

MATH-0308-237CL-FA2022 Foundations of Math Reasoning Fall 2022 STEAM Building, Room 107 TTH 8:00-9:10 AM

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

Student hours: MWF: 11:00 -12:30pm; and TTh: 3:30-5:30pm

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 for this course is: <u>Prealgebra</u>, 8th edition, by Elayn Martin-Gay, Pearson Education, 2018. **Textbook ISBN-13: 9780134707648**

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 is recommended. TI-84 plus 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 20%
Regular Exams 60%
MyMathLab Homework 10%
MyMathLab Quizzes 10%
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: 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 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.

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	Торіс	Due Date
1		Orientation	
	2.1	Introduction to Integers	
Aug 22 - 26	2.2	Adding Integers	Aug 28
	2.3	Subtracting Integers	
	2.4	Multiplying and Dividing Integers	
2	2.5	Order of Operations	
	2.6	Solving Equations: Review of the Addition and	
A 20 G + 2		Multiplication Properties	Sep 4
Aug 29 - Sept 2		Quiz 1: Chapter 2	
	8.1	Pictographs, Bar Graphs, Histograms, Line Graphs, and Introduction to Statistics	
	8.2	Circle Graphs	
3	8.3	The Rectangular Coordinate System and Paired Data	
	8.4	Graphing Linear Equations in Two Variables	Sep 11
Sept. 5 - 9	8.5	Counting and Introduction to Probability	
		Discussion 1: Probability	
		Review for Test 1	
4		Test 1: Chapters 2 and 8	
	3.1	Simplifying Algebraic Expressions	
Sept. 12 - 16	3.2	Solving Equations: Review of the Addition and	Sept. 18
		Multiplication Properties	
	3.3	Solving Linear Equations in One Variable	
5	3.4	Linear Equations in One Variable and Problem Solving	
		Quiz 2: Chapter 3	
Sept. 19 - 23	4.1	Introduction to Fractions and Mixed Numbers	Sep 25
	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	
a	4.7	Operations on Mixed Numbers	
Sept. 26 - 30	4.8	Solving Equations Containing Fractions	Oct 2
		Discussion 2: Algebraic Equations	
		Review for Test 2	
		Test 2: Chapters 3 and 4	
7	5.1	Introduction to Decimals	Oct. 9
Oct. 3 - 7	5.2	Adding and Subtracting Decimals	
	5.3	Multiplying Decimals and Circumference of a Circle	
8	5.4	Dividing Decimals	_
	5.5	Fractions, Decimals, and Order of Operations	
Oct. 10 - 14	5.6	Solving Equations Containing Decimals	Oct 16
	5.7	Decimal Applications: Mean, Median, and Mode	
		Quiz 3: Chapter 5	

Week	Section	Topic	Due Date
9	6.1	Ratios and Rates	
	6.2	Proportions	
Mar 21 - 27	6.3	Proportions and Problem Solving	Oct 23
		Discussion 3: Proportions	
		Review for Test 3	
10		Test 3: Chapters 5 and 6	
	7.1	Percents, Decimals, and Fractions	Oct. 30
Mar 28 - Apr 3	7.2	Solving Percent Problems with Equations	
	7.3	Solving Percent Problems with Proportions	
11	7.4	Applications of Percent	
	7.5	Percent and Problem Solving: Sales Tax, Commission, and	
Oct 31 - Nov 4		Discount	Nov 6
	7.6	Percent and Problem Solving: Interest	
		Quiz 4: Chapter 7	
12	9.2	Perimeter	
Nov. 7 - 11	9.3	Area, Volume, and Surface Area	Nov 13
	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)	
Nov. 14 - 18	9.7	Temperature and Conversions Between the U.S. and	
		Metric Systems	Nov 20
		Review for Test 4	
14			
Nov. 22		Test 4: Chapters 7 and 9	Nov 27
15		Review for Final Exam	Dec 2
Nov. 28 - Dec 2		Comprehensive Final Exam	

^{*}W-Day is Nov 18

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

^{*}Class ends on Dec. 1

^{*}Calendar is subject to change

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 Michelle Brezina at 409-933-8124 or mvaldes1@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 October 5. The last date to withdraw from the 16-week session is November 18. The last date to withdraw for the 2nd 8-week session is December 1.

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