



Math 2412-102CL
Pre-Calculus
Spring 2024

Lecture: 1:30pm – 3:20pm TR STEAM Room 119

Instructor Information: Gabriela Peña, gpena3@com.edu
Office: **STEAM 325-07**
Office Phone #: 409-933-8182
Google Voice #: 409-242-0281

Student hours and location: Schedule your time via <https://calendly.com/gpena3>
Monday & Wednesday 1:00 – 2:00pm & 4:00 – 5:45pm **STEAM 325-07**
Tuesday & Thursday 8:30 – 9:15am **STEAM 325-07**
Tuesday & Thursday 11:00 – 11:45am **Online**

Required Textbook: The textbook used in this course is *Precalculus*, by Michael Sullivan, 11th edition, published by Prentice Hall. Textbooks and/or courseware will be available through VitalSource digitally. Cost of the course materials: \$70.30, **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: Precalculus is an in-depth combined study of algebra, trigonometry, and other topics for calculus readiness.

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, 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 notes for future reference, both as an aid for preparing for quizzes and exams, and as a place to begin when seeking assistance from your professor, your peers, or the college tutoring center. The student has a limit of five 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. The scores on these quizzes will be averaged in with the quiz grades on MyLab Math.

Chapter Exams: 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 thirty minutes to take each exam. There are no make-up exams **unless** the student notifies the instructor in writing before 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. Exams may not be retaken. However, if the grade on the final exam is higher than the lowest chapter exam grade, the final exam grade will replace the one lowest chapter exam grade.

The final exam will replace your lowest test score .

Determination of Course Grade/Detailed Grading Formula:

| | |
|--------------------------|------------|
| Comprehensive Final Exam | 20% |
| Average of Chapter Exams | 60% |
| Homework Average | 10% |
| <u>Quiz Average</u> | <u>10%</u> |
| Final Average | 100% |

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 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.

Table Mapping SLO's and Core Objectives:

| Student Learner Outcomes | Maps to Core Objective | Assessed via this assignment |
|---|--|-------------------------------------|
| 1. Demonstrate and apply knowledge of properties of functions. | Critical Thinking Skills (CT) | Exam |
| 2. Recognize and apply algebraic and Transcendental functions and solve related equations. | Critical Thinking Skills (CT) | Quiz |
| 3. Apply graphing techniques to algebraic and transcendental functions. | Communication Skills (CS3) | Quiz |
| 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 |
| 5. Prove trigonometric identities. | Critical Thinking | Exam |
| 6. Solve right triangles and oblique triangles. | Critical Thinking | Quiz |

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 lrichardson@com.edu.

Course outline:

| Week | Dates | Math 2412-102 | Due Dates |
|-------------|-----------------|--|--|
| 1 | January 16, 18 | Syllabus 4.6 Real Zeros of Polynomial Functions 4.7 Complex Zeros 5.1 Composite Functions | All Week 1 assignments are due 1/23/24 by 11:59PM |
| 2 | January 23, 25 | 5.2 Inverse Functions 5.3 Exponential Functions 5.4 Logarithmic Functions | All Week 2 assignments are due 1/30/24 by 11:59PM |
| 3 | Jan 30, Feb 1 | 5.5 Properties of Logarithms Quiz 1 (5.3 – 5.5) 5.6 Exponential and Logarithmic Equations 5.8 Applications Review for Exam 1 | All Week 3 assignments are due 2/6/24 by 11:59PM |
| 4 | February 6, 8 | Exam 1 (4.6 – 5.8) on February 6, 2024 6.1 Angles and their Measure 6.2 Trigonometric Functions | All Week 4 assignments are due 2/13/24 by 11:59PM |
| 5 | February 13, 15 | 6.2 Trigonometric Functions (continue) 6.3 Properties of Trig Functions Quiz 2 (6.2 – 6.3) 6.4 Graphs of Sine, Cosine Functions | All Week 5 assignments are due 2/20/24 by 11:59PM |
| 6 | February 20, 22 | 6.5 Graphs of the Other Trigonometric Functions 6.6 Phase Shift Review for Exam 2 | All Week 6 assignments are due 2/27/24 by 11:59PM |
| 7 | Feb 27, 29 | Exam 2 (6.1 – 6.6) on February 27, 2024 7.1 Inverse Trigonometric Functions 7.2 Inverse Trigonometric Functions | All Week 7 assignments are due 3/5/24 by 11:59PM |
| 8 | March 5, 7 | 7.3 Trigonometric Equations 7.4 Trigonometric Identities 7.5 Sum and Difference Formulas | All Week 8 assignments are due 3/19/24 by 11:59PM |
| 9 | March 19, 21 | 7.6 Double-Angle and Half-Angle Formulas 7.7 Product to Sum and Sum to Product Formulas 8.1 Right Triangle Trigonometry | All Week 9 assignments are due 3/26/24 by 11:59PM |
| 10 | March 26, 28 | 8.2 The Law of Sines 8.3 The Law of Cosines Quiz 3 (8.1 – 8.3) Review for Exam 3 | All Week 10 assignments are due 4/2/24 by 11:59PM |
| 11 | April 2, 4 | Exam 3 (7.1 – 8.3) on April 2, 2024 9.4 Vectors 10.2 The Parabola | All Week 11 assignments are due 4/9/24 by 11:59PM |
| 12 | April 9, 11 | 10.2 The Parabola (Continue) 10.3 The Ellipse 10.4 The Hyperbola | All Week 12 assignments are due 4/16/24 by 11:59PM |
| 13 | April 16, 18 | Quiz 4 (10.2 – 10.4) 11.5 Partial Fraction Decomposition 12.1 Sequences | All Week 13 assignments are due 4/23/24 by 11:59PM |
| 14 | April 23, 25 | 12.2 Arithmetic Sequences 12.3 Geometric Sequences and Series Review for Exam 4 | All Week 14 assignments are due 4/30/24 by 11:59PM |
| 15 | April 30, May 2 | Exam 4 (10.2 – 12.3) on April 30, 2024 Review for Final Exam | All Week 15 assignments are due 5/7/24 by 11:59PM |
| 16 | May 7, 9 | Final Exam on May 7, 2024 | All Week 16 assignments are due 5/7/24 |

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

Census Day – January 31, 2024

W-Day – April 22, 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 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 February 28. The last date to withdraw from the 16-week session is April 22. The last date to withdraw for the 2nd 8-week session is May 1. The last date to withdraw for spring mini session is May 29.

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.