College of the Mainland

Syllabus
Math 1351.221CL – Spring 2022
Mathematics for Teachers II
T/TH 7:30-8:50 pm

Instructor Information: Carol Switoyus
cswitoyus@com.edu
(409)933-8220

Student Hours and location: M/W 1:00-1:45 pm; T/TH 3:30-5:45 pm; F 10:00-11:30 am
Steam #325-17

Required Textbook: The textbook used in this course is: Mathematics for Elementary Teachers by Musser, Peterson, Burger (Tenth edition) The companion website is http://www.wiley.com/college/musser.

Course Description: This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking.

Course requirements:
HW/Daily: There will be homework assigned for every section covered. Although the homework assignments themselves will not be submitted or graded, they reflect what to expect on quizzes and tests. Your daily grade will be based on participation and in class activities.
Quizzes: There will be four quizzes, four chapter-exams and a comprehensive final. All dates are in the course outline. **There are no retakes on any of the quizzes or exams.**

Determination of Course Grade/Detailed Grading Formula:
The course grade will be determined by the following formula:
Final Average = 60% Exam Average + 10% HW/Daily Average + 10% Quiz Average + 20% Final Exam
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)

Late Work, Make-Up, and Extra Credit:
In-class activities and quizzes may not be made up. Tests may be made up provided you notify me in advance of any issues. There is no extra credit. (Subject to change at the discretion of instructor.)

Attendance Policy: Attendance and participation is required.

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. I will be sending all communication via your COM email, so please check regularly.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Apply fundamental terms of geometry such as points, lines, and planes to describe two- and three- dimensional figures.	Visual Communication Skills (CS)	Exam 2
2. Make and test conjectures about figures and geometric relationships.	Critical Thinking Skills (CT)	Exam 2
3. Use a variety of methods to identify and justify congruency and similarity of geometric objects.	Critical Thinking Skills (CT)	Exam 3
4. Perform geometric transformations.	Visual Communication Skills (CS)	Exam 4
5. Demonstrate fundamental probability techniques and apply those techniques to solve problems.	Empirical and Quantitative Skills (EQS)	Exam 1
6. Explain the use of data collection and statistics as tools to reach reasonable conclusions.	Empirical and Quantitative Skills (EQS)	Exam 1
7. Recognize, examine, and utilize the basic principles of describing and representing data.	Empirical and Quantitative Skills (EQS)	Exam 1
8. Perform measurement processes and explain the concept of a unit of measurement.	Critical Thinking Skills (CT)	Exam 3
9. Develop and use formulas for the perimeter, are, and volume for a variety of figures.	Critical Thinking Skills (CT)	Exam 3

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 Leslie Richardson – Mathematics Department Chair at lrichardson@com.edu.

Course outline:

Wk	Date	Topic	Section
1	Jan 17-21	Statistical Problem Solving	10.1
		Analyze and Interpret Data	10.2
2	Jan 24-28	Misleading Graphs and Statistics	10.3
		Probability and Simple Experiments	11.1

3	Jan 31-Feb 4	**Quiz 1: 10.1-10.3 (2/1)**	
		Probability and Complex Experiments	11.2
		Additional Counting Techniques	11.3
4	Feb 7-11	Simulation, Expected Value, Odds, and Conditional Probability	11.4
		Review Exam 1	
5	Feb 14-18	**Exam 1: Ch. 10, 11 (2/15)**	
		Recognizing Geometric Shapes – Level 0	12.1
		Analyzing Geometric Shapes – Level 1	12.2
6	Feb 21-25	Relationships Between Geometric Shapes	12.3
		An Introduction to a Formal Approach to Geometry	12.4
7	Feb 28-Mar 4	**Quiz 2: 12.1 – 12.3 (3/1)**	
		Regular Polygons, Tessellations, and Circles	12.5
		Describing Three-Dimensional Shapes	12.6
8	Mar 7-11	Review Exam 2	
		Exam 2: Ch. 12 (3/10)	
		********* College Closed – Spring Break *********	
9	Mar 21-25	Measurement with Nonstandard and Standard Units	13.1
		Length and Area	13.2
		Surface Area	13.3
10	Mar 28-Apr1	Volume	13.4
		Quiz 3: 13.1-13.4 (3/31)	
		Congruence of Triangles	14.1
		Similarity of Triangles	14.2
11	Apr 4-8	Review Exam 3	
		Exam 3: Ch. 13, 14 (4/7)	
12	Apr 11-15	Distance and Slope in the Coordinate Plane	15.1
		Equations and Coordinates	15.2
		Geometric Problem-Solving Using Coordinates	15.3
13	Apr 18-22	**Quiz 4: 15.1-15.3 (4/19)**	
		Transformations	16.1
		Congruence and Similarity Using Transformations	16.2
14	Apr 25-29	Review Exam 4	
15	May 2-6	**Exam 4: Ch. 15, 16 (5/3)**	
		Final Exam Review	

16	May 9-13	**Final Exam (5/9)**

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 1st 8-week session is March 2. The last date to withdraw from the 16-week session is April 25. The last date to withdraw for the 2nd 8-week session is May 4.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_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 F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_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.