

## MATH 1314-152CL College Algebra (020) Fall 2023

MW	9:30am – 10:50am	ICB Room 303
F	8:00am = 8:50am	ICB Room 303

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

**Student hours and location:** ICB, Room 303 Friday, 9:00am – 10:00am

#### **Required Textbook/Materials:**

- 1. The textbook used in this course is: College Algebra, by Beecher, Penna, Bittinger, fifth edition, published by Pearson. The e-text is provided within MyMath Lab (**No purchase needed**).
- 2. 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.*

<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:**

College Algebra is an in-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices.

#### **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. Once you gain access to *MyLab Math* within your Brightspace course, you are required to successfully complete an online orientation within MLM before the online assignments will appear. MLM assignments include homework and several online quizzes, and the deadlines for each are provided within MLM. The online homework includes homework from each section and a final exam review. If you opted out of *MyLab Math*, your recorded *MyLab Math* homework and online quiz grades will be zeros.

#### **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.

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 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. 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 15%)	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 0315 homework assignments have not been <u>attempted before</u> Friday, September 1<sup>st</sup>, 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.

## **General Education Core Objectives**

This course will address the following core objectives:

- Critical Thinking Skills: to include creative thinking, innovation, inquiry, analysis, evaluation and synthesis of information;
- Communication Skills: to include effective development, interpretation, and expression of ideas through written, oral and visual communication;
- Empirical and Quantitative Skill: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Student Learner Outcomes	Maps to Core Objective	Assessed via this assignment
<ol> <li>Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.</li> </ol>		
2. Recognize and apply polynomial, rational, exponential and logarithmic functions and solve related equations.	Critical Thinking Skills (CT)	2 application problems on Exam 3

## Table Mapping SLO's and Core Objectives

3.	Apply graphing techniques.	Communication Skills (CB)	Graphing question on Exam 1
4.	Evaluate all roots (zeros) of higher degree polynomials and rational functions.		
5.	Recognize, solve and apply systems of linear equations using matrices.	Empirical and Quantitate Skills (EQS)	2 application problems on Exam 4

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.

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

#### **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 **cannot** 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:

Tentative S	Schedule		
Week	Assignment-due date		
1	MyLab Math Orientation – 90% 1	required to gain access to homework.	
Aug. 28-	1.5 Operations with Variables &		Aug. 30
Sept. 3			Aug. 30
-	<b>c</b> 1		Aug. 30 1
	2.4 Solving Word Problems-		Sept. 1
	2.6 Linear Inequalities		Sept. 1
2	Quiz 1: Sections 1.5, 1.6, 2.1, 2.3	& 2.4	Sept. 3-6
Sept. 4-10	2.3 Absolute Value Equations		Sept. 6
	2.8 Absolute Value Inequalities		Sept. 6
3	Review for Test 1		Sept. 11
Sept. 11-17	Test 1: 1.5, 1.6, & Chapter 2 –	1 <sup>st</sup> class period	
	Quiz 2: Sections 3.1-3.3		Sept. 8-13
	4.1 Systems of Linear Equations		Sept. 15
4	3.1 Graphing Linear Equations		Sept.15
Sept. 18-24	243.2 Slope of a LineSet		Sept. 18
			Sept. 18
	4.3 Applications of Systems of Equations		Sept. 20
	Review for Test 2		Sept 22
	1.4 Rules of Exponents (exclude scientific notation)		Sept. 27
			Sept. 29
			Sept. 30
	<i>Quiz 3: Sections 1.4, 5.1, 5.3 – Sections 1.4, 5.1, 5.1, 5.3 – Sections 1.4, 5.1, 5.1, 5.1, 5.1, 5.1, 5.1, 5.1, 5.1</i>	ept. 19-24	
5	Test 2: Chapters 3, 41st class period on Sept. 25		<mark>d on Sept. 2</mark> 5
Sept. 25-30	5.4 GCF, Factor by Grouping		Sept. 25
	5.5 Factoring Trinomials		Sept. 25
	5.6 Special Case Factoring		Sept. 27
	5.8 Solving Equations by Factoria		Sept. 27
	6.1 Rational Expressions, Simplif	Fying, Multiply, Divide	Sept. 29
	Review for Test 3		
6	Test 3: 1.4 & Chapters 5	Math 1314	
Oct. 2-8	1 <sup>st</sup> class period on Oct. 16	1.1 Introduction to Graphing	<b>Oct.</b> 4
	6.1 Rational Expressions,	1.2 Functions and Graphs	<b>Oct.</b> 4
	Simplifying, Multiply, Divide-	1.3 Linear Functions, Slope & Applica	ations Oct. 8
	Oct. 4		
	6.2 Add/Subtract Rational		
	Expressions- Oct. 6		

7	M /1 0215		
7 Oct 0 15	Math 0315	Math 1314	
Oct. 9-15	3.6 Graphing Functions-Oct. 9	1.4 Equations of Lines	Oct. 9
		1.5 Linear Equations, Functions, Zeros, Ap	Oct. 9
		<i>Quiz 1 (Sections 1.1-1.5)</i> 0	ct. 10-14
		2.1 Increasing, Decreasing, and Piecewise I	
		2.1 mercasing, Decreasing, and Freewise I	<i>Oct.</i> 15
8	Math 0315	Math 1314	000 15
Oct. 16-22	7.2 Radical Expressions and	2.2 The Algebra of Functions	Oct. 18
2000 10 22	Functions (square root only)-	2.3 The Composition of Functions	Oct. 20
	Oct. 16	2.5 Transformations	Oct. 20
	7.3 Simplifying, Adding and	Test 1 Review	
	Subtracting Radicals-Oct. 16		
9	Math 0315	Math 1314	
Oct. 23-29	7.4 Multiplying, Dividing		
	Radicals-Oct. 23	Test 1 (Chapters 1&2)	<b>Oct. 2</b> 3
	<i>Quiz 4: Sections 7.2, 7.3, 7.4 –</i>		
	Oct. 24-26		
10	Math 0315	Math 1314	
Oct. 30-	7.6 Complex Numbers (exclude	3.2 Quadratic Equations, Functions, Zeros,	Models
Nov. 5	division)-Oct. 30		Oct. 30
		3.3 Graphs of Quadratic Functions	Oct. 30
		4.1 Polynomial Functions	Oct. 30
		4.2 Graphing Polynomial Functions	Nov. 1
		4.3 Remainder and Factor Theorems	<i>Nov. 3</i>
		4.5 Rational Functions	<i>Nov. 3</i>
		A C Delemental and Detional Location 11	No. F
		4.6 Polynomial and Rational Inequalities	Nov. 5
11	Math 0215	Quiz 2 (Sections 3.2, 4.3 & 4.5) Nov.	Nov. 5 5-Nov 8
11 Nov. 6.12	Math 0315 Review for Test 4	<b>Quiz 2 (Sections 3.2, 4.3 &amp; 4.5)</b> Nov. Math 1314	5-Nov 8
11 Nov. 6-12	<i>Math 0315</i> Review for Test 4	Quiz 2 (Sections 3.2, 4.3 & 4.5)Nov.Math 13144.6 Polynomial and Rational Inequalities-N	5-Nov 8
		<b>Quiz 2 (Sections 3.2, 4.3 &amp; 4.5)</b> Nov. Math 1314	5-Nov 8
Nov. 6-12	Review for Test 4	Quiz 2 (Sections 3.2, 4.3 & 4.5)Nov.Math 13144.6 Polynomial and Rational Inequalities-NTest 2 Review	5-Nov 8
Nov. 6-12	Review for Test 4 Math 0315	Quiz 2 (Sections 3.2, 4.3 & 4.5)Nov.Math 13144.6 Polynomial and Rational Inequalities-NTest 2 ReviewMath 1314	5-Nov 8 Tov. 7
Nov. 6-12	Review for Test 4	Quiz 2 (Sections 3.2, 4.3 & 4.5)Nov.Math 13144.6 Polynomial and Rational Inequalities-NTest 2 Review	5-Nov 8

		5.2 Exponential Functions and GraphsNov. 155.3 Logarithmic Functions and GraphsNov. 15Quiz 3 (Sections 5.1-5.3)Nov. 17-19	
13 Nov. 20-26	Math 0315 Comprehensive Final Exam Review Comprehensive Final Exam <sup>1st</sup> class period, Nov. 8	Math 13145.4 Properties of Logarithmic FunctionsNov. 205.5 Solving Exponential & Logarithmic Eqs Nov. 205.6 ApplicationsNov. 22Test 3 Review	
14		Math 1314	
Nov. 27-		Test 3: Chapter 5 Nov. 27	
Dec. 3		6.1 Systems of Equations in Two Variables-Nov. 29	
		6.3 Matrices and Systems of EquationsNov. 306.3 Matrices and Systems of EquationsNov. 306.2 Systems of Equations in Three VariablesNov 27	
15		Math 1314	
Dec. 4-10		6.2 Systems of Equations in Three VariablesDec. 46.4 Matrix OperationsDec. 6Test 4 Review	
		Quiz 4 (Sections 6.1-6.4)Dec. 6-Dec. 9Review for Comprehensive Final Exam	
16		Math 1314	
Dec. 11-13		Test 4 Dec. 6	
		Review for Comprehensive Final Exam	
		Comprehensive Final Exam 2-hr exam, Dec. 13	
		Class ends on Dec. 13	

**PLEASE NOTE:** The syllabus is subject to change at the discretion of the instructor. Census Day – September 13, 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 <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 October 11. The last date to withdraw from the 16-week session is November 28. The last date to withdraw for the 2<sup>nd</sup> 8-week session is December 7.

**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>.