

# Math 1351-221H2 Mathematics for Teachers I FALL 2024

Lecture: 6:00pm - 7:20pm MW STEAM Room 107

Instructor Information: Gabriela Peña, gpena3@com.edu

**Office: STEAM 325-07** 

Office Phone #: 409-933-8182

Student hours and location: Schedule your time via <a href="https://calendly.com/gpena3">https://calendly.com/gpena3</a>

Monday & Wednesday 12:00pm – 2:00pm **STEAM 325-07** Wednesday 11:00am – 12:00pm **Tutoring Center** 

Tuesday & Thursday 11:00am – 12:15pm **Online/ STEAM 325-07** 

Required Textbook: The textbook for this course is: A Problem Solving Approach to Mathematics for Elementary School Teachers by Billstein, Boschmans, Libeskind, & Lott (13th ed.) published by Pearson. Textbooks and/or courseware will be available through VitalSource digitally. Cost of the course materials: \$92.45, which has already been paid for with your tuition. The course materials will be available on the first day of class and you will be given the opportunity to opt-out of the e-book prior to the census day of the class. If you choose to opt out then you will not be able to submit any of your assignments, which will lead to not being successful in the class. You will receive an email with more information about the use of the course materials closer to the start of the semester. The homework and quizzes as well as the e-text and videos for this course are online at mymathlab through Brightspace.

**Textbook Purchasing Statement:** E-Book via MyLab Math in Brightspace - D2L

(No Purchase Necessary, unless you Opt Out)

**Course Description:** Math 1351 is the second course in a two-semester course sequence designed to meet the mathematics requirements for students seeking to obtain an elementary teaching certificate. The course is a set theory approach to the development of the real number system, fundamental operations and concepts of arithmetic, systems of numeration, number theory with an emphasis on problem solving strategies and critical thinking.

#### Course requirements (including description of any special projects or assignments):

- 1. Four Chapter Tests
- 2. Comprehensive Final Exam
- 3. MyLab Math (MML) Online Assignments
- 4. Quizzes Assignments
- 5. Discussions
- 6. Project(s)

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

The course grade will be determined by the following formula:

50% Exam Average,

15% Homework, Discussion Board Average

15% Quiz, Project(s)

+ 20% Final Exam

100 % Final Grade

Homework Assignments on MyLab Math: There is a homework assignment for each section covered in class or online lecture video. These are listed on the course outline beginning on page 4 of this syllabus. Twenty percent will be deducted from the score of a homework assignment if it is not finished by the due date. Although the homework is online at mymathlab.com, and the answers are entered online, you should write your work on paper, neatly showing all steps, and keep it in your notebook with your lecture notes for future reference. Both may serve as an aid for preparing for quizzes and exams, and as a place to begin when seeking assistance from your instructor, the math lab tutor, or from your peers. You have several attempts to answer a question correctly on the homework assignments.

Quizzes on MyLab Math: There are four quizzes which relate to the student learning outcomes. They are to be done on MyLab Math. Unlike the homework assignments, the quizzes must be taken in **one sitting**, they are timed, and the student only gets one attempt to answer each question. The quizzes can only be taken twice. If not taken by its due date 20% will be deducted. The higher of the two grades will be used to determine the student's quiz average on MyLab Math.

Four Chapter Exams & Final Exam: There are four exams which cover the chapters in the textbook. The exams are given on the dates listed on the Course Outline. The student has one hour and twenty minutes to take each exam. There are no make-up exams unless the student notifies the instructor in writing prior to the Exam and the professor determines if it is a legitimate reason. If you are permitted to make-up the exam, there is a deadline for completing the exam, and if the deadline is not met, the score for the exam will be recorded as a zero. You are only allowed to make-up one exam in the semester, given that any necessary paperwork is provided. If you have an online Exam scheduled, you will be using Lockdown Browser. You are responsible for finding an electronic device that supports lock browser, if yours does not. For your online exams you will be required to upload your work in a PDF format on Brightspace - D2L, within 30 minutes of completing your exam. You must show work to receive credit and all problems must be numbered. If no work is provided you will lose 15% of your Exam grade. Exams may not be retaken. However, if the grade on the Final Exam is higher than the lowest chapter exam grade, the Final Exam will replace your lowest Exam score. If and only if you have provided the work for all your Online Exams.

**Discussion Board:** There will be discussion board questions on BrighSpace-D2L. You must participate in each discussion and reply to at least one of your classmates by the due date.

**Projects:** There will be 1-2 Projects during the Semester. TBD

### **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)

Grade I: Given unforeseen circumstances that result in the inability to successfully complete the course objectives, an I-Contract can be requested from the instructor assuming you meet the following criteria:

- 1. Have a passing overall average (70 or higher)
- 2. All work completed except for The Final Exam

**Attendance Policy:** Students at COM are expected to attend and participate in every session of all classes for which they are registered. Regular attendance is a critical component to being successful in courses. College of the Mainland recognizes no excused absences other than those prescribed by law. There is a strong correlation

between excessive absences and failing grades. It is extremely difficult to succeed in this course without having good attendance. Students with excessive absences will be referred to Student Services. Students should consult information provided in My Math Lab and the course calendar when it becomes necessary to miss a class in order to be prepared when they return to class. If you are absent, you are still responsible for the work that was to be finished by the next class.

**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.

# **Student Learning Outcomes**

| Student Learner Outcome   | Maps to Core Objective                  | Assessed via this<br>Assignment  |
|---|---|----------------------------------|
| 1. Explain and model the arithmetic operations for whole numbers and integers.                                  | Empirical and Quantitative Skills (EQS) | Exam 4                           |
| 2. Explain and model computations with fractions, decimals, ratios, and percentages                             | Empirical and Quantitative Skills (EQS) | Exam 3                           |
| 3. Describe and demonstrate how factors, multiples, and prime numbers are used to solve problems.               | Critical Thinking Skills (CT)           | Exam 2                           |
| 4. Apply problem solving skills to numerical applications.  | Critical Thinking Skills (CT)           | Problem-Solving<br>Project(Quiz) |
| 5. Represent and describe relationships among sets using the appropriate mathematical terminology and notation. | Visual Communication Skills (CS)        | Exam 1                           |
| 6. Compare and contrast structures of numeration systems.   | Critical Thinking Skills (CT)           | Exam 1                           |

**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 Handbook. Any student found to have been academically dishonest on a quiz or test will receive a zero on that quiz or test and forfeit the chance to retake. In addition, he or she will be referred to the Office of Student Conduct for further disciplinary action. For the second offense, students will be given an "F" for the class. Please read the sections on *Standards of Student Conduct and Discipline and Penalties* in the on-line Student Handbook.

The scientific calculator TI-30XIIS is required for this course. Graphing calculators and unapproved calculators are not permitted when testing. Using a calculator for tests that is not approved will be considered cheating.

**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 the Department Chair, Mr. Leslie Richardson at (409)933-8329.

Course outline: (Due dates are the last day that the assignment can be submitted, it's suggested to be completed before.)

| Week | Dates            | Math 1351-221H2  | Due Dates by 11:59pm |
|------|------------------|--|----------------------|
| 1    | Oct. 14-18       | Attend Face to Face Lectures and Complete MML Assignments by their Due Date Syllabus             | , <u> </u>           |
|      |                  | 9-1 Determining Probabilities  | 10/18/24             |
|      |                  | 9-2 Multistage Experiments and Modeling Games  | 10/18/24             |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                |                      |
|      |                  | 9-3 Simulations and Applications of Probability  | 10/20/24             |
|      |                  | 9-4 Counting and Techniques in Probability   | 10/20/24             |
|      |                  | Chapter 9 Discussion Board   | 10/20/24             |
| 2    | Oct. 21-25       | Attend Face to Face Lectures and Complete MML Assignments by their Due Date                      |                      |
|      |                  | Review Exam 1 (Chapter 9)  | 10/05/04             |
|      |                  | Exam 1 (Chapter 9) October 21, 2024  | 10/25/24<br>10/25/24 |
|      |                  | 10-1 Collecting Data Watch the Online Lectures and Complete MML Assignment by Due Date           | 10/23/24             |
|      |                  | 10-2 Displaying Data: Part I   | 10/27/24             |
|      |                  | 10-2 Displaying Data. Part II  | 10/27/24             |
|      |                  | Chapter 10 Discussion Board  | 10/27/24             |
| 3    | Oct. 28- Nov. 1  | Attend Face to Face Lectures and Complete MML Assignments by their Due Date                      | 10/27/24             |
| 5    | OCI. 20- 190V. 1 | 11-3 More About Angles   | 11/1/24              |
|      |                  | 11-3 More About Angles 11-4 Geometry in Three Dimensions   | 11/1/24              |
|      |                  | Chapter 11 Discussion Board  | 11/1/24              |
|      |                  | Review Exam 2 (Chapter 10 & 11)  |                      |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                |                      |
|      |                  | Exam 2 (Chapter 10 & 11) Online submission November 4, 2024                                      | 11/4/24              |
|      |                  | 12-1 Congruence Through Constructions  | 11/6/24              |
|      |                  | 12-2 Additional Congruence Theorems  | 11/6/24              |
| 4    | Nov. 4-8         | Attend Face to Face Lectures and Complete MML Assignments by their Due Date                      |                      |
|      |                  | 12-3 Additional Constructions  | 11/8/24              |
|      |                  | Chapter 12 Discussion Board  | 11/8/24              |
|      |                  | 12-4 Similar Triangles and Other Similar Figures   | 11/8/24              |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                | 11/11/01             |
|      |                  | Review Exam 3 (Chapter 12)   | 11/11/24             |
|      | 37 44 47         | Exam 3 (Chapter 12) March 27   | 11/11/24             |
| 5    | Nov. 11-15       | Attend Face to Face Lectures and Complete MML Assignments by their Due Date                      | 11/15/04             |
|      |                  | 13-1 Linear Measure  | 11/15/24             |
|      |                  | 13-2 Areas of Polygons and Circles   | 11/15/24             |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                | 11/17/24             |
|      |                  | 13-3 The Pythagorean Theorem, Distance Formula, and Equations of a Circle 13-4 Surface Area      | 11/17/24<br>11/17/24 |
| 6    | Nov. 18-22       |  | 11/17/24             |
| U    | 1107. 10-22      | Attend Face to Face Lectures and Complete MML Assignments by their Due Date 13-5 Volume and Mass | 11/22/24             |
|      |                  | Review Exam 4 (Chapter 13)   | 11/22/24             |
|      |                  | Chapter 13 Discussion Board  | 11/22/24             |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                | ,                    |
|      |                  | Exam 4 (Chapter 13 ) November 25, 2024   | 11/24/24             |
|      |                  | 14-1 Translations, Rotations, and Tessellations  | 11/24/24             |
| 7    | Nov. 25-27       | Attend Face to Face Lectures and Complete MML Assignments by their Due Date                      |                      |
|      |                  | 14-2 Reflections and Glide Reflections   | 11/27/24             |
|      |                  | 14-3 Dilations   | 11/27/24             |
|      |                  | Chapter 14 Discussion Board  | 11/27/24             |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                |                      |
|      |                  |  |                      |
| 8    | Dec. 2-6         | Attend Face to Face Lectures and Complete MML Assignments by their Due Date                      |                      |
|      |                  | Review for Final Exam in class December 2, 2024  | 12/2/24              |
|      |                  | Final Exam in class December 4, 2024   | 12/4/24              |
|      |                  | Watch the Online Lectures and Complete MML Assignment by Due Date                                |                      |
|      |                  |  |                      |

PLEASE NOTE: The syllabus is subject to change at the discretion of the instructor.

Census Day – October 21, 2024 W-Day – November 15, 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 1st 8-week session is October 2. The last date to withdraw from the 16-week session is November 15. The last date to withdraw for the 2nd 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 deanofstudents@com.edu or communityresources@com.edu.

#### **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.