



Math 1314.141CL

College Algebra

Fall 2023

TTH STEAM Building, Room 107, 9:30-10:50 AM

F STEAM Building, Room 119, 9:00-9:50 AM

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

Student hours and location: MW 2:00-3:30 PM, TTH 11:00 AM-12:15 PM, STEAM 325-09, and T 2:30-4:30 PM in [TEAMS](#), or by appointment

Required Textbook/Materials: You have purchased access to *MyMathLab*, software which includes the eText for the textbook and all course assignments, with your tuition. 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:

- **Videos:** Video assignments will be given each week for every section covered in the course. Video assignments will count as 1% of your final grade.
- **Homework:** Homework assignments will be given each week for every section covered in the course. Homework assignments will count as 9% 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:

$$\text{Final Average} = 64\% \text{Chapter Exam Average} + 16\% \text{Final Exam} \\ + 9\% \text{Homework Average} + 1\% \text{Video Average} + 10\% \text{Quiz Average}$$

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 attend and participate in every session of all classes for which they are registered. When students are not actively participating (e.g., attending class and completing weekly online homework), the faculty member will alert their advisor using the Early Alert system described below.

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 |

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|---|--------|---|-----------------------------------|
| 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 Mr. Leslie Richardson, Chair of the Math Department, at 409-933-8329 or lrichardson@com.edu.

Course outline:

| Week | Dates | Topics | Sections | Due |
|------|----------------|--|----------|----------------|
| 6 | Oct. 5-8 | Orientation | | Oct. 8 |
| | | Introduction to Graphs | 1.1 | |
| 7 | Oct. 9-15 | Functions and Graphs | 1.2 | Oct. 15 |
| | | Linear Functions, Zeros | 1.5 | |
| | | Quiz 1: Sections 1.1-1.5 | | |
| | | Inc. Dec. Piecewise Functions | 2.1 | |
| 8 | Oct. 16-22 | Algebra of Functions | 2.2 | Oct. 23 |
| | | Compositions | 2.3 | |
| | | Transformations | 2.5 | |
| 9 | Oct. 23-29 | Review for Exam 1 | | Oct. 23 |
| | | Exam 1: Chapters 1 and 2 | | Oct. 24 |
| | | Quadratic Functions | 3.2 | Oct. 29 |
| | | Graphs of Quadratic Functions | 3.3 | |
| 10 | Oct. 30-Nov. 5 | Polynomial Functions | 4.1 | Nov. 6 |
| | | Graphs of Polynomial Functions | 4.2 | |
| | | Remainder, Factor Theorems | 4.3 | |
| | | Rational Functions | 4.5 | |
| | | Quiz 2: Finding Zeros – 3.2, 4.3, 4.5 | | |

| Week | Dates | Topics | Sections | Due |
|------|----------------|---|----------|--------------------|
| 11 | Nov. 6-12 | Review for Exam 2 | | Nov. 6 Nov. 7 |
| | | Exam 2: Chapters 3 and 4 | | |
| | | Inverse Functions | 5.1 | Nov. 12 |
| | | Exponential Functions | 5.2 | |
| | | Logarithmic Functions | 5.3 | |
| | | Quiz 3: Graphing Techniques – Sections 5.1-5.3 | | |
| 12 | Nov. 13-19 | Properties of Log Functions | 5.4 | Nov. 20 |
| | | Exponential, Log Equations | 5.5 | |
| | | Modeling | 5.6 | |
| 13 | Nov. 20-22 | Review for Exam 3 | | Nov. 20 Nov. 21 |
| | | Exam 3: Chapter 5 | | |
| | | ****Thanksgiving Holiday**** | | |
| 14 | Nov. 27-Dec. 3 | Solve Linear Systems | 6.3 | Dec. 3 |
| | | Applications | 6.2 | |
| | | Matrix Operations | 6.4 | |
| | | Quiz 4: Sections 6.2-6.4 | | |
| 15 | Dec. 4-Dec. 10 | Geometry: Lines, Angles, Quadrilaterals | | Dec. 11 |
| | | Geometry: Triangles and Solids | | |
| | | Right Angle Trigonometry: Part 1 | | |
| | | Right Angle Trigonometry: Part 2 | | |
| | | Review for Exam 4 | | |
| 16 | Dec. 11-14 | Exam 4: Chapter 6 | | Dec. 12 |
| | | Review for Final Exam | | Dec. 13 |
| | | Comprehensive Final Exam | | Dec. 14 |

****W-Day: November 28, 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 https://www.com.edu/student-services/docs/Student_Handbook_2023-2024_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 at 409-933-8919 or klachney@com.edu. 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 1st 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 2nd 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 <https://www.com.edu/community-resource-center/>. 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 deanofstudents@com.edu or communityresources@com.edu.