

## MATH 1332-150CL Contemporary Mathematics – Quantitative Reasoning SPRING 2023

### 11:00am - 12:20pm MW ICB Room 310

Instructor Information: Gabriela Peña, gpena3@com.edu

Office: **STEAM 325-07** 

Office Phone #: 409-933-8182 Leave a Message

Google Voice #: 409-242-0281

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

Monday & Wednesday 1 - 2pm & 4 - 5pm **STEAM 325-07** Tuesday 3:30 - 5pm **STEAM 325-07** 

Tuesday & Thursday 8 – 9am **Online** 

**Required Textbook:** A Survey of Mathematics With Applications, 11<sup>th</sup> edition, by Angel, Abbot, and Runde, Pearson Education, 2021. The homework and quizzes as well as the e-text and videos for this course are online at mymathlab.com.

**Textbook Purchasing Statement:** E-Book via MyLab Math in Brightspace - D2L (**No Purchase Necessary**)

**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 15%)	60%
Final Exam	20%

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 before 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. 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 one lowest chapter exam grade. The final exam will replace your lowest test score.

#### **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**:

Week	Dates Dates	Math 1332-150	<b>Due Dates</b>
1	January 18	Meet with MATH 0306 during MATH 1332 Time	
2	January 23, 25	Meet with MATH 0306 during MATH 1332 Time	
3	Jan 30, Feb 1	Syllabus 2.1 Set Concepts 2.2 Subsets	All Week 3 assignments are due 2/6/23 by 11:59PM
4	February 6, 8	2.3 Venn Diagrams and Set Operations 2.4 Venn Diagrams with Three Sets and Verification of Equality of Sets	All Week 4 assignments are due 2/13/23 by 11:59PM
5	February 13, 15	2.5 Application of Sets  Quiz 1 (Section 2.5)  3.1 Statements and Logical Connectives  3.2 Truth Tables for Negation, Conjunction, and Disjunction	All Week 5 assignments are due 2/20/23 by 11:59PM
6	February 20, 22	3.3 Truth Tables for the Conditional and Biconditional 3.4 Equivalent Statements  Quiz 2 (Section 3.2, 3.3, 3.4)  Review Chapters 2 & 3 (Extra Credit)	All Week 6 assignments are due 2/27/23by 11:59PM
7	Feb 27, Mar 1	Review Chapters 2 & 3 (In class) 11.1 Empirical & Theoretical Probabilities Exam 1: Chapters 2 & 3 (March 1, 2023)	All Week 7 assignments are due 3/6//23 by 11:59PM
8	March 6, 8	11.2 Odds 11.3 Expected Value 11.4 Tree Diagrams 11.5 OR and AND Problems Review Chapter 11.2-11.6 (Extra Credit)	All Week 8 assignments are due 3/20/23 by 11:59PM
9	March 20, 22	11.6 Conditional Probability Review Chapter 11.2-11.6 (In class) Exam 2 (11.1 – 11.6) (March 22, 2023)	All Week 9 assignments are due 3/27/23 by 11:59PM
10	March 27, 29	11.7 The Counting Principle and Permutations 11.8 Combinations	All Week 10 assignments are due 4/3/23 by 11:59PM
11	April 3, 5	11.9 Solving Probability Problems by Using Combinations Quiz 3 (Section 11.7 - 11.9) 11.10 Binomial Probability Formula 12.2 Frequency Distributions and Statistical Graphs	All Week 11 assignments are due 4/10/23 by 11:59PM
12	April 10, 12	Quiz 4 (Section 12.2) 12.3 Measures of Central Tendency 12.4 Measures of Dispersion Review Chapter 11.7 – 11.10 & 12.2 – 12.4	All Week 12 assignments are due 4/17/23 by 11:59PM
13	April 17, 19	Exam 3 (11.7-11.10 & 12.2 – 12.4) (April 17, 2023) 6.2 Formulas	All Week 13 assignments are due 4/24/23 by 11:59PM
14	April 24, 26	<ul><li>6.3 Applications of Algebra</li><li>6.10 Functions and Their Graphs</li><li>10.1 Percent</li><li>10.2 Personal Loans and Simple Interest</li></ul>	All Week 14 assignments are due 5/1/23 by 11:59PM
15	May 1, 3 Meet for MATH 1332 from 9:30am- 12:20pm	10.2 Personal Loans and Simple Interest 10.3 Compound Interest Quiz 5 (Section 10.1, 10.2, 10.3, 6.10) 10.4 Installment Buying 10.5 Buying a House with a Mortgage Quiz 6 (Section 10.2, 10.3, 10.4, 10.5)	All Week 15 assignments are due 5/8/23 by 11:59PM
16	May 8, 10 Meet for MATH 1332 from 9:30am- 12:20pm	Review (6.2 – 10.5) Exam 4 (6.2 – 10.5) (May 8, 2023) Review for Final Exam in class May 8 Final Exam (May 10, 2023)	All Week 16 assignments are due 5/9/23

**PLEASE NOTE:** The syllabus is subject to change at the discretion of the instructor. Census Day – February 2, 2023

#### **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="Student Handbook 2022-2023 v4.pdf">Student Handbook 2022-2023 v4.pdf</a> (com.edu). 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 <a href="mailto:klachney@com.edu">klachney@com.edu</a>. 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 March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2<sup>nd</sup> 8-week session is May 3.

**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 <a href="maintenance-deanofs-tudents@com.edu">deanofs-tudents@com.edu</a> or <a href="maintenance-center">communityresources@com.edu</a>.

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