

## Math 1314-233CL College Algebra Spring 2023 STEAM Building, Room 103 TTH 7:30 - 9:20pm

Instructor Information: Theophilus Boye, <u>tboye@com.edu</u>, 409-933-8758

**Student hours: MW**: 11:00-12:30; **TTh**: 3:30-5:30pm **F**: 11:00-12:00 **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.
- MyLab Math (MLM) contained within Brightspace is required for this class. All Homework and Quizzes will be done in MyLab Math. You can access D2L Brightspace at <u>http://com.brightspace.com</u>

#### **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:

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: 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.

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

#### **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

#### **Classroom Conduct Policy**

Arriving on time, staying the entire class period, eliminating distractions like cell phones, using appropriate language (no cursing), respecting your classmates and the instructor, and cleaning up after yourself are all expectations for students in the classroom. Please abide by these expectations so that the class setting is enjoyable for all students. Regarding cell phones, they should be turned off or set on airplane mode and in your backpack/purse (not on your desk). It is extremely disruptive to the learning environment, so you will be asked to leave if it is a

continuous problem. Infractions may result in an automatic withdrawal from the class. Cell phones cannot be used during tests or quizzes and refer to testing policies for additional information. Please notify me before class if you have an emergency that requires you to answer your phone during class. Take an emergency phone call outside of the classroom.

For their safety, unattended minors of students are not permitted on campus while students are in class. In consideration of fellow classmates, please do not bring children to class.

#### **Testing Policy**

Prohibited devices include, but are not limited to:

- Cell phones; smart phones; smart watches
- Audio players/recorders, tablets, laptops, notebooks, or any other personal computing devices
- Cameras or any other photographic equipment
- Any devices, including digital watches, that can be used to record, transmit, receive, or play back audio, photographic, text, or video content.

If your device makes a sound or is in your possession when the device goes off, you may be dismissed, and your score may be recorded as a zero.

# If you leave the classroom at any time during an exam, the exam must be submitted for grading.

It is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

#### **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	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 <u>grade of zero</u> 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 <u>lrichardson@com.edu</u>

# **Course outline**

XX7 1					
Week	Topics-due date				
1	Math 0320 (Week 1 – Week 5)				
	My Math Lab Orientation $-90\%$ required to gain access to homework.				
Jan. 17 <b>- 22</b>	2.6 Linear Inequalities-				
	2.3 Absolute Value Equations				
	2.8 Absolute Value Inequalities				
2	3.1 Graphing Linear Equations with Two Unknowns				
	Quiz A (Sections 2.6 & 2.8)				
Jan. 23 <b>- 29</b>	1				
	3.3 Graphs and the Equations of a Line				
	3.5 Concept of a Function				
	3.6 Graphing Functions from Equations				
3	4.1 Systems of Linear Equations in 2 Variables (Test 2 Info)				
Jan30 - Feb.5	Test 1 Review				
	Test 1 (Chapters 2 & 3) – (1 <sup>st</sup> class period)				
	4.3 Applications of Systems of Equations				
	5.4 GCF, Factoring by Grouping				
	Quiz C (Section 4.3)				
4	4 5.5 Factoring Trinomials				
	5.6 Special Cases of Factoring				
	5.8 Solving Equations by Factoring				
Feb. 6 - 12	Quiz D (Sections 5.5, 5.6 & 5.8)				
	5.2 Dividing Polynomials (Test 3 Info)				
	5.3 Synthetic Division (Test 3 Info)				
	Test 2 Review				
5	<i>Test 2 (Chapters 4 &amp; 5, sections 4.1, 4.3, 5.4-5.8) – (1<sup>st</sup> class period)</i>				
	6.1 Rational Expressions: Simplifying, Multiplying, Dividing				
Feb. 13 - <b>19</b>	6.2 Add/Subtraction of Rational Expressions				
	6.3 Complex Rational Expressions				
	6.4 Rational Equations				
6	Math 0320	Math 1314			
	6.4 Rational Equations	1.1 Introduction to Graphing			
	Test 3 Review	1.2 Functions and Graphs			
Feb. 20 - <b>26</b>	Quiz E (Sections 6.1 & 6.4)				
	<i>Test 3 (Chapters 5 &amp; 6)</i>				
	(1 <sup>st</sup> class period)				
	7.6 Complex Numbers				
7	Math 0320	Math 1314			
		1.3 Linear Functions, Slope, and Applications			
	7.6 Complex Numbers	1.4 Equations of Lines			
Feb27 - Mar5		1.5 Linear Equations, Functions, Zeros, Applications			
	Quiz F (Section 7.6)	2.1 Increasing, Decreasing, and Piecewise Functions			
		2.2 The Algebra of Functions			
		Quiz A (Sections 1.1-1.5)			

Week	Topics-due date	
8	Math 0320	Math 1314
	8.1 Quadratic Equations	2.2 The Algebra of Functions
Mar 6 - <b>12</b>	_	2.3 The Composition of Functions
		2.5 Transformations
		Test 1 Review
Mar 13 - 19	SPRING BREAK	
9	Math 0320	Math 1314
	8.2 Quadratic Formula	Test 1 (Chapters 1 & 2) – ( $1^{st}$ class period)
Mar 20 - <b>26</b>		3.2 Quadratic Equations, Functions, Zeros, Models
		3.3 Analyzing Graphs of Quadratic Functions
		4.1 Polynomial Functions
10	Math 0320	Math 1314
	7.5 Radical Equations	4.2 Graphing Polynomial Functions
Mar27 - Apr2		4.3 Remainder and Factor Theorems
		4.5 Rational Functions
		Quiz B (Sections 3.2, 4.3 & 4.5)
		4.6 Polynomial Inequalities
11	Math 0320	Math 1314
	Test 4 Review	5.1 Inverse Functions ( <i>Test 3 Info</i> )
Apr. 3 - 9		Test 2 Review
		Test 2 (Chapters 3, 4) – (1 <sup>st</sup> class period)
		5.2 Exponential Functions and Graphs
12	Math 0320	Math 1314
	<i>Test 4 (Chapter 7 &amp; 8) -</i>	5.2 Exponential Functions and Graphs
Apr. 10 - <b>16</b>	(1 <sup>st</sup> class period)	5.3 Logarithmic Functions and Graphs
		5.4 Logarithmic Properties
		Quiz C (Sections 5.1-5.3)
12		5.5 Solving Exponential & Logarithmic Equations
13	Math 0320	Math 1314
17 00	Final Exam Review	5.6 Applications
Apr. 17 <b>- 23</b>		Test 3 Review
		<i>Test 3: Chapter 5 – (1<sup>st</sup> class period)</i>
		6.1 Systems of Equations in Two Variables
14	Math 0320	6.3 Matrices & Systems of Equations   Math 1314
14		
$\Delta \mathbf{pr} = 24 - 20$	Comprehensive Final Exam (1 <sup>st</sup> class pariod)	<ul><li>6.3 Matrices &amp; Systems of Equations</li><li>6.2 Systems of Equations in Three Variables</li></ul>
Apr. 24 - <b>30</b>	Final Exam-(1 <sup>st</sup> class period)	6.4 Matrix Operations
		Test 4 Review
		Quiz D (Sections 6.1-6.4)
15		Math 1314
13		Test 4 Review
May 1 - <b>7</b>		Review for Comprehensive Final Exam
wiay 1 - 7		<i>Test 4: Chapter 6– (1<sup>st</sup> class period)</i>
		Review for Comprehensive Final Exam
16		Math 1314
May 8 - 11		Comprehensive Final Exam–(2-hr exam)
wiay 0 - 11		Comprehensive I inui Exum-(2-ni exum)

### **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 <u>Student Handbook 2022-2023 v4.pdf (com.edu)</u>. 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 <u>klachney@com.edu</u>. 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> 8-week session is March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2<sup>nd</sup> 8-week session is May 3.

**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 <u>https://www.com.edu/community-resource-center/</u>. 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 <u>deanofstudents@com.edu</u> or <u>communityresources@com.edu</u>.