Thursdays every week from 2:00 – 3:50pm. You will also be responsible to watch some lectures online that will be found on D2L-Brightspace. Every lecture, whether in class or online will have a MyMathLab assignment.

Course requirements (including description of any special projects or assignments): Determination of Course Grade/Detailed Grading Formula (methods of evaluation to be employed to include a variety of means to evaluate student performance):

My Math Lab (MML) and/or in Class Homework	10%
My Math Lab (MML) and/or In Class Quiz	10%
Chapter Exam Online and/or In class (Each Exam is 16%)	64%
Final Exam In class	16%

Homework Assignments on MyLab Math: There is a homework assignment for each section covered in class or online lecture video. These are listed on the course outline beginning on page 4 of this syllabus. Twenty percent will be deducted from the score of a homework assignment if it is not finished by it is due date. Although the homework is online at mymathlab.com, 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 may serve as an aid for preparing for quizzes and exams, and as a place to begin when seeking assistance from your instructor, the math lab tutor, or from your peers. You have several attempts to answer a question correctly on the homework assignments.

Quizzes on MyLab Math: There are four quizzes which relate to the student learning outcomes. They are to be done on MyLab Math. Unlike the homework assignments, the quizzes must be taken in **one sitting**, they are timed, and the student only gets one attempt to answer each question. The quizzes can only be taken twice. If not taken by its due date 20% will be deducted. The higher of the two grades will be used to determine the student's quiz average on MyLab Math.

Four Chapter Exams & Final Exam: There are four exams which cover the chapters in the textbook. The exams are given on the dates listed on the Course Outline. The student has one hour and twenty minutes to take each exam. There are no make-up exams unless the student notifies the instructor in writing prior to the Exam and the professor determines if it is a legitimate reason. If you are permitted to make-up the exam, there is a deadline for completing the exam, and if the deadline is not met, the score for the exam will be recorded as a zero. You are only allowed to make-up one exam in the semester, given that any necessary paperwork is provided. If you have an online Exam scheduled, you will be using Lockdown Browser. You are responsible for finding an electronic device that supports lock browser, if yours does not. For your online exams you will be required to upload your work in a PDF format on Brightspace - D2L, within 30 minutes of completing your exam. You must show work to receive credit and all problems must be numbered. If no work is provided you will lose 15% of your Exam grade. Exams may not be retaken. However, if the grade on the Final Exam is higher than the lowest chapter exam grade, the Final Exam will replace your lowest Exam score. If and only if you have provided the work for all your Online Exams.

#### **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)

Grade I: Given unforeseen circumstances that result in the inability to successfully complete the course objectives, an I-Contract can 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

Attendance Policy: Students at COM are expected to attend and participate in every session of all classes for which they are registered. Regular attendance is a critical component to being successful in courses. College of the Mainland recognizes no excused absences other than those prescribed by law. There is a strong correlation between excessive absences and failing grades. It is extremely difficult to succeed in this course without having good attendance. Students with excessive absences will be referred to Student Services. Students should consult information provided in My Math Lab and the course calendar when it becomes necessary to miss a class in order to be prepared when they return to class. If you are absent, you are still responsible for the work that was to be finished by the next class.

**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.

**Student Learning Outcomes:** 

Student Learner Outcomes	SLO assessed via this assignment	SLO maps to Core Objective	Core Objective assessed via this assignment
1. Apply the language and notation of sets.	Quiz 1	Critical Thinking Skills (CT)	Question on Test 1
2. Determine the validity of an argument or statement and provide mathematical evidence.	Quiz 2		
3. Solve problems in mathematics of finance.	Quiz 6	Communication Skills (CS)	Question on Test 4
<ol> <li>Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.</li> </ol>	Quiz 3		
<ol><li>Interpret and analyze various representations of data.</li></ol>	Quiz 4	Empirical and Quantitative Skills (EQS)	Question on Test 3
6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real- world settings, including, but not limited to, personal finance, health literacy, and civic engagement.	Quiz 5		

**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 a quiz or test will receive a zero on that quiz or test and forfeit the chance to retake. In addition, he or she will be referred to the Office of Student Conduct for further disciplinary action. For the second offense, students will be given an "F" for the class. Please read the sections on *Standards of Student Conduct and Discipline and Penalties* in the on-line Student Handbook.

The scientific calculator TI-30XIIS is required for this course. Graphing calculators and unapproved calculators are not permitted when testing. Using a calculator for tests that is not approved will be considered cheating.

**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 the Department Chair, Mr. Leslie Richardson at (409)933-8329.

Course outline: (Due dates are the last day that the assignment can be submitted, it's suggested to be completed before)

Week	Dates	Math 1332-102H2	Due Dates By 11:59PM
1	Oct. 14-18	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	
		Syllabus	
		2.1 Set Concepts	10/17/24
		2.2 Subsets	10/17/24
		2.3 Venn Diagrams and Set Operations	10/20/24
		2.4 Venn Diagrams with Three Sets and Verification of Equality of Sets	10/20/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	
		2.5 Application of Sets	10/21/24
		Quiz 1 (Section 2.5)	10/21/24
		3.1 Statements and Logical Connectives	10/21/24
2	Oct. 21-25	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	10,21,21
2	Oct. 21-23	3.2 Truth Tables for Negation, Conjunction, and Disjunction	10/24/24
		3.3 Truth Tables for the Conditional and Biconditional	10/24/24
		3.4 Equivalent Statements	10/27/24
		-	10/21/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	10/00/04
		Exam 1 Review	10/28/24
		11.1 Empirical & Theoretical Probabilities	10/28/24
3	Oct. 28- Nov. 1	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	
		Exam 1(Chapter 2 & 3) in class on 10/29/24	10/29/24
		11.2 Odds	11/3/24
		11.4 Tree Diagrams	11/3/24
		11.5 OR and AND Problems	11/4/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	
		Quiz 2	11/4/24
		11.6 Conditional Probability	11/4/24
4	Nov. 4-8	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	
		Exam 2 Review in class on 11/5/24	11/5/24
		Exam 2 (11.1, 11.2, 11.4 - 11.6) in class on 11/7/24	11/7/24
		11.7 The Counting Principle and Permutations	11/8/24
		11.8 Combinations	11/8/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	
		11.9 Solving Probability Problems by Using Combinations	11/11/24
		Quiz 3	11/11/24
		12.2 Frequency Distributions and Statistical Graphs	11/11/24
5	Nov. 11-15	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	
		12.3 Measures of Central Tendency	11/15/24
		12.4 Measures of Dispersion	11/15/24
		Exam 3 Review	11/17/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	
		6.2 Formulas, 6.3 Applications of Algebra, 6.10 Functions and Their Graphs	11/18/24
		10.1 Percent	11/18/24
6	Nov. 18-22	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	
		Exam 3 in class on 11/19/24	11/19/24
		10.2 Personal Loans and Simple Interest	11/24/24
		10.3 Compound Interest	11/24/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	
		10.4 Installment Buying	11/25/24
7	Nov. 25-27	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	
,	1.07. 25 27	10.5 Buying a House with a Mortgage	11/27/24
		Quiz 4	11/27/24
		Exam 4 Review In Class 11/26/24	11/26/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	11/20/27
		Exam 4 (6.2 – 10.5) [Available from 11/26-11/27]	11/27/24
8	Dec. 2-6	Attend Face to Face Lectures and Complete MML Assignments by their Due Date	11/2//27
0	Dec. 2-0	Review for Final Exam in class 12/3/24	12/2/24
		Final Exam in class 12/5/24	12/3/24 12/5/24
		T THIAT EXAMENICULASS 12/3/24	12/3/24
		Watch the Online Lectures and Complete MML Assignments by their Due Date	

PLEASE NOTE: The syllabus is subject to change at the discretion of the instructor. Census Day – October 21, 2024

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 <a href="https://www.com.edu/student-services/docs/Student Handbook 2024-2025 v2.pdf">https://www.com.edu/student-services/docs/Student Handbook 2024-2025 v2.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.

**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 <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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.