



Math 2412.101C3 and Math 2412.601C3

Precalculus

Spring 2025

M/W 9:30-10:50 am (Rm 107), F 9:00 – 9:50 am (Rm 115)

Instructor Information: Carol Switoyus
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(409)933-8220

Student hours and location: MW 8:15 am – 9:15 am, 11:00 am – 12:30 pm
TTH 4:00 pm – 5:00 pm
F 8:15 am – 8:45 am
Location for all student hours is Steam #325-17

Required Textbook/Materials: The textbook used in this course is: Precalculus, by Sullivan, 11th edition, published by Prentice Hall. E-Book via MyMathLab in Brightspace - D2L (**No Purchase necessary**). We will be using MyMathLab for all assignments and some assessments.

Course Description: Precalculus is an in-depth combined study of algebra, trigonometry, and other topics for calculus readiness.

Course requirements:

HW/Daily: There will be a homework assignment for each section covered to be done online using MyMathLab. It is your responsibility to make sure the assignments are submitted by the due date and time.

Quizzes/Exams: There will be ten quizzes to be done online using MyMathLab. You can retake each quiz just once to improve your score; the higher score will be the one that counts. There will be four chapter-exams and a comprehensive final to be completed in class. **There are no retakes on any of the exams. All due dates are on the course outline.**

Determination of Course Grade/Detailed Grading Formula:

The course grade will be determined by the following formula:

$$\text{Final Average} = 60\% \text{Chapter Exam Average} + 20\% \text{Final Exam} + 10\% \text{Homework Average} + 10\% \text{Quiz Average}$$

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 Policy: Late homework and quizzes may be submitted, but there is a 20% grade penalty on late assignments. Tests must be taken on days assigned unless you notify me **in advance** of any issues. **There is no extra credit.**

Attendance Policy: Attendance and participation are 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 also be sending out information to your COM email address, please be sure to check it regularly.**

Student Learner Outcomes	Maps to Core Objective	Assessed via this assignment
1. Demonstrate and apply knowledge of properties of functions.	Critical Thinking Skills (CT)	Quiz 2
2. Recognize and apply algebraic and transcendental functions and solve related equations.	Critical Thinking Skills (CT)	Quiz 3
3. Apply graphing techniques to algebraic and transcendental functions.	Communication Skills (CS3)	Exam 3
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.	Empirical and Quantitative Skills (CT)	Quiz 4
5. Prove trigonometric identities.	Critical Thinking	Quiz 7
6. Solve right and oblique triangles.	Critical Thinking	Quiz 8

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:

<u>Week</u>	<u>Topic</u>	<u>Section</u>
1 Jan 13-17	Real Zeros of polynomial functions Complex Zeros HW 4.6-4.7 due 1/19 Quiz 1: 4.6, 4.7 due 1/19	4.6 4.7
2 Jan 20-24	No class 1/20 – College Closed MLK Day Composite Functions Inverse Functions Exponential Functions HW 5.1-5.3 due 1/26 Quiz 2: 5.1-5.3 due 1/26	5.1 5.2 5.3
3 Jan 27-31	Logarithm Functions Properties of Logarithms Exponential, Logarithmic Equations HW 5.4-5.6 due 2/2	5.4 5.5 5.6
4 Feb 3-7	Applications Review Exam 1 HW 5.8 due 2/9 Quiz 3: 5.4-5.8 due 2/9	5.8
5 Feb 10-14	Exam 1: Chapter 4, 5 2/10 Angles and Their Measure Trigonometric Functions: Unit Circle Approach HW 6.1-6.2 due 2/16 Quiz 4: 6.1-6.2 due 2/16	6.1 6.2
6 Feb 17-21	Properties of Trigonometric Functions Graphs of Sine, Cosine Functions HW 6.3-6.4 due 2/23	6.3 6.4
7 Feb 24-28	Graphs of Other Trig Functions Phase Shift Review Exam 2 HW 6.5-6.6 due 3/2 Quiz 5: 6.3-6.5 due 3/2	6.5 6.6
8 Mar 3-7	Exam 2: Ch. 6 3/3 Inverse Trig Functions Inverse Trigonometric Functions (continued) HW 7.1-7.2 due 3/9	7.1 7.2

9	Mar 10-14	Trigonometric Equations	7.3
		Trigonometric Identities	7.4
		Sum and Difference Formulas	7.5
		Double- and Half-Angle Formulas	7.6
		HW 7.3-7.6 due 3/16	
		Quiz 6: 7.1-7.3 due 3/16	
		Quiz 7: 7.4-7.6 due 3/16	

***** SPRING BREAK MARCH 17-MARCH 21 – COLLEGE CLOSED – NO CLASSES *****

10	Mar 24-28	Right Triangle Trigonometry	8.1
		The Law of Sines	8.2
		The Laws of Cosines	8.3
		HW 8.1-8.3 due 3/30	
		Quiz 8: 8.1-8.3 due 3/30	
11	Mar 31-Apr 4	Review Exam 3	
		Exam 3: Chapter 4/2	
		Conics, The Parabola	10.1, 10.2
12	Apr 7-11	The Ellipse	10.3
		The Hyperbola	10.4
		HW 10.2-10.4 due 4/13	
		Quiz 9: 10.2-10.4 due 4/13	
13	Apr 14-18	Vectors	9.4
		Partial Fraction Decomposition	11.5
		Sequences	12.1
		HW 9.4, 11.5, 12.1 due 4/20	
		No class 4/18 – Spring Holiday	
14	Apr 21-25	Arithmetic Sequences	12.2
		Geometric Sequences and Series	12.3
		HW 12.2, 12.3 due 4/27	
		Quiz 10: 9.4, 12.1-12.3 due 4/27	
		Review Exam 4	
15	Apr 28-May 2	Exam 4: Chapter 4/28	
		Final Exam Review	
16	May 5-9	Final Exam 5/5	

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_2024-2025_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, 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 February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2nd 8-week session is April 30.

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.

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.