# Math 0308.037IN <br> Foundations of Math Reasoning <br> Spring 2022 <br> Online 

Instructor Information: Sandra Coleman, scoleman11@com.edu, 409-933-8211
Student hours and location: MW 2:00-4:15 PM, STEAM 325-09, and TTH 2:30-4:00 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 | $10 \%$ |
| 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. 23 |
|  | 2.1 | Introduction to Integers |  |
|  | 2.2 | Adding Integers |  |
|  | 2.3 | Subtracting Integers | Jan. 30 |
|  | 2.4 | Multiplying and Dividing Integers |  |
|  | 2.5 | Order of Operations |  |


| 2 cont'd | 8.1 | Pictographs, Bar Graphs, Histograms, Line Graphs, and Introduction to Statistics | Jan. 30 |
| :---: | :---: | :---: | :---: |
|  | 8.2 | Circle Graphs |  |
| 3 | 8.3 | The Rectangular Coordinate System and Paired Data | Feb. 6 |
|  | 8.4 | Graphing Linear Equations in Two Variables |  |
|  | 8.5 | Counting and Introduction to Probability |  |
|  |  | Discussion 1: Probability |  |
|  |  | Review for Test 1 |  |
| 4 |  | Test 1: Chapters 2 and 8 | Feb. 9 |
|  | 3.1 | Simplifying Algebraic Expressions |  |
|  | 3.2 | Solving Equations: Review of the Addition and Multiplication Properties | Feb. 13 |
|  | 3.3 | Solving Linear Equations in One Variable |  |
| 5 | 3.4 | Linear Equations in One Variable and Problem Solving | Feb. 20 |
|  |  | 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. 27 |
|  | 4.7 | Operations on Mixed Numbers |  |
|  | 4.8 | Solving Equations Containing Fractions |  |
|  |  | Discussion 2: Algebraic Equations |  |
|  |  | Review for Test 2 |  |
| 7 |  | Test 2: Chapters 3 and 4 | Mar. 2 |
|  | 5.1 | Introduction to Decimals |  |
|  | 5.2 | Adding and Subtracting Decimals | Mar. 6 |
|  | 5.3 | Multiplying Decimals and Circumference of a Circle |  |
| 8 | 5.4 | Dividing Decimals | Mar. 13 |
|  | 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 |  |
|  |  | ****Spring Break**** |  |
| 9 | 6.1 | Ratios and Rates | Mar. 27 |
|  | 6.2 | Proportions |  |
|  | 6.3 | Proportions and Problem Solving |  |
|  |  | Discussion 3: Proportions |  |
|  |  | Review for Test 3 |  |


| 10 |  | Test 3: Chapters 5 and 6 | Mar. 30 <br> Apr. 3 |
| :---: | :---: | :---: | :---: |
|  | 7.1 | Percents, Decimals, and Fractions |  |
|  | 7.2 | Solving Percent Problems with Equations |  |
|  | 7.3 | Solving Percent Problems with Proportions |  |
| 11 | 7.4 | Applications of Percent | Apr. 10 |
|  | 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. 17 |
|  | 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. 24 |
|  | 9.7 | Temperature and Conversions Between the U.S. and Metric Systems |  |
|  |  | Discussion 4: Percent |  |
|  |  | Review for Test 4 |  |
| 14 |  | Test 4: Chapters 7 and 9 | $\begin{gathered} \text { Apr. } 27 \\ \text { May } 1 \\ \hline \end{gathered}$ |
|  |  | Review for Final Exam |  |
| 15 |  | Comprehensive Final Exam | May 4 |

****W-Day: April 25, 2022****

## 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

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 Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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 st 8 -week session is March 2. The last day to withdraw from the 16 -week session is April 25 . The last date to withdraw from the 2 nd 8 -week session is May 4.
$\mathbf{F}_{\mathrm{N}}$ Grading: The $\mathrm{F}_{\mathrm{N}}$ grade is issued in cases of failure due to a lack of attendance, as determined by the instructor. The $\mathrm{F}_{\mathrm{N}}$ 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 $\mathrm{F}_{\mathrm{N}}$ grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an $\mathrm{F}_{\mathrm{N}}$ 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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.

