

# MATH 1332-150CL Contemporary Mathematics Spring 2024

MW 11:00am – 12:20pm

ICB #23, Room 204

Instructor Information: Ms. Manukyan Email: <u>amanukyan@com.edu</u>

Student hours and location: ICB, Room 204 Friday, 10:50am – 11:50am

## **Required Textbook/Materials:**

- 1. The textbook used in this course is: A Survey of Mathematics With Applications, 11th edition, by Angel, Abbot, and Runde, Pearson Education, 2017. The e-text is provided within MyMath Lab (No purchase needed).
- Access to a desktop computer or laptop and internet service outside of class are required to gain access to the required online assignments. Computers and internet access are available on campus during specified times. Some devices like iPads/tablets, Chromebooks, and cellphones present problems with gaining access to online MyLab Math assignments. Note: MyLab Math generally does not like Safari Download Chrome or Firefox if you

<u>Note</u>: MyLab Math generally does not like Safari. Download Chrome or Firefox if you have an Apple computer.

- 3. *MyLab Math (MLM)* software is required for this class.
- 4. A graphing calculator is needed for this course. A Texas Instrument TI-83 Plus or TI-84 Plus is recommended. A TI-89 or higher cannot be used in this course.
- 5. A free PDF converter app or a printer that can scan documents is needed to submit some assignments/scratch work, etc.

## **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. Prerequisites/co-requisites: Prerequisite of TSI Math 350 or <u>MATH 0306/0308</u> grade "C" or better or co-requisite of <u>MATH 0306/0308</u>. Intended for NON-STEM (Science, Technology, Engineering, and Mathematics) majors.

## **Course requirements:**

Four regular Tests

Comprehensive final exam Online Homework Assignments (My Math Lab/Brightspace) Online Quizzes (My Math Lab/Brightspace)

You can **access D2L Brightspace at COM** at <u>http://com.brightspace.com</u>. You can also access D2L by going to COM's homepage at <u>http://www.com.edu</u>, scroll down to the bottom of the page, and click on the button for D2L Brightspace. MLM assignments include homework and several online quizzes, and the deadlines for each are provided within MLM.

#### **Homework Assignments**

There is an assigned homework for each section to be completed online using MyMathLab, MML. You have unlimited tries to get every question right. The due dates are shown next to the assignments in the Assignments folder in MML. Twenty percent will be deducted from the score of a homework assignment if it is not finished by it its due date. *Within MyLab Math homework:* 

1. Enter your answers then click the CHECK ANSWER button.

- 2. If needed, click the SIMILAR EXERCISE button to redo the exercise. Note: You should strive to score at least 80% before moving on to the next section.
- 3. 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 your instructor.
- 4. Click on the next question to continue.

Please note that personal computer problems do not excuse the requirement to complete all coursework in a timely and satisfactory manner. If at any time you experience technical problems with your *MyLab Math* account, please contact Pearson's Customer Technical Support.

**Quizzes on MyLab Math:** There are six 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. 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.

**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%

#### **Grading Formula:**

The course grade will be determined by the following formula:

Final Average =	64% Chapter Exam Average + 16% Final Exam
	+ 10% Homework Average + 10% Quiz Average

**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

Your individual assignment grades and overall course average will be located within your MLM Course Gradebook, NOT the Brightspace's gradebook.

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

#### Late Work

All homework assignments and quizzes are done online using MML. Due dates are shown next to the assignments in the Assignments folder in MML. There will be 3 more days allowed to complete homework assignments or take the quiz, but if not taken by its due date, 20% will be deducted.

## **Make-up policy**

If you are unable to make a scheduled exam, you will be allowed to make up the exam outside of class provided you notify the instructor prior to the exam and have a legitimate reason for the absence. All makeup exams must be taken in the Testing Center by appointment. This course most likely will not have any extra credit, so practice, study adequately, learn the information, and meet deadlines for the assignments you do have. **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. Students should consult with their instructors when it becomes necessary to miss a class. Students are required to attend all classes. College of the Mainland recognizes no excused absences other than those prescribed by law.

You cannot make-up classes, and it is your responsibility to be punctual and regular at attending class. If you find that you are having trouble arriving on time, adjust your schedule accordingly. Tardiness or leaving early can cause you to be counted absent.

Also, please be advised that it is <u>vour</u> responsibility to get caught up when a class is missed. **Remember:** EACH DAY OF THE WEEK, EXCLUDING FRIDAYS, THAT WE MEET COUNTS AS TWO CLASS PERIODS. EACH FRIDAY COUNTS AS ONE CLASS PERIOD. *If some of the homework assignments have not been <u>attempted before</u> <i>Friday, January 19, an Early Alert referral will be submitted.* 

**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 email account used to register for MML must be your COM email.

Student Learner Outcomes		SLOs Assessment	Maps to Core Objective	ctive Core Objective Assessment, when assessed	
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	
4.	Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.	Quiz 3			
5.	Interpret and analyze various representations of data.	Quiz 4	Empirical and Quantitative Skills (EQS)	Question on Test 3	

#### **Table Mapping SLO's and Core Objectives**

6. Demonstrate the ability to	Quiz 5	
choose and analyze		
mathematical models to		
solve problems from real-		
world settings, including,		
but not limited to, personal		
finance, health literacy, and		
civic engagement.		

**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 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.

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

## **Classroom Conduct Policy**

Arriving on time, staying the entire class period, eliminating distractions like cell phones, using appropriate language (no cursing), respecting your classmates and the instructor, and cleaning up after yourself are all expectations for students in the classroom. Please abide by these expectations so that the class setting is enjoyable for all students. Regarding cell phones, they should be turned off or set on airplane mode and in your backpack/purse (not on your desk). It is extremely disruptive to the learning environment, so you will be asked to leave if it is a continuous problem. Infractions may result in an automatic withdrawal from the class. Cell phones <u>cannot</u> be used during tests or quizzes and refer to testing policies for additional information. Please notify me before class if you have an emergency that requires you to answer your phone during class. Take an emergency phone call outside of the classroom.

**Course outline:** This course loans the first 2 weeks to Math 0306.150. Time from the last 2 weeks of that course is returned to Math 1332.150, so that the total time for each course is correct.

This is a tentative schedule. As the semester progresses, adjustments may be needed.WeekDaySections CoveredDue Date

	1	1	1
3	1-29	Introduction	
		2.1 Set Concepts	2-2
		2.2 Subsets (start)	
	1-31	2.2 Subsets (finish)	2-4
	1 51	2.3 Venn Diagrams and Set Operations	2-4
		2.5 Venii Diagrams and Set Operations	2-4
4	2-5	2.4 Vonn Diagrams with Three Sets and	2-9
4	2-3	2.4 Venn Diagrams with Three Sets and	
		Verification of Equality of Sets	2-9
		2.5 Application of Sets (start)	
	0.7		0.11
	2-7	2.5 Application of Sets (finish)	2-11
		Quiz 1 (Section 2.5, SLO 1)	
		-will not appear until unlocked	
		(70% in each assignment is required to unlock)	2-15
		3.1 Statements and Logical Connectives	2-11
5	2-12	3.2 Truth Tables for Negation, Conjunction,	2-16
		and Disjunction	
		3.3 Truth Tables for the Conditional	2-16
		and Biconditional	
	2-14	3.4 Equivalent Statements	2-18
		Quiz 2 (Section 3.2, 3.3, 3.4, SLO 2) -will not	2-22
		appear until unlocked	
		(70% in each assignment is required to unlock)	
		11.1 Empirical and Theoretical Probabilities	2-18
			2 10
6	2-19	Test 1 Review	2-19
0	2-19		2-17
	2-21	TEST 1 (CH. 2&3)	
	2-21	11011(011.200)	
7	2.26	11.2 0.11	2 21
7	2-26	11.2 Odds	2-21
		11.3 Expected Value (start)	3-1

	2-28	11.3 Expected Value (finish)	3-3
	2-20	11.4 Tree Diagrams	3-3
8	3-4	11.5 OR and AND Problems	3-8
	3-6	<ul><li>11.6 Conditional Probability</li><li>11.7 The Counting Principle and Permutations (start)</li></ul>	3-10
	3-11	SPRING BREAK	
9	3-18	Test 2 Review	3-20
	3-20	Test 2 (11.1 – 11.6)	
10	3-25	<ul><li>11.7 The Counting Principle and Permutations (finish)</li><li>11.8 Combinations (start)</li></ul>	
	3-27	11.8 Combinations (finish)	3-29
		11.9 Solving Probability Problems by Using Combinations	3-31
		Quiz 3 (Section 11.1, 11.5, 11.6, 11.7, 11.8,	3-31
		11.9, SLO 4) -will not appear until unlocked (70% in each assignment is required to unlock)	4-4
11	4-1	12.2 Frequency Distributions and Statistical Graphs	
		Quiz 4 (Section 12.2, SLO 5)	4-5
		<ul> <li>-will not appear until unlocked</li> <li>(70% in each assignment is required to unlock)</li> <li>12.3 Measures of Central Tendency (start)</li> </ul>	4-9
	4-3	12.3 Measures of Central Tendency (finish)	
		12.4 Measures of Dispersion	4-7
			4-7
12	4-8	Test 3 Review	
	4-10	Test 3 (11.7 – 12.4)	4-10

	I		1
13	4-15	6.2 Formulas	
		6.3 Applications of Algebra	
		6.10 Functions and Their Graphs	4-19
		····	4-19
	4-17	10.1 Percent	4-19
		10.2 Personal Loans and Simple Interest	
			4-21
14	4-22	10.3 Compound Interest	4-21
		Quiz 5 (Section 10.1, 10.2, 10.3, 6.10, SLO 6)	
		-will not appear until unlocked	4-26
		(70% in each assignment is required to unlock)	4-30
		(1070 in cach assignment is required to unlock)	1.50
	4-24	10.4 Installment Buying	
	121	10.1 Instantion Duying	
			4-28
15	4-29	10.5 Buying a House with a Mortgage	1 20
15	12)	Quiz 6 (Section 10.2, 10.3, 10.4, 10.5, SLO 3)	
		-will not appear until unlocked	5-3
		(70% in each assignment is required to unlock)	5-7
		Test 4 Review	57
	5-1	Test 4 / Final Review	4-28
	51	Test 4 $(6.2 - 10.5)$	4 20
		1031 + (0.2 - 10.5)	5-1
16	5-6	Final Review	J-1
10	5-0		
	5-8	THE FINAL	5-8
	5-0		5-0

PLEASE NOTE: 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 <u>https://www.com.edu/student-services/docs/Student\_Handbook\_2023-2024\_v2.pdf</u>. *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 <u>klachney@com.edu</u>. 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 February 28. The last date to withdraw from the 16-week session is **April 22**. The last date to withdraw for the 2<sup>nd</sup> 8-week session is May 1.

**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>.