

Contemporary Mathematics – Quantitative Reasoning Summer 2024

Instructor Information: Gabriela Peña, <u>gpena3@com.edu</u> Office: STEAM 325-07 Office Phone #: 409-933-8182 Google Voice #: 409-242-0281

Student hours and location: All office hours will be help virtually. Schedule your time via <u>https://calendly.com/gpena3</u> Tuesday 2-3pm Wednesday 1- 2pm & 7-8:45pm Thursday 11:30am-1:30pm

Required Textbook: <u>A Survey of Mathematics With Applications</u>, 11th edition, by Angel, Abbot, and Runde, Pearson Education, 2021. Textbooks and/or courseware will be available through VitalSource digitally. Cost of the course materials: \$82.20, **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.

Course requirements (including description of any special projects or assignments):

- 1. Four Chapter Tests
- 2. Comprehensive Final Exam
- 3. My Math Lab (MML) Online Assignments
- 4. Quizzes 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 Homework	10%
Quiz Average	10%
Chapter Exam (Each Exam is 16%)	64%
Final Exam	16%

Homework Assignments on MyLab Math: There is a homework assignment for each section covered in class. 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 finished by it is due. 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, or from your peers. The student has 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. The scores on these quizzes will be averaged in with the quiz grades on MyLab Math.

Four Chapter Exams 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. You will take your exam online using **Lockdown Browser**. You are responsible to find an electronic device that supports lock browser, if yours does not. 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. For your exams you will be required to upload your work in a **PDF format on Brightspace - D2L**, **immediately after taking the Exam.** All problems must be numbered, and you must show work to receive credit. If no work is provided for a question, you may lose points for that question. <u>Exams may not be retaken</u>. However, if the grade on the Final Exam is higher than the lowest chapter exam grade, <u>the Final Exam will replace your lowest Exam score</u>, if and only if the work has been provided for all previous 4 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

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

Homework & Quizzes have a 20% deduction if submitted after its original due date and before the final due date. There is no make-up allowed on exams unless previously approved by the instructor before the exam dates. Your Final Exam grade will not replace the lowest Exam grade if work has not been provided for all 4 Exams previously. **There is no Extra credit.**

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. For this online class, you are responsible for watching the video and using the video notes for each section. There is a

strong correlation between excessive absences and failing grades. If you do not make the time to watch these videos, it may lead to being unsuccessful in class. It is extremely difficult to succeed in this course without having good organizational skills and watch the videos and complete the assignments before their due date.

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
 Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems. 	Quiz 3		
 Interpret and analyze various representations of data. 	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		

Student Learning Outcomes:

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.

Week	Dates	Math 1332-102	Due Dates	
1 June 3-7		ONLY MATH 0306		
2	June 10	Syllabus-Welcome Video		
	June 10	2.1 Set Concepts	June 14	
	June 10	2.2 Subsets	June 14	
	June 10	2.3 Venn Diagrams and Set Operations	June 15	
	June 10	2.4 Venn Diagrams with Three Sets and Verification of Equality of Sets	June 15	
	June 10	2.5 Application of Sets	June 16	
	June 10	Quiz 1 (Section 2.5)	June 16	
3	June 17	3.1 Statements and Logical Connectives	June 21	
	June 17	3.2 Truth Tables for Negation, Conjunction, and Disjunction	June 21	
	June 17	3.3 Truth Tables for the Conditional and Biconditional	June 22	
	June 17	3.4 Equivalent Statements	June 22	
	June 17	Quiz 2 (Section 3.2, 3.3, 3.4)	June 23	
	June 17	Review Chapters 2 & 3	June 23	
	June 17	Exam 1: Chapters 2 & 3 [Available from June 23-24]	June 23-24	
4	June 24	11.1 Empirical & Theoretical Probabilities	June 29	
•	June 24	11.2 Odds	June 29	
	June 24	11.3 Expected Value	June 30	
5	July 1	11.4 Tree Diagrams	July 3	
5	July 1	11.5 OR and AND Problems	July 5	
	July 1	11.6 Conditional Probability	July 5	
	July 1	Review Chapter 11.2-11.6	July 6	
	July 1	Exam 2 $(11.1 - 11.6)$ [Available from July 7-8]	July 7-8	
6	July 8	11.7 The Counting Principle and Permutations	July 12	
0	July 8	11.8 Combinations	July 12 July 12	
	July 8	11.9 Solving Probability Problems by Using Combinations	July 12 July 13	
	July 8	Quiz 3 (Section 11.7 - 11.9)	July 13	
	July 8	11.10 Binomial Probability Formula	July 14	
	July 8	12.2 Frequency Distributions and Statistical Graphs	July 14 July 14	
7	July 15	Quiz 4 (Section 12.2)	July 19	
/	July 15 July 15	12.3 Measures of Central Tendency	July 19 July 19	
	July 15 July 15	12.5 Measures of Dispersion	July 19 July 20	
	July 15 July 15	Review Chapter $11.7 - 11.10 \& 12.2 - 12.4$	July 20	
	July 15 July 15	Exam 3 (11.7-11.10 & $12.2 - 12.4$) [Available from July 21-22]	July 21-22	
8	July 22	6.2 Formulas	July 27	
0		6.3 Applications of Algebra	July 27	
	July 22 July 22	6.10 Functions and Their Graphs	July 27 July 27	
	July 22	10.1 Percent	•	
	July 22 July 22		July 28 July 28	
	July 22	10.2 Personal Loans and Simple Interest 10.3 Compound Interest	•	
0	July 22	*	July 28	
9	July 29	Quiz 5 (Section 10.1, 10.2, 10.3, 6.10)	August 1	
	July 29	10.4 Installment Buying	August 1	
	July 29	10.5 Buying a House with a Mortgage	August 2	
	July 29	Quiz 6 (Section 10.2, 10.3, 10.4, 10.5)	August 2	
10	July 29	Review (6.2 – 10.5)	August 6	
10	August 4	Exam 4 (6.2 – 10.5) [Available from August 4-5]	August 4-5	
	August 5	Review for Final Exam	August 5	
DIFASE	August 5	Final Exam [Available from August 5-6]	August 5-6	

PLEASE NOTE: The syllabus is subject to change at the discretion of the instructor. Census Day – June 11, 2024 W-Day – July 30, 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 <u>https://www.com.edu/student-services/docs/Student_Handbook_2023-</u>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, Student Accessibility Services Coordinator Phone: 409-933-8919 Email: <u>AccessibilityServices@com.edu</u> 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 5-week session is July 1. The last date to withdraw for the 2nd 5-week session is August 2.

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 <u>https://www.com.edu/community-resource-center/</u>. 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 <u>deanofstudents@com.edu</u> or <u>communityresources@com.edu</u>.

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.