

Math 1314-110CL College Algebra Fall 2022 STEAM, Room 119 MW 11:00-12:30pm, F 9:00 – 9:50am

Instructor Information: Theophilus Boye, tboye@com.edu, 409-933-8758

Student hours: MWF: 11:00 -12:30pm; and **TTh**: 3:30-5:30pm

location: STEAM 325-3

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 chapter exams will be given. 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% 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:

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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)
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Late Work, Make-Up, and Extra-Credit 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. The late penalty for past due assignments is 20% of your grade. Extra credit assignments will not be available.

Attendance Policy: Attendance is required for all class meetings. 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.

Electronic Device Policies

You may use your laptop or tablet for taking notes during lecture; however, that privilege will be lost if I find that you are using them for non-course-related reasons (e.g., news, social media, shopping).

All other electronic devices should be **silenced and hidden**. If there is an emergency and your phone must be on/visible, please inform me of this at the beginning of class

Table Mapping SLO's and Core Objectives

| Student Learner | | SLO assessed via | SLO maps to Core | Core Objective assessed | |
|-----------------|---|------------------|---|-----------------------------------|--|
| | Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses. | Exam 1 | Objective | via this assignment | |
| | Student Learner | SLO assessed via | SLO maps to Core | Core Objective assessed | |
| | Outcome | this assignment | Objective | via this assignment | |
| 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 Mr. Leslie Richardson, Chair of the Math Department, at 409-933-8329 or lrichardson@com.edu

Course outline:

| Week | Dates | Topics | Sections | Due | |
|------|----------------|---------------------------------------|----------|--------|--|
| 1 | Aug 22 - 26 | Orientation | | | |
| | | Introduction to Graphs | 1.1 | Aug 28 | |
| | | Functions and Graphs | 1.2 | | |
| 2 | Aug 29 – Sep 2 | Linear Functions, Equations of Lines | 1.3, 1.4 | | |
| | | Linear Functions, Zeros | 1.5 | Sep 4 | |
| | | Inc. Dec. Piecewise Functions | 2.1 | - | |
| 3 | Sep 5 – Sep 9 | Quiz A: Sections 1.1-1.5 | | | |
| | | Algebra of Functions | 2.2 | | |
| | | Compositions | 2.3 | Sep 11 | |
| | | Transformations | 2.5 | | |
| 4 | Sep 12 – 16 | Review for Exam 1 | | | |
| | | Exam 1: Chapters 1 and 2 | | Sep 14 | |
| 5 | Sep 19 - 23 | Quadratic Functions | 3.2 | Sep 25 | |
| | | Graphs of Quadratic Functions | 3.3 | - | |
| 6 | Sep 26 - 30 | Polynomial Functions | 4.1 | | |
| | | Graphs of Polynomial Functions | 4.2 | Oct 2 | |
| 7 | Oct 3 - 7 | Remainder, Factor Theorems | 4.3 | | |
| | | Poly Inequalities, Rational Functions | 4.6, 4.5 | Oct 9 | |
| | | Quiz B: Finding Zeros – Sections 3.2, | | | |
| | | 4.3, 4.5 | | | |
| 8 | Oct 10 - 14 | Review for Exam 2 | | | |
| | | Exam 2: Chapters 3 and 4 | | Mar 12 | |
| 9 | Oct 17 - 21 | Inverse Functions | 5.1 | | |
| | | Exponential Functions | 5.2 | Oct 23 | |
| 10 | Oct 25 - 29 | Logarithmic Functions | 5.3 | | |
| | | Quiz C: Graphing Techniques – | | | |
| | | Sections 5.1-5.3 | | Oct 30 | |
| | | Properties of Log Functions | 5.4 | | |
| 11 | Oct 31- Nov 4 | Exponential, Log Equations | 5.5 | | |
| | | Modeling, Review | 5.6 | Nov 6 | |
| 12 | Nov 7 - 11 | Review for Exam 3 | | Nov 9 | |
| | | Exam 3: Chapter 5 | | | |
| 13 | Nov 14 - 18 | Solve Linear Systems | 6.1, 6.3 | | |
| | | Applications | 6.2 | Nov 20 | |
| 14 | Nov 21 - 23 | Matrix Operations | 6.4 | | |
| | | Quiz D: Sections 6.1-6.4 | | Nov 27 | |
| | | **** Thanks Giving **** | | | |
| 15 | Nov 28 - Dec 2 | Review for Exam 4 | | | |
| | | Exam 4: Chapter 6 | | Nov 30 | |
| 16 | Dec 6 - 8 | Review for Final Exam | | | |
| | | Comprehensive Final Exam | | Dec 7 | |

^{*}W-Day is Nov 18

^{*}Class ends on Dec 7

^{*}Calendar is subject to change

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 Michelle Brezina at 409-933-8124 or mvaldes1@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 5. The last date to withdraw from the 16-week session is November 18. The last date to withdraw for the 2nd 8-week session is December 1.

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 <a href="maintenance-deanoft-deanoft-deanoft-deanoft-deanoft-dailness-