



MATH-0306-153CL
Mathematical Foundations
Fall 2023
STEAM Building, Room 107
TTH 11:00-12:20 pm; F 11:00 – 11:50am

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

Student hours: MW: 8:30-9:30am; TTh: 3:30 – 6:00pm; F: 9:00-10:00am
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: Prealgebra, 8th edition, by Elayn Martin-Gay, Pearson Education, 2018. **Textbook ISBN-13: 9780134707648**

Course Description: This course prepares students for 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 Assignments (My Math Lab)

Quizzes (My Math Lab)

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	15%
Regular Exams	60%
MyLab Math Homework	15%
MyLab Math Quizzes	10%

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.

Email: Include your **course & section** in the subject line when emailing.

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.

Electronic Device Policies

You may use your laptop or tablet for taking notes during lectures; however, that privilege will be lost if I find that you are using them for non-course-related reasons (e.g., news, social media, shopping).

All other electronic devices should be silenced and hidden. If there is an emergency and your phone must be on/visible, please inform me of this at the beginning of class.

Week	Math 0306	Due Date @ 11:59PM	Math 1342	Due Date @ 11:59PM
1 Aug 28 – Sept 3	<i>Orientation-T</i> 1.2 Place Value, Names for Numbers & Reading Tables -T 1.3 Adding & Subtracting Whole Numbers and Perimeter -T 1.4 Rounding and Estimating -T 1.5 Multiplying Whole Numbers and Area -Th 1.6 Dividing Whole Numbers -Th 1.7 Exponents and Order of Operations - Th 1.8 Introduction to Variables, Algebraic Expressions, and Equations – Th <i>*There is a single Ch. 1 HW assignment for 1.2-1.8*</i>	Sept 3	<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	Sept 3
2 Sept 4 – Sept 10 Holiday: Mon 9/4	2.1 Introduction to Integers-T 2.2 Adding Integers-T 2.3 Subtracting Integers-T 2.4 Multiplying and Dividing Integers-Th 2.5 Order of Operations-Th 2.6 Solving Equations: Review of the Addition and Multiplication Properties-T Quiz 1: Chapter 2	Sept 10	1.4 Other Effective Sampling Methods-T 1.5 Bias in Sampling-T 1.6 The Design of Experiments-T 2.1 Organizing Qualitative Data-Th	Sept 10
3 Sept 11 – Sept 17	8.1 Pictographs, Bar Graphs, Histograms, Line Graphs, and Introduction to Statistics-T 8.2 Circle Graphs-T <i>*8.1 & 8.2 online HW assignments only – this material is covered in 2.1 & 2.2 in 1342*</i> 8.3 The Rectangular Coordinate System and Paired Data-Th 8.4 Graphing Linear Equations in Two Variables-Th	Sept 17	2.2 Organizing Quantitative Data: The Popular Displays-T 2.3 Additional Displays of Quantitative Data-Th 2.4 Graphical Misrepresentations of Data-Th Quiz 1 (1.1-1.6, 2.1-2.4) – SLO 1 and 2	Sept 17
4 Sept 18 – Sept 24	8.5 Counting and Introduction to Probability-T <i>Review for Test 1-T</i> Test 1: Chapters 1, 2 and 8-Th-9/21 3.1 Simplifying Algebraic Expressions- Th	8.5, Rev: W – 9/20 Test 1: Th – 9/21 3.1: 9/24	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	Sept 24

Week	Math 0306	Due Date @ 11:59PM	Math 1342	Due Date @ 11:59PM
5 Sept 25 – Oct 1	3.2 Solving Equations: Review of the Addition and Multiplication Properties- T 3.3 Solving Linear Equations in One Variable-T 3.4 Linear Equations in One Variable and Problem Solving-T Quiz 2: Chapter 3 4.1 Introduction to Fractions and Mixed Numbers-Th 4.2 Factors and Simplest Form-Th 4.3 Multiplying and Dividing Fractions-Th	Oct 1	3.3 Measures of Central Tendency and Dispersion from Grouped Data-T 3.4 Measures of Dispersion and Outliers-T 3.5 The Five-Number Summary Boxplots-Th <i>Review for Exam 1-Th</i>	3.3 - 3.5: Su – 10/1 <i>Rev:</i> <i>M – 10/2</i>
6 Oct 2 - Oct 8	4.4 Adding and Subtracting Like Fractions, Least Common Denominator, and Equivalent Fractions-T 4.5 Adding and Subtracting Unlike Fractions-T 4.7 Operations on Mixed Numbers-T 4.8 Solving Equations with Fractions-Th <i>Review for Test 2-Th</i>	4.4, 4.5, 4.7, 4.8: Su – 10/8 <i>Rev:</i> <i>M – 10/9</i>	Exam 1 (Ch 1, 2, 3) – T – 10/3 4.1/4.2 Scatter Diagrams, Correlation, Coefficient of Determination, & Least Squares Regression-Th Quiz 2 (4.1-4.2) – SLO 7	Exam 1: T – 10/3 <i>4.1/4.2, Quiz 2: Su – 10/4</i>
7 Oct 9 - Oct 15	Test 2: Chapters 3 and 4 – T – 10/10 5.1 Introduction to Decimals-T 5.2 Adding and Subtracting Decimals-Th 5.3 Multiplying Decimals and Circumference of a Circle-Th 5.4 Dividing Decimals-Th	Test 2: T: 10/10 5.1 – 5.4: Su – 10/15	5.1 Probability Rules-T 5.2 The Addition Rule and Complements-T/Th 5.3 Independence and the Multiplication Rule-Th	Oct 15
8 Oct 16 – Oct 22	5.5 Fractions, Decimals, and Order of Operations-T 5.6 Solving Equations Containing Decimals-T 5.7 Decimal Applications: Mean, Median, and Mode *5.7 Online HW assignment only – Covered this topic in 3.1 in 1342* Quiz 3: Chapter 5 6.1 Ratios and Rates-Th 6.2 Proportions-Th	Oct 22	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	Oct 22
9 Oct 23 – Oct 29	6.3 Proportions and Problem Solving-T <i>Review for Test 3-T</i> Test 3: Chapters 5 and 6 – Th – 10/26	6.3, <i>Rev:</i> W – 10/25 Test 3: Th – 10/26	6.1 Discrete Random Variables-T 6.2 The Binomial Probability Distribution-T <i>Review for Exam 2-Th</i> 7.1 Properties of Normal Distribution-T *7.1 is on Exam 3*	6.1, 6.2: Su – 10/29 <i>Rev:</i> <i>M – 10/30</i>

Week	Math 0306	Due Date @ 11:59PM	Math 1342	Due Date @ 11:59PM
10 Oct 30 – Nov 5	7.1 Percents, Decimals, and Fractions-T 7.2 Solving Percent Problems with Equations-Th 7.3 Solving Percent Problems with Proportions-Th 7.4 Applications of Percent-Th	Nov 5 Nov 2	Exam 2 (4.1/4.2, 5.1-5.5, 6.1, 6.2)- T – 10/31 7.1 Properties of Normal Distribution-T 7.2 Applications of Normal Distribution-Th Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5	Exam 2: T – 10/31 7.1, 7.2, Quiz 4: Su – 11/5
11 Nov 6 – Nov 12	7.5 Percent and Problem Solving: Sales Tax, Commission, and Discount-T 7.6 Percent and Problem Solving: Interest-T Quiz 4: Chapter 7 9.2 Perimeter-Th 9.3 Area, Volume – Th	Nov 12	8.1 Distribution of the Sample Mean-T 8.2 Distribution of the Sample Proportion-Th	Nov 12
12 Nov 13 – Nov 19	9.4 Linear Measurement (US & Metric units of length)-T 9.5 Weight and Mass (US & Metric units of weight and mass)-T 9.6 Capacity (US & Metric units of volume)-Th 9.7 Temperature and Conversions Between the U.S. and Metric Systems-Th	Nov 19	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>	9.1,9./2,Quiz 5: Su – 11/19 <i>Rev: M – 11/20</i>
13 Nov 20 – Nov 26 Holiday: 11/23-11/26 Th-Su	<i>Review for Test 4-T</i>	Nov 26	Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2) – T – 11/21 10.1 The Language of Hypothesis Testing-T	Exam 3: T – 11/21 10.1: Su – 11/26
14 Nov 27 – Dec 3	Test 4: Chapters 7 and 9 – T – 11/28 <i>Review for Final Exam-Th</i>	Test 4: T – 11/28 <i>F.E. Rev: M – 12/4</i>	10.2 Hypothesis Tests for a Population Proportion-T 10.3 Hypothesis Tests for a Population Mean-T 11.1 Inference about Two Population Proportions-Th 11.2 Inference about Two Means: Dependent Samples-Th	Dec 3
15 Dec 4 - Dec 10	Comprehensive Final Exam-T – 12/5	F. Exam: T – 12/5	11.3 Inference about Two Means: Independent Samples-T (if time permits) Quiz 6 (10.1-10.3, 11.1-11.3) – SLO 8 <i>Review for Exam 4-T</i> Exam 4 (10.1-10.3, 11.1-11.3)-Th <i>Final Exam Review-T/Th</i>	11.3,Quiz6, <i>Rev:</i> W – 12/ 6 Exam 4: Th – 12/7 <i>F.E. Rev: M – 12/11</i>
16 Dec 11 – Dec 15			Final Exam -T	F. Exam: T – 12/12

***W-Day is Nov 28**

***Class ends on Dec. 5**

***Calendar is subject to change**

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://www.com.edu/student-services/docs/Student_Handbook_2023-2024_v2.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.*

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 October 11. The last date to withdraw from the 16-week session is November 28. The last date to withdraw for the 2nd 8-week session is December 7.

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.