

## Math 1314.117 H1 Math 1314.617 H1

## College Algebra

## Spring 2025 8:00am – 10:50am, T & Th ICB 301

Instructor Information: Alan Bigos, abigos@com.edu, 409-933-8327

**Student hours and location:** 325-16 Steam

M&W: T&Th: F: F:

**Required Textbook/Materials:** The textbook used in this course is: College Algebra, by Beecher, Penna, Bittinger, fifth edition, published by Pearson. A graphing calculator is needed for this course. A Texas Instruments TI 83 Plus or TI 84 Plus is recommended. A TI 89 or higher cannot be used in this course. You will need access to the internet to gain access to course materials using the MML (MyMathLab) software. If you do not have your own internet access, you can get access on campus in the Library and the Tutoring Center, ICB 109.

**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:**

#### **Online Homework**

The homework assignments appear in My Math Lab, which is accessed through Brightspace. Although the homework is online, you should write out your work and put it in your notebook so you can study from it later. Remember, the point of doing homework is to prepare yourself for tests, so try and be as caught up as possible before test days. All assignments must be completed by midnight of the indicated deadline for full credit. Whether the topics are covered in-class or strictly online, you should try and complete the homework assignments on their scheduled days (not the due dates). The due dates already have a built-in extension, so do not ask for an additional one. You can continue to work on assignments after these deadlines for reduced

credit. You have unlimited tries (up to the end of course deadline) to get every question right. **To access past due assignments, type in "late".** 

#### MyMathLab Quizzes

There are four timed quizzes which relate to the student learning outcomes. Quizzes appear in My Math Lab, which is accessed through Brightspace. You should complete the related homework assignments before attempting a quiz. Quizzes may be taken up to 2 times. Your first attempt must be taken by the stated deadline, or it will be recorded as a zero. To unlock a second attempt, you must score at least 80% on each of the related homework assignments. Second attempts can be made up to the end of the course deadline.

#### **Tests**

Tests are where you demonstrate your proficiency in the material. This means using the methods presented in class and arriving at the correct answers in the designated time frame.

#### In-Class Tests:

The in-class Tests are written exams, which require complete, well-reasoned solutions written in detail; this means you must show all steps and proper work, or you will not be given credit for an answer. During Testing situations, make sure that all unnecessary items are put away. No backpacks or books on the desks. Make sure the proctor has a clear line of sight. Spread out. When possible, one student per table.

#### Online Tests:

Test 2 is online and will have a 2-day window to be completed. It is timed. In addition, you must upload a .pdf copy of your scrap work to Brightspace within 15 minutes of completing your online test. Failure to do so will result in a 20-point penalty to your raw score. Your scrap work will be reviewed for possible additional partial credit.

You will be given an opportunity to practice scanning and uploading your work prior to taking an online test.

### **Final Exam**

The Final Exam will be a comprehensive multiple-choice exam. You should still organize your thoughts and show (on scratch paper) all steps needed to work the problems correctly. Standard testing rules still apply.

#### **Accessing MyMathLab**

1. Log into Brightspace

- a. Click on the My Math Lab link for the appropriate class
- b. Click on HOMEWORK button and then the homework assignment you wish to do.
- 2. Use the "Show Me How" aids when needed and complete the homework assignment.
- 3. Enter your answers then click the CHECK ANSWER button.
- 4. If needed, click the SIMILAR EXERCISE button to redo the exercise. Note: You should score at least 80% before moving on to the next section.
- 5. 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.
- 6. Click on the next question to continue.

If your score does not save properly, send me an email indicating the specific question and section number with a picture of your written work attached.

#### **Class Participation**

To maximize learning, students must be actively engaged in the classroom. Staring at the board doesn't cut it. You need to be listening to the discussion, taking notes, asking questions, and helping to maintain a learning atmosphere. Some specific behaviors that we are trying to avoid are "tuning out", not taking notes, and playing with your phone. When you are in class but not participating, you are communicating to the other students that they are wasting their time. That means that you are not only hurting yourself but others as well.

#### **Cancelled Classes**

Should class meetings be cancelled for unexpected circumstances, students should treat the planned assignments as online assignments.

#### **Determination of Course Grade/Detailed Grading Formula:**

#### **Grading Scale**

The following weighting system will be used to determine your overall average.

MyMathLab Homework	10%
MyMathLab Quizzes	10%
Tests	64%
<b>Comprehensive Final Exam</b>	16%

Your letter grade will be determined by your overall average using the following 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 or Fn: 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.

**Grade W:** If you drop the class after census day, your official grade will be W, regardless of how much of the coursework has been completed. Keep in mind that if you drop a class that is linked to another, you will be dropped from both.

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

Each class meeting is a unique experience involving interaction with other students and cannot be recreated. In-class participation cannot be made up. You are still responsible for what was covered. If you are unable to attend class, you will need to talk with another student or meet with the instructor (in person or virtually) outside of class. Obviously, not everyone will be able to have perfect attendance, for whatever reason. Just be aware that if you are not in the classroom, additional effort will be needed to stay caught up. All work other than the final must be completed by the day before the scheduled Final. Students will be allowed to substitute 1 low test score with their Final Exam score. **There are no retakes.** 

Homework Assignments: You may continue to work on homework assignments after the initial deadline. Problems from regular homework assignments completed after the deadline will have their score decreased by 20%. You will need to type in the password "late" to gain access to homework problems after the deadlines.

Quizzes: If you do not complete a quiz by the stated deadline, you will only be allowed one attempt for that quiz.

Tests: If you are unable to make an in-person scheduled exam, you may be allowed to make up opportunity outside of class provided you notify the instructor prior to the exam and have a

legitimate reason for the absence, and it can be completed within a reasonable timeframe. All makeup exams must be taken in the Testing Center by appointment.

#### Extra Credit

Students who complete the first graded MML assignment on time will have 2 points added to their score. There is no other extra credit.

The end of course deadline for completing all online work (other than the final review) is March 3.

#### **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 regularly attend class. It is in your best interest to attend all classes, be punctual, and not leave early. It is extremely difficult to succeed in this course without having good attendance.

To receive credit for attendance you must be in the classroom for the majority of the designated time and sign the attendance sheet for the appropriate time slot. Being in the tutoring or testing area does not count as being in class. Remember, it is your responsibility to sign in. You are still responsible for all the material covered whether you are in class or not.

If you arrive late, please quickly and quietly take your seat and get set up so that you can begin participating in 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. Class announcements which do not include personal information may be shared via Brightspace/My Math Lab. You might get an immediate reply, but some responses may take up to 2 business days. Do not send messages using Teams as I do not check it on a regular basis.

Table Mapping SLO's and Core Objectives

Student Learner Outcomes		SLO assessed via this assignment	SLO maps to Core Objective	Core Objective assessed via this assignment
1.	Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	Exam 1		
2.	Recognize and apply polynomial, rational, exponential and logarithmic functions and solve related equations.	Exam 2, Exam 3	Critical Thinking Skills (CT)	2 application problems on Exam 3
3.	Apply graphing techniques.	Quiz 3	Communication Skills (CS)	Graphing question on Exam 1
4.	Evaluate all roots (zeros) of higher degree polynomials and rational functions.	Quiz 2		
5.	Recognize, solve and apply systems of linear equations using matrices.	Exam 4	Empirical and Quantitative Skills (EQS)	2 application problems on Exam 4

**Academic Dishonesty:** Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate disciplinary action.

**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 Leslie Richardson at 409-933-8329 or lrichardson@com.edu.

# Course Outline: This is subject to change.

Week	Date	Sections	Due
1	January 13-17	In Class:	January
		1.1 Introduction to Graphing	18
		1.2 Functions and graphs	20
		1.3 Linear Functions	20
		1.4 Equations of Lines	20
		Watch Online Video:	
		1.5 Linear Functions, Zeros	21
		Quiz 1	21
2	January 21-24	Watch Online Video:	
	·	2.1 Increasing, Decreasing,	23
		Piece-wise Functions	
		In Class:	
		2.2 Algebra of Functions	28
		2.3 Composition of Functions	28
		2.5 Transformations	28
		Exam 1 Review	30
3	January 27-31	In Class:	
	J	Exam 1: Chapters 1, 2	<b>3</b> 1
			February
		3.3 Graphs of Quadratic Functions	3
		4.1 Polynomial Functions	4
		4.2 Graphing Poly Functions	4
		Watch Online Video:	
		3.2 Quadratic Functions	3
4	February 3-7	In Class:	
		4.3 Remainder, Factor Theorems	9
		4.5 Rational Functions	9
		Exam 2 Review	9
		5.1 Inverse Functions	15
		Watch Online Video:	
		4.6 Polynomial Inequalities	9
		Quiz 2	9
5	February 10-14	Online:	
	1010001	Exam 2: Chapters 3, 4	
		Quiz 3	10-11 15
		In Class:	
		5.2 Exponential Functions	15
		5.3 Logarithmic Functions	15
		1	
		<ul><li>5.4 Properties of Log Functions</li><li>5.5 Exponential, Log Equations</li></ul>	18 18

6	February 17-21	In Class:	
		5.6 Applications	19
		Exam 3 Review	19
		Exam 3: Chapter 5	<mark>2</mark> 0
		Watch Online Video:	
		6.1 Systems in 2 Variables	25
		-	
7	February 24-28	In Class:	March
		6.3 Solving Systems in 3 Variables	1
		With Matrices	
		6.2 Applications	3
		Online:	
		Quiz 4	3
		Exam 4 Review	3
8	March 3-7	In Class:	
		Exam 4: Chapter 6	4
		<mark>Final Exam</mark>	6
		Online:	
		Final Exam Review	5

\*\*\*\* W-day: February 26th \*\*\*\*

#### **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,

**2025** 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: 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 1<sup>st</sup> 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2<sup>nd</sup> 8-week session is April 30.

**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-deanoft-de

## **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.