

# Math 1314.141CL College Algebra Spring 2022 TTH STEAM Building, Room 107, 11:00 AM-12:20 PM F STEAM Building, Room 102, 9:00-9:50 AM

Instructor Information: Sandra Coleman, scoleman11@com.edu, 409-933-8211

**Student hours and location:** MW 2:00-4:15 PM, STEAM 325-09, and TTH 2:30-4:00 PM, in TEAMS, or by appointment

**Required Textbook/Materials:** Minimally, you are required to purchase the access code for MyMathLab to access the eText for the textbook and all course assignments. A hard copy of the textbook is recommended, but not required. The textbook used in this course is: College Algebra, by Beecher, Penna, Bittinger, fifth edition, published by Pearson.

**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:**

- **Homework:** Homework assignments will be given each week for every section covered in the course. Homework assignments will count as 10% of your final grade.
- Quizzes: Four quizzes will be given. Cumulatively, the quizzes will count as 10% of your final grade.
- Unit Exams: Four exams will be given, and you will be provided with a review to prepare for each exam. Each test will count as 16% of your grade.
- Final Exam: The comprehensive final exam will be given at the end of the course during Week 16. The final exam will count as 16% of your grade and will replace your lowest exam grade if it is higher.

Required Technology: A graphing calculator, such as a TI-84 Plus, is required for this course. A TI-89 or higher or a TI-Nspire are not permitted. Internet capability is also required to gain access to course materials and online assignments via MyMathLab software.

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

Grading Formula:

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

### Grading Scale:

The course grade will be determined using the following scale:

Grade A: Final Average [89.5, 100] Grade B: Final Average [79.5, 89.5) Grade C: Final Average [69.5, 79.5) Grade D: Final Average [59.5, 69.5) Grade F: Final Average [0, 59.5)

Late Work, Make-Up, and Extra-Credit Policy: Your final exam grade will replace your lowest test grade. If you neglect to take a test by its due date, this grade will be the one replaced unless you have prior instructor approval to makeup this test at an alternate time. The late penalty for past due assignments is 20% of your grade. Occasionally, extra credit points will be offered to the entire class; however, individually, extra credit assignments will not be available.

Attendance Policy: Students at COM are expected to participate every week for which they are registered. Per COM policy, students are required to log on to their course at least twice per week, but it may be necessary to log on more times each week to complete the assignments required of this course. When students are not actively participating (e.g., contributing to discussions and completing weekly online homework), the faculty member can initiate an instructor drop and, subsequently, the student will receive a W for the course.

**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.

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

Student Learner Outcome	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	Quiz 3	Communication	Graphing question on
	techniques		Skills (CS)	Exam 1
4.	Evaluate all roots			
	(zeros) of higher	Quiz 2		
	degree polynomials			
	and rational functions			
5.	Recognize, solve, and			
	apply systems of	Exam 4	Empirical and	2. application problems
	linear equations using		Quantitative Skills	on Exam 4
	matrices.		(EQS)	

**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 Mr. Leslie Richardson, Chair of the Math Department, at 409-933-8329 or <a href="mailto:lirichardson@com.edu">lrichardson@com.edu</a>.

### **Course outline:**

Week	Dates	Topics	Sections	Due
1	Feb. 24-27	Orientation		
		Introduction to Graphs	1.1	Feb. 27
2	Feb. 28-Mar.6	Functions and Graphs	1.2	
		Linear Functions, Zeros	1.5	
		Quiz 1: Sections 1.1-1.5		Mar. 6
		Inc. Dec. Piecewise Functions	2.1	
3	Mar. 7-13	Algebra of Functions	2.2	
		Compositions	2.3	Mar. 13
		Transformations	2.5	
	Mar. 14-20	****Spring Break****		
4	Mar. 21-27	Review for Exam 1		
		Exam 1: Chapters 1 and 2		<b>Mar. 22</b>
		Quadratic Functions	3.2	
		Graphs of Quadratic Functions	3.3	Mar. 27
5	Mar. 28-Apr. 3	Polynomial Functions	4.1	
		Graphs of Polynomial Functions	4.2	
		Remainder, Factor Theorems	4.3	Apr. 3
		Rational Functions	4.5	
		<b>Quiz 2: Finding Zeros – 3.2, 4.3, 4.5</b>		
		Friday Lab – TVB 1318		Apr. 1

Week	Dates	Topics	Sections	Due	
6	Apr. 4-10	Review for Exam 2			
		Exam 2: Chapters 3 and 4		Apr. 5	
		Inverse Functions	5.1		
		Exponential Functions	5.2	Apr. 10	
		Logarithmic Functions	5.3		
		Quiz 3: Graphing Techniques – Sections 5.1-5.3			
7	Apr. 11-14	Properties of Log Functions	5.4		
		Exponential, Log Equations	5.5	Apr. 17	
		Modeling	5.6		
8	Apr. 18-24	Review for Exam 3			
		Exam 3: Chapter 5		<b>Apr. 19</b>	
		Solve Linear Systems	6.3		
		Applications	6.2	Apr. 24	
		Matrix Operations	6.4		
9	Apr. 25-May 1	Quiz 4: Sections 6.2-6.4			
		Geometry: Lines, Angles, Quadrilaterals		May 1	
		Geometry: Triangles and Solids			
10	May 2-8	Right Angle Trigonometry: Part 1			
		Right Angle Trigonometry: Part 2		May 8	
		Review for Exam 4			
11	May 9-13	Exam 4: Chapter 6		May 10	
		Review for Final Exam			
		<b>Comprehensive Final Exam</b>		<b>May 12</b>	

\*\*\*\*W-Day: April 25, 2022\*\*\*\*

### **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. 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

**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 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.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or <a href="https://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 set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

**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 1st 8-week session is March 2. The last day to withdraw from the 16-week session is April 25. The last date to withdraw from the 2nd 8-week session is May 4.

**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.

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.

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.