

Math 0315.242C3
Foundations of Algebra
Fall 2024
STEAM Room 105
MW 5:30 – 6:50 PM
MW 6:51 – 7:20 PM

Instructor Information: Megan Dulude, mdulude@com.edu

Student hours and location:

Monday & Wednesday 5:30 – 6:00 PM STEAM Room 105

Required Textbook/Materials: Intermediate <u>Algebra</u>, 8th edition, by Tobey, Slater, Blair and Crawford by Pearson

Course Description: This course is designed to develop skills and understanding in the following areas: basic algebra concepts to include exponents, factoring and radicals; relations and functions, inequalities, algebraic expressions, and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Prerequisites/co-requisites: Prerequisite of TSIA2 Math Diagnostic 4. This course does not transfer.

Course requirements:

Homework Assignments:

Homework for each section will be completed online using MyMathLab.

Quizzes and Exams:

Four online quizzes will be completed in *MyMathLab*. You can retake each quiz just once to improve your score; the higher score will be the one that counts. There will also be four unit exams and a comprehensive final. No retakes are permitted.

Required Technology:

- MyMathLab software is required for this class.
- A calculator is also required.
- Access to the internet is necessary to complete online homework, quizzes, and test reviews.

Determination of Course Grade: The course will be determined by the following formula:

Final Average = 60%Chapter Exam Average + 20%Final Exam + 10%Homework Average + 10%Quiz Average

Grading Scale:

Grade A: Final Average in [89.5, 100] Grade B: Final Average in [79.5, 89.5) Grade C: Final Average in [69.5, 79.5) Grade D: Final Average in [59.5, 69.5) Grade F: Final Average in [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.

Student Learner Outcomes: Upon successful completion of MATH 0315, students will:

- 1. Define, represent and perform operations on real and complex numbers.
- 2. Recognize, understand and analyze features of a function.
- 3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
- 4. Identify and solve absolute value and linear inequalities.
- 5. Model, interpret and justify mathematical ideas and concepts using multiple representations.
- 6. Model, interpret and justify mathematical ideas and concepts sing multiple representations.
- 7. Connect and use multiple strands of mathematics in situations and problems, as well as to the study of other disciplines.

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. 19-25	Orientation		
		Operations with Variables and Grouping Symbols	1.5	
		Evaluating Variable Expressions and Formulas	1.6	Aug. 26
		First Degree Equations with One Unknown	2.1	
		Solving Word Problems	2.4	
		Linear Inequalities	2.6	
2	Aug. 26-	Absolute Value Equations	2.3	
	Sept. 1	Quiz A: Sections 1.5, 1.6, 2.1, 2.3, & 2.4		
		Absolute Value Inequalities	2.8	
		Review for Test 1		
		Test 1 (Sections 1.5, 1.6, 2.1, 2.3, 2.4, 2.6, & 2.8)		Aug. 28
		Graphing Linear Equations	3.1	Sept. 4
3	Sept. 2-8	Slope of a Line	3.2	
		Equations of a Line	3.3	Sept. 9
		Quiz B: Sections 3.1-3.3		_
		Systems of Linear Equations	4.1	
4	Sept. 9-15	Rules of Exponents (exclude scientific notation)	1.4	
		Polynomials: Add, Subtract, Multiply, and Divide	5.1	
		Synthetic Division	5.3	Sept. 16
		Quiz C: Section 1.4, 5.1, & 5.3	3.3	
		Applications of Systems of Equations	4.3	
		Review for Test 2	1.5	
5	Sept. 16-22	Test 2 (Sections 3.1-3.3, 4.1, & 4.3)		Sept. 16
		GCF, Factor by Grouping	5.4	
		Factoring Trinomials	5.5	
		Special Case Factoring	5.6	Sept. 23
		Mixed Factoring	5.7 Online	_
		Solving Equations by Factoring	5.8	
		Review for Test 3		
6	Sept. 23-29	Test 3 (Sections 1.4, 5.1, and 5.3-5.8)		Sept. 23
		Rational Expressions, Simplify, Multiply, Divide	6.1	
		Addition, Subtraction Rational Expressions	6.2	
		Graphing Functions	3.6	Sept 30
7	Sept. 30-Oct. 6	Radical Expressions and Functions (square root only)	7.2	Oct. 7
8	Oct. 7-13	Simplifying, Adding, and Subtracting Radicals	7.3	Oct.14
9	Oct. 14-20	Multiplying and Dividing Radicals	7.4	Oct. 21
10	Oct. 21-27	Quiz D (Sections 7.2-7.4)		
		Complex Numbers (exclude division)	7.6	Oct. 28
11	Oct. 28-Nov. 3	Review for Test 4		
				Nov. 4
12	Nov. 4-Nov. 10	Test 4 (Sections 6.1, 6.2, 3.6, 7.2, 7.3, 7.4, & 7.6)		Nov. 4
13	Nov. 11-17	Final Exam Review		Nov. 18
14	Nov. 18-24	Final Exam (comprehensive)		Nov. 19

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_2024-2025_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, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, 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 2. The last date to withdraw from the 16-week session is November15. The last date to withdraw for the 2nd 8-week session is November 26.

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-de

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.