



Math 0308.237CL
Foundations of Math Reasoning
STEAM Bldg, Room 107
Spring 2023
TTh
5:30 – 7:20 PM (0308)
7:30 – 9:20 PM (1342)

Instructor Information: Kristi Kelley, kkelley9@com.edu , 409-933-8287

Student hours and location: MW 9:00-11:00 AM and TTH 3:30-5:30 PM in STEAM 325.05 or in [TEAMS](#), or by appointment

Join the Microsoft Team Virtual Office Hours Session by clicking the link above or by using the code **211je1x**

Required Textbook/Materials: Prealgebra, 8th edition, by Elayn Martin-Gay

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 cost of the access code is included in tuition for this course. You will go to D2L to access MyMathLab.***

Required Technology: A TI-30XIIS calculator is required for this course. A TI-83 or higher (graphing calculators) or a TI-Nspire are **not permitted**. Internet capability is also required to gain access to course materials and online assignments via MyMathLab software.

Recommended Materials:

- A small 3 ring binder (to keep class notes in)
- Spiral bound notebook (to do your homework in) OR notebook paper and a bradded folder
- Pens and Pencils (You MUST complete your exam with a pencil or ERASEABLE pen)
- index cards
- highlighters

Points may be deducted for use of a non-erasable pen.

Course Description: This course prepares students for a college-level courses in either Statistical Reasoning or Contemporary Mathematics. Topics include: numeracy with an emphasis on estimation and fluency with large numbers; evaluating expressions and formulas; rates, ratios, and proportions; percentages; solving equations; linear models; data interpretations, including graphs and tables; verbal, algebraic and graphical representations of functions; exponential models.

Course requirements:

- **Homework:** Online MyMathLab homework assignments will be given each week for every section covered in the course. Homework assignments will count as 10% of your final grade. There *may* be additional homework assignments assigned during class throughout the semester.
- **Quizzes:** Four online MyMathLab quizzes will be given. Cumulatively, the quizzes will count as 10% of your final grade. ***There may be in class quizzes given at any time.***
- **Unit Exams:** Four exams will be given, and you will be provided with an online and paper review to prepare for each exam. Each test will count as 15% of your grade. The exams count as 60% of your grade.
We will review for the exam in class IF time permits.
- **Final Exam:** The comprehensive final exam will be given at the end of the course during Week 15. The final exam will count as 20% of your grade and will replace your lowest exam grade if it is higher.

Determination of Course Grade/Detailed Grading Formula:

Grading Formula:

The course average will be determined using the following formula:

$$\text{Final Average} = .60(\text{Exam Average}) + .20(\text{Final Exam}) + .10(\text{Homework}) + .10(\text{Quizzes})$$

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: Each homework and quiz has a set due date. Any questions worked after the due date will have a 20% late penalty. As a general rule, there are no make-up exams. A make-up exam will only be allowed at the discretion of the instructor under *extenuating circumstances (which have been documented)* and is limited to *one* exam. You are required to e-mail the instructor **before** the exam is given to be considered for a make-up exam. 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. The final exam will replace your lowest exam grade (if higher) **IF you have accrued less than 5 unexcused absences. All other missed tests will be assigned a zero, and the zero(s) will be used to calculate final grade in course.** Occasionally, extra credit points may 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 *if possible*. Regular attendance is a critical component to being successful in courses. Students should consult with their instructors when it becomes necessary to miss a class. Students are required to attend all classes. You cannot make-up classes, and it is your responsibility to be punctual and regular at attending class. If you find that you are having trouble arriving on time, adjust your schedule accordingly. **Tardiness, leaving early, not participating, and/or being on your cell phone during class can cause you to be counted absent. Also, please be advised that it is your responsibility to get caught up when a class is missed.**

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.

Table Mapping SLO's and Core Objectives

Student Learner Outcomes	SLO assessed via this assignment	SLO maps to Core Objective	Core Objective assessed via this assignment
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	Exam 1		
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: College of the Mainland is committed to a high standard of academic integrity. All students are responsible for honesty and independent effort. Incidents of academic and scholastic dishonesty (including cheating, plagiarism, and collusion) will be dealt with in a manner that is consistent with College Policy and the Student Conduct. Any student found to have been academically dishonest on an assignment, quiz, or exam will receive a zero for that assignment, quiz, or exam, and he or she will be referred to the Office of Student Conduct for further disciplinary action. Please read the section on Standards of Student Conduct and Discipline and Penalties in the online Student Handbook.

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, Math Department Chair, at (409) 933-8329 or at lrichardson@com.edu.

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.

Course outline:

Week	Math 0308	Due Date @ 11:59PM	Math 1342	Due Date @ 11:59PM
1 Jan. 17-22	<i>Orientation-T</i> 2.1 Introduction to Integers-T 2.2 Adding Integers-T 2.3 Subtracting Integers-Th 2.4 Multiplying and Dividing Integers-Th	Jan 22	<i>Orientation-T</i> 1.1 Introduction to the Practice of Statistics-T 1.2 Observational Studies versus Designed Experiments-Th 1.3 Simple Random Sampling-Th	Jan 22
2 Jan. 23-29	2.5 Order of Operations-T 2.6 Solving Equations: Review of the Addition and Multiplication Properties-T Quiz 1: Chapter 2 8.1 Pictographs, Bar Graphs, Histograms, Line Graphs, and Introduction to Statistics-Th 8.2 Circle Graphs-Th	Jan 29	1.4 Other Effective Sampling Methods-T 1.5 Bias in Sampling-T 1.6 The Design of Experiments-Th 2.1 Organizing Qualitative Data-Th	Jan 29
3 Jan. 30- Feb 5	8.3 The Rectangular Coordinate System and Paired Data-T 8.4 Graphing Linear Equations in Two Variables-T 8.5 Counting and Introduction to Probability-Th <i>Review for Test 1-Th</i>	Feb 5	2.2 Organizing Quantitative Data: The Popular Displays-T 2.3 Additional Displays of Quantitative Data-T 2.4 Graphical Misrepresentations of Data-Th Quiz 1 (1.1-1.6, 2.1-2.4) – SLO 1 and 2 3.1 Measure of Central Tendency-Th	Feb 5
4 Feb. 6-12	Test 1: Chapters 2 and 8-Feb 7-T 3.1 Simplifying Algebraic Expressions-Th 3.2 Solving Equations: Review of the Addition and Multiplication Properties-Th 3.3 Solving Linear Equations in One Variable-Th	Feb 12	3.1 Measure of Central Tendency-T 3.2 Measures of Dispersion-T/Th 3.3 Measures of Central Tendency and Dispersion from Grouped Data-Th	Feb 12
5 Feb. 13- 19	3.4 Linear Equations in One Variable and Problem Solving-T Quiz 2: Chapter 3 4.1 Introduction to Fractions and Mixed Numbers-T 4.2 Factors and Simplest Form-Th 4.3 Multiplying and Dividing Fractions-Th 4.4 Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions-Th	Feb 19	3.4 Measures of Dispersion and Outliers-T 3.5 The Five-Number Summary Boxplots-T/Th <i>Review for Exam 1-Th</i>	Feb 19
6 Feb. 20- 26	4.5 Adding and Subtracting Unlike Fractions-T 4.7 Operations on Mixed Numbers-T 4.8 Solving Equations Containing Fractions-Th <i>Review for Test 2-Th</i>	Feb 26	Exam 1 (1.1-1.6, 2.1-2.4, 3.1-3.5)-Feb 21-T 4.1/4.2 Scatter Diagrams, Correlation, Coefficient of Determination, & Least Squares Regression-Th Quiz 2 (4.1-4.2) – SLO 7	Feb 26
7 Feb. 27- Mar. 5	Test 2: Chapters 3 and 4-Feb 28-T 5.1 Introduction to Decimals-Th 5.2 Adding and Subtracting Decimals-Th 5.3 Multiplying Decimals and Circumference of a Circle-Th	Mar 5	5.1 Probability Rules-T 5.2 The Addition Rule and Complements-T/Th 5.3 Independence and the Multiplication Rule-Th	Mar 5

8 Mar. 6-12 8 ctd	5.4 Dividing Decimals-T 5.5 Fractions, Decimals, and Order of Operations-T 5.6 Solving Equations Containing Decimals-Th 5.7 Decimal Applications: Mean, Median, and Mode-Th Quiz 3: Chapter 5	Mar 12	5.4 Conditional Probability and the General Multiplication Rule-T 5.5 Counting Techniques-T/Th Quiz 3 (5.1-5.5) – SLO 3 and 4 6.1 Discrete Random Variables-Th	Mar 12
Mar. 13-19	SPRING BREAK			
9 Mar. 20-26	6.1 Ratios and Rates-T 6.2 Proportions-T 6.3 Proportions and Problem Solving-Th <i>Review for Test 3-Th</i>	Mar 26	6.1 Discrete Random Variables-T 6.2 The Binomial Probability Distribution-T/Th <i>Review for Exam 2-Th</i>	Mar 26
10 Mar.27-Apr. 2	7.1 Percents, Decimals, and Fractions-T 7.2 Solving Percent Problems with Equations-T Test 3: Chapters 5 and 6-Mar 30-Th	Apr 2	Exam 2 (4.1, 4.2, 5.1-5.5, 6.1, 6.2)- Mar 28 -T 7.1 Properties of Normal Distribution-Th 7.2 Applications of Normal Distribution-Th Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5	Apr 2
11 Apr. 3-9	7.3 Solving Percent Problems with Proportions-T 7.4 Applications of Percent-T 7.5 Percent and Problem Solving: Sales Tax, Commission, and Discount-Th 7.6 Percent and Problem Solving: Interest-Th Quiz 4: Chapter 7	Apr 9	8.1 Distribution of the Sample Mean-T 8.2 Distribution of the Sample Proportion-Th	Apr 9
12 Apr. 10-16	9.2 Perimeter-T 9.3 Area, Volume, and Surface Area-T 9.4 Linear Measurement (US & Metric units of length)-Th 9.5 Weight and Mass (US & Metric units of weight and mass)-Th	Apr 16	9.1 Estimating a Population Proportion-T 9.2 Estimating a Population Mean-T/Th Quiz 5 (9.1, 9.2) – SLO 6 <i>Review for Exam 3-Th</i>	Apr 16
13 Apr. 17-23	9.6 Capacity (US & Metric units of volume)-T 9.7 Temperature and Conversions Between the U.S. and Metric Systems-T <i>Review for Test 4-Th</i>	Apr 23	Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2)- Apr 18-T 10.1 The Language of Hypothesis Testing-Th 10.2 Hypothesis Tests for a Population Proportion-Th	Apr 23
14 Apr. 24-30	Test 4: Chapters 7 and 9-Apr 25-T <i>Review for Final Exam-Th</i>	Apr 30	10.3 Hypothesis Tests for a Population Mean-T 11.1 Inference about Two Population Proportions-Th	Apr 30
15 May 1-7	Comprehensive Final Exam-May 2-T		11.2 Inference about Two Means: Dependent Samples-T 11.3 Inference about Two Means: Independent Samples-Th Quiz 6 (10.1-10.3, 11.1-11.3) – SLO 8 <i>Review for Exam 4-Th</i>	May 7
16 May 8-12			Exam 4 (10.1-10.3, 11.1-11.3)-May 9-T Final Exam Review-T Final Exam-May 11-Th	F. E. Rev. due May 10

****Calendar is subject to change****

****Census Date: 2/1/2022****

****Withdraw Date: 4/24/2022***