

## Math 1314-002IN College Algebra Summer 2023

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

**Student hours: MTW**: 10:30 - 12:00pm.

**location:** TEAM

**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.
- MyLab Math (MLM) contained within Brightspace is required for this class.
   All Homework, Quizzes and Exams will be done in MyLab Math. You can access D2L Brightspace at <a href="http://com.brightspace.com">http://com.brightspace.com</a>

### Grading Formula:

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Final Average = 60%Chapter Exam Average + 15%Final Exam
+ 10%Homework Average + 10%Quiz Average + 5%Dicussion
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#### **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:

As a general rule, there are no make-up exams. A make-up exam will only be allowed at the discretion of the instructor and only under extenuating circumstances and is limited to **one exam**. If it is necessary to miss an exam, you are required to petition the instructor before the exam is given to be considered for a make-up exam. Only extenuating circumstances of a serious nature that are documented will be considered. Realize not being prepared for the exam is not a legitimate reason for a make-up exam nor is scheduling work/appointments during the class period. **All other missed tests will be assigned a zero, and the zero(s) will be used to calculate final grade.** 

The late penalty for past due assignments is 20% of your grade. 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., 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.

Email: Include your course & section in the subject line when emailing

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

Student Learner		SLO assessed via	SLO maps to Core	Core Objective assessed	
Outcome		this assignment	Objective	via this assignment	
1.	Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	Exam 1			
	Student Learner Outcome	SLO assessed via this assignment	SLO maps to Core Objective	Core Objective assessed 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 <a href="mailto:lrichardson@com.edu">lrichardson@com.edu</a>

# **Course outline:**

July 10-16	Week	Date	Math 1314	Sections	Due Date
Functions and Graphs   1.2   1.3   1.4   1.4   1.5	1	July 10-16	Introduction to Graphing	1.1	
Equations of Lines   Linear Functions, Zeros, Applications   1.4   Linear Functions, Zeros, Applications   1.5   Quiz 1: Sections 1.1 - 1.5   Lincreasing, Decreasing, Piecewise Functions   2.1   The Algebra of Functions   2.2   Zeros, Composition of Functions   2.2   Zeros, Transformations   2.5   Zeros, Ze			Functions and Graphs	1.2	
Linear Functions, Zeros, Applications			Linear Functions, Slope	1.3	
Quiz 1: Sections 1.1 - 1.5   Increasing, Decreasing, Piecewise Functions   2.1   The Algebra of Functions   2.2   2.2			Equations of Lines	1.4	July 16
Increasing, Decreasing, Piecewise Functions			Linear Functions, Zeros, Applications	1.5	
The Algebra of Functions   2.2			<b>Quiz 1: Sections 1.1 – 1.5</b>		
The Algebra of Functions   2.2			Increasing, Decreasing, Piecewise Functions	2.1	
July 17 - 23   Transformations   Review Exam 1   Exam 1: Chapters 1, 2   Due: Friday July 21   Quadratic Functions and Zeros   3.2   3.3   3.3   4.1				2.2	
July 17 - 23   Transformations   Review Exam 1   Exam 1: Chapters 1, 2   Due: Friday July 21   Quadratic Functions and Zeros   3.2   3.3   3.3   4.1	2			2.3	
July 17 - 23					
Quadratic Functions and Zeros   3.2   3.3   3.3   3.3   4.1   3.3   3.3   4.1   3.3   3.3   4.1   4.1   4.2   4.3   4.4   4.5   4.6   4.			Review Exam 1		
Quadratic Functions and Zeros   3.2   3.3   3.3   3.3   4.1   3.3   3.3   4.1   4.1   4.2   4.3   4.5   4.5   4.6   4.		July 17 22			
Graphs of Quadratic Functions   3.3   4.1   4.1   4.2   4.2   4.3   4.5   4.5   4.6   4.		July 1 / - 23		3.2	July 23
Polynomial Functions Graphing Polynomial Functions Remainder and Factor Theorems  3  Rational Functions Quiz 2: Sections 3.2, 4.3, 4.5 Polynomial and Rational Inequalities Review for Exam 2 Exam 2: Chapters 3, 4 Due: Friday July 28 Inverse Functions Exponential Functions and Graphs Logarithmic Functions and Graphs Properties of Logarithmic Functions Quiz 3: Sections 5.1 – 5.3 Solving Exponential and Logarithmic Equations  4  Exponential/Logarithmic Applications Review for Exam 3 Exam 3: Chapter 5 Due: Friday Aug 4 Systems of Equations in 2 variables/ Matrices and Systems of Equations Systems of Equations in 3 Variables Applications Matrix Operations Quiz 4: Sections 6.1 – 6.4  Review for Exam 4 Exam 4: Chapter 6 Due: Tuesday Aug 8 Review for Final Exam  Aug 10					
Graphing Polynomial Functions   4.2   4.3					
Remainder and Factor Theorems  Rational Functions Quiz 2: Sections 3.2, 4.3, 4.5 Polynomial and Rational Inequalities Review for Exam 2 Exam 2: Chapters 3, 4 Due: Friday July 28 Inverse Functions Exponential Functions and Graphs Logarithmic Functions and Graphs Properties of Logarithmic Functions Quiz 3: Sections 5.1 – 5.3 Solving Exponential And Logarithmic Equations  4  Exponential/Logarithmic Applications Review for Exam 3 Exam 3: Chapter 5 Due: Friday Aug 4 Systems of Equations in 2 variables/ Matrices and Systems of Equations Systems of Equations in 3 Variables Applications Quiz 4: Sections 6.1 – 6.4  Aug 6 - 9  Review for Exam 4 Exam 4: Chapter 6 Due: Tuesday Aug 8 Review for Final Exam  Aug 10					
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July 24 - 30  July 24 - 30  July 24 - 30  July 31 - Aug 6  Aug 6 - 9  Review for Exam 3  Aug 6 - 9  Quiz 2: Sections 3.2, 4.3, 4.5  Polynomial and Rational Inequalities Review for Exam 2 Exam 2: Chapters 3, 4 Due: Friday July 28 Inverse Functions Exponential Functions and Graphs Logarithmic Functions and Graphs Properties of Logarithmic Functions Quiz 3: Sections 5.1 - 5.3 Solving Exponential and Logarithmic Equations  Exponential/Logarithmic Applications Review for Exam 3 Exam 3: Chapter 5 Due: Friday Aug 4 Systems of Equations in 2 variables/ Matrices and Systems of Equations Systems of Equations Quiz 4: Sections 6.1 - 6.4  Review for Exam 4 Exam 4: Chapter 6 Review for Final Exam  Aug 10	3				
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THAT DAIN DUC, THUINUAY AUY IV			Final Exam Due: Thursday Aug 10		

<sup>\*\*</sup>All assignments due by 11:59PM on the date listed above\*\*

<sup>\*</sup>W-Day is Aug 4

<sup>\*</sup>Class ends on Aug 9

<sup>\*</sup>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 <a href="Student Handbook 2022-2023 v4.pdf">Student Handbook 2022-2023 v4.pdf</a> (com.edu). 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 <a href="klachney@com.edu">klachney@com.edu</a>. 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 1<sup>st</sup> 5-week session is June 30. The last date to withdraw from the 10-week session is July 31. The last date to withdraw for the 2<sup>nd</sup> 5-week session is August 4.

**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 <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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-de