

# Math 0306.135H1 Foundations of Math Reasoning Fall 2024 STEAM Building, Room 103 MW 11:00 AM-12:20 PM and F 10:00-10:50 AM

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

**Student hours and location:** MW 2:00-3:00 PM and TTH 11:00 AM-12:15 PM in the STEAM Bldg., Room 325-09, T 2:00-3:00 PM in TEAMS, MW 3:00-4:00 in the Tutoring Center (Industrial Careers Building, Room 109), or by appointment

**Required Textbook/Materials:** You have purchased access to MyMathLab which includes the eText for the textbook and all course assignments with your tuition. A hard copy of the textbook is not required. The textbook for this course is: <u>Prealgebra</u>, 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.

# **Course requirements:**

Videos (MyMath Lab) Homework Assignments (MyMath Lab) Discussion Forums 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 Brightspace D2L.

# **Determination of Course Grade/Detailed Grading Formula:**

Comprehensive Final Exam	20%
Regular Exams	60%
Videos	1%
Discussion Forums	5%
MyMath Lab Homework	14%
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 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.

**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:lirichardson@com.edu">lrichardson@com.edu</a>.

# **Course outline:**

2.2 Adding Integers  W 2.3 Subtracting Integers 2.4 Multiplying and Dividing Integers W 2.5 Order of Operations  F 2.5 Order of Operations  2 Aug. 26-Sept. 1  Solving Equations: Review of the Addition and Multiplication Properties  W 3.3 Solving Linear Equations in One Variable & Problem Solving  W 3.4 Linear Equations in One Variable & Problem Solving  Rectangular Coordinate System and Paired Data  Graphing Linear Equations in Two Variables  Solving and Introduction to Probability (D2L)  * Review for Test 1  * Test 1: Ch. 2 & 8 (online)  Introduction to Fractions and Mixed Numbers and Mixed Numbers  4.1 Harding and Dividing Fractions  * Adding and Subtracting Like Fractions, Least  Common Denominator, and Equivalent Fractions  biscussion 2: Algebraic	Aug. 28 Sept. 1
W 2.3 Subtracting Integers 2.4 Multiplying and Dividing Integers 3.4 Integers 4.5 Counting and Introduction to Probability (D2L)  Review for Test 1  Aug. 26-Sept. 1  Aug. 26-Sept. 1  System and Paired Data Graphing Linear Equations in Two Variables 8.5 Counting and Introduction to Probability (D2L)  Review for Test 1  Test 1: Ch. 2 & 8 (online) Introduction to Fractions and Mixed Numbers 4.1 Introduction to Fractions and Mixed Numbers 4.2 Factors and Simplest Form Multiplication Properties 4.3 Multiplying and Dividing Fractions  W 3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving * Discussion 2: Algebraic	
W 2.3 Subtracting Integers 2.4 Multiplying and Dividing Integers 8.5 Counting and Introduction to Probability Discussion 1: Probability (D2L) 8 Review for Test 1  2 Aug. 26-Sept. 1 Simplifying Algebraic Expressions 3.2 Solving Equations: Review of the Addition and Multiplication Properties 4.1 Multiplying and Dividing Fractions  W 3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving 4.4 Graphing Linear Equations in Two Variables Counting and Introduction to Probability (D2L) 8 Review for Test 1  Test 1: Ch. 2 & 8 (online) Introduction to Fractions and Mixed Numbers Factors and Simplest Form Multiplying and Dividing Fractions  4.2 Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
2.4 Multiplying and Dividing Integers  F 2.5 Order of Operations  * Discussion 1: Probability (D2L)  * Review for Test 1  2 Aug. 26- Sept. 1  Sept. 1  * Test 1: Ch. 2 & 8 (online) Expressions  3.2 Solving Equations: Review of the Addition and Multiplication Properties  W 3.3 Solving Linear Equations in One Variable  * Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions  * Adging and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions  * Discussion 2: Algebraic	
Integers    Solving Linear Equations in One Variable & Problem Solving   *   *   *   *   *   *   *   *   *	
Test 1: Ch. 2 & 8 (online)  2 Aug. 26- Sept. 1  2 Aug. 26- Sept. 1  3.1 Simplifying Algebraic Expressions 3.2 Solving Equations: Review of the Addition and Multiplication Properties  W  3.3 Solving Linear Equations in One Variable July Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 1: Probability Disc	
F 2.5 Order of Operations * Discussion 1: Probability (D2L)  * Review for Test 1  2 Aug. 26- Sept. 1  3.1 Simplifying Algebraic Expressions 3.2 Solving Equations: Review of the Addition and Multiplication Properties  W 3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving  * Discussion 1: Probability (D2L) * Review for Test 1  * Test 1: Ch. 2 & 8 (online) Introduction to Fractions and Mixed Numbers 4.1 Factors and Simplest Form Multiplying and Dividing Fractions Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
2 Aug. 26- Sept. 1  3.1 Simplifying Algebraic Expressions 3.2 Solving Equations: Review of the Addition and Multiplication Properties  W  3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving  * Review for Test 1  * Test 1: Ch. 2 & 8 (online) Introduction to Fractions and Mixed Numbers 4.2 Factors and Simplest Form Multiplying and Dividing Fractions Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
* Review for Test 1  2 Aug. 26- Sept. 1  3.1 Simplifying Algebraic Expressions 3.2 Solving Equations: Review of the Addition and Multiplication Properties  W  3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving  * Review for Test 1  * Test 1: Ch. 2 & 8 (online) Introduction to Fractions and Mixed Numbers Factors and Simplest Form Multiplying and Dividing Fractions Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
2 Aug. 26- Sept. 1  3.1 Simplifying Algebraic Expressions 3.2 Solving Equations: Review of the Addition and Multiplication Properties  W  3.3 Solving Linear Equations in One Variable Jack Problem Solving  * Test 1: Ch. 2 & 8 (online) Introduction to Fractions and Mixed Numbers Factors and Simplest Form Multiplying and Dividing Fractions 4.4 Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
Sept. 1  Sept. 1  Sept. 1  Solving Equations: Review of the Addition and Multiplication Properties  W  3.3  Solving Linear Equations in One Variable  3.4  Linear Equations in One Variable & Problem Solving  *  Sept. 1  A.1  Introduction to Fractions and Mixed Numbers  4.2  Factors and Simplest Form  Multiplying and Dividing  Fractions  4.4  Adding and Subtracting  Like Fractions, Least  Common Denominator, and  Equivalent Fractions  Discussion 2: Algebraic	
3.2 Solving Equations: Review of the Addition and Multiplication Properties  W 3.3 Solving Linear Equations in One Variable  3.4 Linear Equations in One Variable & Problem Solving  W 3.5 Solving Linear Equations in One Variable & Problem Solving  * Discussion 2: Algebraic	Sept. 1
of the Addition and Multiplication Properties  W 3.3 Solving Linear Equations in One Variable & Problem Solving  Variable & Problem Solving  Solving Linear Equations in One Uariable & Problem Solving  * Discussion 2: Algebraic	
Multiplication Properties  W 3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving  W 2.3 Multiplying and Dividing Fractions  Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
W 3.3 Solving Linear Equations in One Variable Linear Equations in One Variable & Problem Solving Linear Equivalent Fractions (Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
W 3.3 Solving Linear Equations in One Variable 3.4 Linear Equations in One Variable & Problem Solving * Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
One Variable Like Fractions, Least Common Denominator, and Equivalent Fractions Piscussion 2: Algebraic	
3.4 Linear Equations in One Variable & Problem Solving * Common Denominator, and Equivalent Fractions Discussion 2: Algebraic	
Variable & Problem Solving Equivalent Fractions  * Discussion 2: Algebraic	
* Discussion 2: Algebraic	
F 3.4 (continued) Equations	
	Sept. 8
W 4.5 Adding and Subtracting 5.2 Add/Subtract Decimals	
Unlike Fractions 5.3 Multiplying Decimals and	
F 4.7 Operations on Mixed Circumference of a Circle	
rumbers Review for rest 2	0 111
	Sept. 11
	Sept. 15
Order of Operations 6.2 Proportions  Solving Fractions 6.2 Proportions	
W 5.6 Solving Equations 6.3 Proportions and Problem	
F 5.7 Containing Decimals Solving F 5.7 Decimal Applications: * Discussion 3: Proportions	
F 5.7 Decimal Applications: * Discussion 3: Proportions (D2L)	
* Review for Test 3	
	Sept. 16
	Sept. 10 Sept. 22
Fractions 7.5 Percent and Problem	50pt. 22
7.2 Solving Percent Problems Solving: Sales Tax,	
with Equations Commission, and Discount	
F 7.3 Solving Percent Problems	
with Proportions	
	Sept. 29
9.3 Area (No Volume or SA) Units of Volume)	-r/
W 9.4 Linear Measurement (U.S. 9.7. Temperature and	
and Metric Units of Length) Conversions	
F 9.5 Weight and Mass (U.S. and * Discussion 4: Percent (D2L)	
Metric Weight and Mass) * Review for Test 4	

Week	Date	In-Class Instruction			Inc	dependent Study - Online	Due
7	Sept. 30-	M	*	Test 4: Ch. 7 & 9 (in class)			Sept. 30
	Oct. 6	W	*	Review for Final Exam	*	Review for Final Exam	
		F		(continued)		(MyMathLab)	
8	Oct. 7-11	M	*	Final Exam (in class)			Oct. 7

\*\*\*\*W-Day: October 2, 2024\*\*\*\*

# **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="https://www.com.edu/student-services/docs/Student Handbook 2024-2025\_v2.pdf">https://www.com.edu/student-services/docs/Student Handbook 2024-2025\_v2.pdf</a>. 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 1<sup>st</sup> 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 2<sup>nd</sup> 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 <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-deanoft-deanoft-deanoft-deanoft-dailness-community-resources@com.edu">deanoft-dean

### **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.