



Math 0308.037IN
Foundations of Math Reasoning
Spring 2023
Online

Instructor Information: Sandra Coleman, scoleman11@com.edu, 409-933-8211

Student hours and location: MW 2:00-4:30 PM, STEAM 325-09, and T 2:30-5:00 PM, in [TEAMS](#), or by appointment

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 for this course is: Prealgebra, 8th edition, by Elayn Martin-Gay, Pearson Education, 2018.

Course Description: This course prepares students for college-level courses in Quantitative Reasoning and Elementary Statistical Methods. Topics include numeracy and the real number system with emphasis on integers and rational numbers; rates, ratios, and proportions; percentages; solving linear equations; problem solving; measurement and geometry; and statistical concepts, notation, and reasoning.

Prerequisite: TSIA2 Math Diagnostic 5. This course does not transfer.

Course requirements:

Homework Assignments (My Math Lab)

Quizzes (My Math Lab)

Discussion Forum Participation

Four exams

Comprehensive final exam

Required Technology: A calculator is needed for this course. A Texas Instruments TI30XIIS or TI 84 Plus is recommended. TI-89s or higher or TI-Nspire graphing calculators are not permitted. Internet capability is required to gain access to course materials and online assignments via MyMathLab software.

Determination of Course Grade/Detailed Grading Formula:

The course grade will be determined in the following way:

Comprehensive Final Exam	15%
Regular Exams	60%
MyMathLab Homework/Videos	10%
MyMathLab Quizzes	10%
Discussion Forum Participation	5%
Final Average	100%

Grading Scale:

Grade A: Final Average is [89.5, 100]

Grade B: Final Average is [79.5, 89.5)

Grade C: Final Average is [69.5, 79.5)

Grade D: Final Average is [59.5, 69.5)

Grade F: Final Average is [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 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.

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.

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	Section	Topic	Due Date
1		Orientation	Jan. 22
	2.1	Introduction to Integers	
	2.2	Adding Integers	
	2.3	Subtracting Integers	
	2.4	Multiplying and Dividing Integers	
2	2.5	Order of Operations	Jan. 29
	2.6	Solving Equations: Review of the Addition and Multiplication Properties	
		Quiz 1: Chapter 2	

2 cont'd	8.1	Pictographs, Bar Graphs, Histograms, Line Graphs, and Introduction to Statistics	Jan. 29
	8.2	Circle Graphs	
3	8.3	The Rectangular Coordinate System and Paired Data	Feb. 5
	8.4	Graphing Linear Equations in Two Variables	
	8.5	Counting and Introduction to Probability	
		Discussion 1: Probability (D2L Brightspace)	
		Review for Test 1	
4		Test 1: Chapters 2 and 8	Feb. 8
	3.1	Simplifying Algebraic Expressions	Feb. 12
	3.2	Solving Equations: Review of the Addition and Multiplication Properties	
	3.3	Solving Linear Equations in One Variable	
5	3.4	Linear Equations in One Variable and Problem Solving	Feb. 19
		Quiz 2: Chapter 3	
	4.1	Introduction to Fractions and Mixed Numbers	
	4.2	Factors and Simplest Form	
	4.3	Multiplying and Dividing Fractions	
	4.4	Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions	
6	4.5	Adding and Subtracting Unlike Fractions	Feb. 26
	4.7	Operations on Mixed Numbers	
	4.8	Solving Equations Containing Fractions	
		Discussion 2: Algebraic Equations (D2L Brightspace)	
		Review for Test 2	
7		Test 2: Chapters 3 and 4	Mar. 1
	5.1	Introduction to Decimals	Mar. 5
	5.2	Adding and Subtracting Decimals	
	5.3	Multiplying Decimals and Circumference of a Circle	
8	5.4	Dividing Decimals	Mar. 12
	5.5	Fractions, Decimals, and Order of Operations	
	5.6	Solving Equations Containing Decimals	
	5.7	Decimal Applications: Mean, Median, and Mode	
		Quiz 3: Chapter 5	
Mar. 13-19		***Spring Break***	
9	6.1	Ratios and Rates	Mar. 26
	6.2	Proportions	
	6.3	Proportions and Problem Solving	
		Discussion 3: Proportions (D2L Brightspace)	
		Review for Test 3	

10		Test 3: Chapters 5 and 6	Mar. 29
	7.1	Percents, Decimals, and Fractions	Apr. 2
	7.2	Solving Percent Problems with Equations	
	7.3	Solving Percent Problems with Proportions	
11	7.4	Applications of Percent	Apr. 9
	7.5	Percent and Problem Solving: Sales Tax, Commission, and Discount	
	7.6	Percent and Problem Solving: Interest	
		Quiz 4: Chapter 7	
12	9.2	Perimeter	Apr.16
	9.3	Area, Volume, and Surface Area	
	9.4	Linear Measurement (US & Metric units of length)	
	9.5	Weight and Mass (US & Metric units of weight and mass)	
13	9.6	Capacity (US & Metric units of volume)	Apr. 23
	9.7	Temperature and Conversions Between the U.S. and Metric Systems	
		Discussion 4: Percent (D2L Brightspace)	
		Review for Test 4	
14		Test 4: Chapters 7 and 9	Apr. 26
		Review for Final Exam	Apr. 30
15		Comprehensive Final Exam	May 3

****W-Day: April 24, 2023****

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 [Student Handbook 2022-2023 v4.pdf \(com.edu\)](#). *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 klachney@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 March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2nd 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 <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 deanofstudents@com.edu or communityresources@com.edu.