

# Math 1351-221CL Mathematics for Teachers II FALL 2022

**Lecture: 7:30pm – 8:50pm MW STEAM Room 107** 

Instructor Information: Gabriela Peña, gpena3@com.edu

Office: **STEAM 325-07** 

Office Phone #: 409-933-8182 Leave a Message

Google Voice #: 409-242-0281

Student hours and location: Schedule your time via https://calendly.com/gpena3

Monday & Wednesday 1 - 2pm & 4 - 5pm **STEAM 325-07** 

Tuesday 3:30 – 5pm **STEAM 325-07** 

Tuesday & Thursday 8 – 9am **Online** 

**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. The homework and quizzes as well as the e-text and videos for this course are online at mymathlab.com.

**Textbook Purchasing Statement:** E-Book via MyLab Math in Brightspace - D2L (**No Purchase Necessary**)

**Course Description:** Math 1351 is the first 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:**

Homework Assignments on MyLab Math: There is a homework assignment for each section covered in class. 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 finished by it is due. 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, or from your peers. You have several attempts to answer a question correctly on the homework assignments.

**Discussion Board:** There will be discussion board questions on BrighSpace-D2L To receive your points for this, you must comment on the discussion questions, and reply to someone's comment.

**Projects:** There will be 2-3 Projects during the Semester. TBD

**Quizzes:** There will be quizzes over specific sections. The quizzes will be in class.

**Exams:** There will be four, chapter exams and a comprehensive final. There are no retakes on any of the exams, and students are expected to complete the exam within an allotted time. The dates of the exams and the sections covered on each exam are shown in the course outline. Exams will be in person.

## **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 Average

+ 20% Final Exam

100 % Final Grade

## Grading Scale:

Grade A: Final Average in [89.5, 100]

Grade B: Final Average in [79.5, 89.5)

Grade C: Final Average in [69.5, 79.5)

Grade D: Final Average in [59.5, 69.5)

Grade F: Final Average in [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 Learner Outcome   | Maps to Core Objective                  | Assessed via this                |
|---|---|----------------------------------|
| 1. Explain and model the arithmetic operations for whole numbers and integers.                                  | Empirical and Quantitative Skills (EQS) | Assignment 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 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 sections on Standards of Student Conduct and Discipline and Penalties in the on-line 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 the Department Chair, Mr. Leslie Richardson at (409)933-8329 or <a href="mailto:lirichardson@com.edu">lrichardson@com.edu</a>

# **Course outline:**

| Week | Dates            | Math 1351-221  | <b>Due Dates</b>  |
|------|------------------|--|---|
| 1    | August 22, 24    | Syllabus 9-1 Determining Probabilities 9-2 Multistage Experiments and Modeling Games   | All Week 1 assignments are due 8/28/22 by 11:59PM         |
| 2    | August 29, 31    | <ul><li>9-3 Simulations and Applications of Probability</li><li>9-4 Counting and Techniques in Probability</li></ul>   | All Week 2 assignments are due 9/6/22 by 11:59PM          |
| 3    | September 7      | Review Exam 1 (Chapter 9)<br>Project 1   | All Week 3 assignments are due 9/11/22 by 11:59PM         |
| 4    | September 12, 14 | Exam 1<br>10-1 Collecting Data   | All Week 4 assignments are due 9/18/22 by 11:59PM         |
| 5    | September 19, 21 | 10-2 Displaying Data: Part I<br>10-3 Displaying Data Part II   | All Week 5 assignments are due 9/25/22 by 11:59PM         |
| 6    | September 26, 28 | <ul><li>11-3 More About Angles</li><li>11-4 Geometry in Three Dimensions</li></ul>   | All Week 6 assignments are due 10/2/22 by 11:59PM         |
| 7    | October 3, 5     | Review Exam 2 (Chapter 10&11)<br>Exam 2  | All Week 7 assignments are due 10/09/22 by 11:59PM        |
| 8    | October 10, 12   | <ul><li>12-1 Congruence Through Constructions</li><li>12-2 Additional Congruence Theorems</li></ul>  | All Week 8 assignments are due 10/16/22 by 11:59PM        |
| 9    | October 17, 19   | 12-3 Additional Constructions<br>12-4 Similar Triangles and Other Similar Figures  | All Week 9 assignments are due 10/23/22 by 11:59PM        |
| 10   | October 24, 26   | Review Exam 3 (Chapter 12)<br>Exam 3   | All Week 10 assignments<br>are due 10/30/22 by<br>11:59PM |
| 11   | Oct. 31, Nov. 2  | <ul><li>13-1 Linear Measure</li><li>13-2 Areas of Polygons and Circles</li><li>13-3 The Pythagorean Theorem, Distance Formula, and Equations of a Circle</li></ul> | All Week 11 assignments are due 11/6/22 by 11:59PM        |
| 12   | November 7, 9    | 13-4 Surface Area<br>13-5 Volume and Mass  | All Week 12 assignments are due 11/13/22 by 11:59PM       |
| 13   | November 14, 16  | Review Exam 4 (Chapter 13)<br>Exam 4   | All Week 13 assignments<br>are due 11/20/22 by<br>11:59PM |
| 14   | November 21      | 14-1 Translations, Rotations, and Tessellations<br>Project 2   | All Week 14 assignments<br>are due 11/27/22 by<br>11:59PM |
| 15   | November 28, 30  | 14-2 Reflections and Glide Reflections<br>14-3 Dilations   | All Week 15 assignments<br>are due 12/04/22 by<br>11:59PM |
| 16   | December 5, 7    | Review for Final Exam<br>Final Exam (In person on 12/7/2022)   | All Week 16 assignments<br>are due 12/07/22 by<br>11:59PM |

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

Census Day – September 7, 2022 W-Day – November 18, 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.<a href="https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf">https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.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. <a href="https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf">https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf</a>

**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 Michelle Brezina at 409-933-8124 or <a href="mailto:mvaldes1@com.edu">mvaldes1@com.edu</a>. 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  $1^{st}$  8-week session is October 5. The last date to withdraw from the  $1^{ct}$  8-week session is November 18. The last date to withdraw for the  $2^{nd}$  8-week session is December 1.

**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-deanofstudents@com.edu">deanofstudents@com.edu</a> or <a href="maintenance-center">communityresources@com.edu</a>