# Math 1314-109CL <br> College Algebra <br> Fall 2021 <br> STEAM Building, Room 119 <br> MW 2:00-3:50 PM 

Instructor Information: Theophilus Boye, tboye@com.edu, 409-933-8758
Student hours MW: 9:45-10:45; 12:30-1:30pm and TTH: 3:30-5:15pm location: TEAMS/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:

$$
\begin{aligned}
\text { Final Average }= & \quad 64 \% \text { Chapter Exam Average }+\mathbf{1 6 \%} \% \text { Final Exam } \\
& +\mathbf{1 0 \%} \text { Homework Average }+\mathbf{1 0 \%} \text { Quiz Average }
\end{aligned}
$$

## 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: 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 $\mathbf{W}$ 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.

Course Message: Used the course message tool in blackboard to ask any questions about the course and to clarify assignments. I will try to answer any questions posted within the within 24hours. Please use email for concerns of a personal nature. I will respond to your email as quickly as possible (usually within 24 hours).

Table Mapping SLO's and Core Objectives

| Student Learner <br> Outcome | SLO assessed via <br> this assignment | SLO maps to Core <br> Objective | Core Objective assessed <br> via this assignment |
| :--- | :--- | :--- | :--- |
| 1.Demonstrate and <br> apply knowledge of <br> properties of <br> functions, including <br> domain and range, <br> operations, <br> compositions, and <br> inverses. <br> Student Learner <br> Outcome <br> 2. <br> Recognize and apply <br> polynomial, rational, <br> exponential, and Exam 2, Exam 3 | SLO assessed via <br> this assignment | SLO maps to Core <br> Objective | Core Objective assessed <br> via this assignment |


| logarithmic functions <br> and solve related <br> equations. |  | Critical Thinking <br> Skills (CT) | 2. application problems <br> on Exam 3 |
| :--- | :--- | :--- | :--- |
| 3. Apply graphing <br> techniques | Quiz 3 | Communication <br> Skills (CS) | Graphing question on <br> Exam 1 |
| 4.Evaluate all roots <br> (zeros) of higher <br> degree polynomials <br> and rational functions | Quiz 2 |  |  |
| 5. Recognize, solve, and <br> apply systems of <br> linear equations using <br> matrices. | Exam 4 | Empirical and <br> Quantitative Skills <br> (EQS) | 2. application problems <br> 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. 23-29 | Orientation |  | Aug. 29 |
|  |  | Introduction to Graphs | 1.1 |  |
|  |  | Functions and Graphs | 1.2 |  |
| 2 | Aug. 30-Sep. 5 | Linear Functions, Equations of Lines | 1.3, 1.4 | Sep. 5 |
|  |  | Linear Functions, Zeros | 1.5 |  |
|  |  | Inc. Dec. Piecewise Functions | 2.1 |  |
|  |  | **** Labor Day **** |  |  |
| 3 | Sep. 7-12 | Quiz A: Sections 1.1-1.5 |  | Sep. 12 |
|  |  | Algebra of Functions | 2.2 |  |
|  |  | Compositions | 2.3 |  |
|  |  | Transformations | 2.5 |  |
| 4 | Sep. 13-19 | Review for Exam 1 |  | Sep. 15 |
|  |  | Exam 1: Chapters 1 and 2 |  |  |
| Week | Dates | Topics | Sections | Due |
| 5 | Sep. 20-26 | Quadratic Functions | 3.2 | Sep. 26 |
|  |  | Graphs of Quadratic Functions | 3.3 |  |
| 6 | Sep. 27 - Oct. 3 | Polynomial Functions | 4.1 | Oct. 3 |
|  |  | Graphs of Polynomial Functions | 4.2 |  |


| 7 | Oct. 4-10 | Remainder, Factor Theorems | 4.3 | Oct. 10 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Poly Inequalities, Rational Functions | 4.6, 4.5 |  |
|  |  | $\begin{aligned} & \text { Quiz B: Finding Zeros - Sections 3.2, } \\ & 4.3,4.5 \end{aligned}$ |  |  |
| 8 | Oct. 11-17 | Review for Exam 2 |  | Oct. 13 |
|  |  | Exam 2: Chapters 3 and 4 |  |  |
| 9 | Oct. 18-24 | Inverse Functions | 5.1 | Oct. 24 |
|  |  | Exponential Functions | 5.2 |  |
| 10 | Oct. 25-31 | Logarithmic Functions | 5.3 | Oct. 31 |
|  |  | Quiz C: Graphing Techniques Sections 5.1-5.3 |  |  |
|  |  | Properties of Log Functions | 5.4 |  |
| 11 | Nov. 1-7 | Exponential, Log Equations | 5.5 | Nov. 7 |
|  |  | Modeling, Review | 5.6 |  |
| 12 | Nov. 8-14 | Review for Exam 3 |  | Nov. 10 |
|  |  | Exam 3: Chapter 5 |  |  |
| 13 | Nov. 15-21 | Solve Linear Systems | 6.1, 6.3 | Nov. 21 |
|  |  | Applications | 6.2 |  |
| 14 | Nov. 22-24 | Matrix Operations | 6.4 | Nov. 28 |
|  |  | Quiz D: Sections 6.1-6.4 |  |  |
|  |  | **** Thanks Giving **** |  |  |
| 15 | Nov 29 - Dec 5 | Review for Exam 4 |  | Dec 1 |
|  |  | Exam 4: Chapter 6 |  |  |
| 16 | Dec 6-8 | Review for Final Exam |  | Dec 8 |
|  |  | Comprehensive Final Exam |  |  |

****W-Day: November 19, 2021****

## 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 hbankston@com.edu. 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 hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu 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 is March 3rd for the 1 st 8 -week session, April 26 for the 16-week session, and May 5th.
$\mathbf{F}_{\mathrm{N}}$ Grading: The $\mathrm{F}_{\mathrm{N}}$ grade is issued in cases of failure due to a lack of attendance, as determined by the instructor. The $\mathrm{F}_{\mathrm{N}}$ 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 $\mathrm{F}_{\mathrm{N}}$ grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an $\mathrm{F}_{\mathrm{N}}$ 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 www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, 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 com.edu/coronavirus for future updates.

