

### Department of Mathematics

**Syllabus for Math 1314-222CL (3437)** 

Spring 2022 College Algebra

Professor: Abbas Masum E-mail: amasum@com.edu

**Telephone:** (409) 933-8329

Class time: 7:30pm-8:50pm, MW STEAM Building, Room 119

### **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. I will make every effort to respond to your email within 24 hours of receiving it.

**Student hours:** MML and practicing the required concepts

**Office Hours:** 

Monday	Wednesday
5:00PM-5:30PM	5:00PM- 5:30PM

### 1. Required Textbook

The textbook used in this course is: College Algebra, by Beecher, Penna, Bittinger, fifth edition, published by Pearson.

### 2. Textbook Purchase

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.

### 3. 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.

### 4. Technology

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.

# 5. Course Requirements

### **Homework Assignments**

There is an assigned homework for each section to be completed online using MyMathLab.

The course ID: masum58197

### **Quizzes and Exams**

There are four quizzes, four chapters exams and a comprehensive final exam. All of the quizzes and exams are to be done online using MyMathlab. You can retake each quiz just once to improve your score; the higher score will be the one that counts. **There are no retakes on any of the** 



exams. There will be no extra credit. Please do not ask for helping you to pass the course. If you plan on applying yourself and devoting your time, you will pass.

### 6. Determination of Course Grade

**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

The Final Exam score will replace the lowest Chapter Exam Score when it is larger.

### **Grading Scale:**

Grade A: Final Average in [89.5, 100] Grade B: Final Average in [79.5, 89.5) Grade C: Final Average in [69.5, 79.5) Grade D: Final Average in [59.5, 69.5)

Grade F: Final Average in [0, 59.5)

# 7. Makeup policy

There will be no makeup test for any missed test. However, if a test is missed and you notify me ahead of time, I might arrange for an alternative. No makeup will be granted to be taken during the regular class time. This is policy is only good for **ONE MISSED EXAM**. Missing more than one exam will count as ZERO.

### 8. Course Outline

Date	Topics	Sections	
Wed, Jan 19	Orientation		
Mon, Jan 24	Introduction to Graphs	1.1	
	Functions and Graphs	1.2	
Wed, Jan 26	Linear Functions, Zeros	1.5	
	Quiz 1: Sections 1.1-1.5	MML	
Mon, Jan 31	Inc. Dec. Piecewise Functions	2.1	
	Algebra of Functions, Compositions	2.2, 2.3	
	Transformations	2.5	
Wed, Feb 2	Review for Exam 1		
Mon, Feb 7	Exam 1: Chapters 1 and 2	IN-CLASS	
Wed, Feb 9	Quadratic Functions	3.2	
	Graphs of Quadratic Functions	3.3	
Mon, Feb 14	Polynomial Functions	4.1	
	Graphs of Polynomial Functions	4.2	
Wed, Feb 16	Remainder, Factor Theorems	4.3	
	Rational Functions	4.5	



	Quiz 2: Finding Zeros – Sections 3.2, 4.3, 4.5	MML			
Mon, Feb 21	Review for Exam 2				
Wed, Feb 23	Exam 2: Chapters 3 and 4	IN-CLASS			
Mon, Feb 28	Inverse Functions	5.1			
	Exponential Functions	5.2			
Wed, Mar 2	Logarithmic Functions	5.3			
	Quiz 3: Graphing Techniques – Sections 5.1-5.3	MML			
Mon, Mar 7	Properties of Log Functions	5.4			
Wed, Mar 9	Exponential, Log Equations	5.5			
	Modeling	5.6			
Mon, Mar 14	Spring Rrook-No Class				
Wed, Mar 16	Spring Break-No Class				
Mon, Mar 21	Review for Exam 3				
Wed, Mar 23	Exam 3: Chapter 5	IN-CLASS			
Mon, Mar 28	Solve Linear Systems	6.3			
	Applications	6.2			
Wed, Mar 30	Matrix Operations	6.4			
	Matrix Operations				
Mon, Apr 4	Inverse of Matrices	6.5			
	<b>Quiz 4: Sections 6.2-6.4</b>	MML			
Wed, Apr 6	Determinant & Cremer's Rule, 2x2	6.6			
Mon, Apr 11	Determinant & Cremer's Rule, 3x3	6.7			
	Systems of Linear Inequalities	6.7			
Wed, Apr 13	Systems of Linear Inequalities	6.7			
Mon, Apr 18	Applications of Systems of L. E; Linear Programming	6.7			
Wed, Apr 20 Review for Exam 4					
Mon, Apr 25					
Wed, Apr 27	Exam 4: Chapter 6	IN-CLASS			
Mon, May 2	Final Exam Review				
Wed, May 4 Final Exam Review					
Mon, May 9	Comprehensive Final Exam	IN-CLASS			
Wed, May 11	Comprehensive Final Exam	IN-CLASS			

# 9. Attendance Policy

You must log in and be active in MyMathLab at least four times each week. In addition to time spent in doing homework, taking quizzes and exams it will be necessary to study, using the course materials, at least 4 hours per week to be successful in the class.



### 10. 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 11/19/2021 (please verify).

### 11. 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.

### 12. 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 an assignment, quiz or exam will receive a zero for that assignment, quiz or exam and he or she will be referred to the Office of Student Conduct for further disciplinary action. Please read the sections on Standards of Student Conduct and Discipline and Penalties in the online Student Handbook.

#### 13. Concerns about the Instructor

If you have any concerns or issues with the instructor, you should first attempt to resolve the issue with the instructor. If you are unable to resolve the issue with the instructor, you should then contact then Mathematics Department Chair, Mr. Leslie Richardson at (409) 933-8329, lrichardson@com.edu.

14. Table Mapping SLO's and Core Objectives

	<b>Student Learner Outcomes</b>	Maps to Core Objective	Assessed via this assignment
1.	Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	Critical Thinking Skills (CT)	Exam
2.	Recognize and apply polynomial, rational, exponential and logarithmic functions and solve related equations.	Critical Thinking Skills (CT)	Exam
3.	Apply graphing techniques.	Visual Communication Skills (CS)	Quiz
4.	Evaluate all roots (zeros) of higher degree polynomials and rational functions.	Critical Thinking Skills (CT)	Quiz
5.	Recognize, solve and apply systems of linear equations using matrices.	Empirical and quantitative Skills (EQS)	Exam



### 15. 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. https://build.com.edu/uploads/sitecontent/files/student-services/Student Handbook 2019-2020v5.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. https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook 2019-2020v5.pdf

# 16. Academic Success & Support Services

College of the Mainland is committed to providing students the necessary support and tools for success in their college career. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

#### 17. ADA Statement

Any student with a documented disability needing academic accommodations is requested to contact Holly Bankston at 409-933-8520 or <a href="https://hbankston@com.edu">hbankston@com.edu</a>. The Office of Services for Students with Disabilities is located in the Student Success Center.

# **18. Counseling Statement:**

Any student that is needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or <a href="mailto:hbankston@com.edu">hbankston@com.edu</a>. Counseling services are available on campus in the student center for free and students can also email <a href="mailto:counseling@com.edu">counseling@com.edu</a> to setup their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

### **Please Note:**

Computer access and printing will be available on the following days and times in either Innovations or the Library Lab.

Monday: 7am - 6pm Tuesday: 7am - 6pm Wednesday: 8am - 6pm Thursday: 7am - 6pm Friday: 8am - 12pm Saturday: 9am - 1pm

Here are the links for each of the labs. The hours are updated online.

https://www.com.edu/computer-labs/library-computer-lab

https://www.com.edu/computer-labs/innovations



# **Institutional Policies and Guidelines**

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**F**<sub>N</sub> **Grading:** The  $F_N$  grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The  $F_N$  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  $F_N$  grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an  $F_N$  grade.

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COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at <a href="www.com.edu/coronavirus">www.com.edu/coronavirus</a>. In compliance with <a href="Governor Abbott's May 18 Executive Order">Governor Abbott's May 18 Executive Order</a>, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit <a href="com.edu/coronavirus">com.edu/coronavirus</a> for future updates.