



MATH 2412.102CL

Precalculus

Fall 2023

1:30 AM - 3:20 PM T Th, STEM 119

Instructor Information: Dr. Jason Duvall (jduvall3@com.edu)

Student hours and location: 3:30 PM – 5:30 PM T Th, location TBA

Required Textbook/Materials:

The textbook used in this course is Precalculus, by Michael Sullivan, 11th edition, published by Prentice Hall. The e-text is provided with MyLab Math. The student will need a computer and internet service outside of class to gain access to the online assignments on MyLab Math. Computers and internet access are available on campus during specified times. A Texas Instruments TI30XIIS scientific calculator is recommended for this course.

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 unit covered. These are listed on the course outline in the syllabus and on the list of assignments on MyLab Math. Each day's homework assignments must be completed by 11:59 pm on the due date shown on both the course outline and on the list of assignments on MyLab Math. You should do the assignments as soon as possible after participating in the lecture, reading the appropriate section in the text book, and watching the associated video(s) on MyLab Math. 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 Page 2 | college tutoring center. The student has a limit of five attempts to answer a question correctly on the homework assignments.

Quizzes on MyLab Math: Four quizzes which relate to the student learning outcomes, will be taken on MyLab Math. Like the homework assignments, the due dates are shown on both the course outline in this syllabus and on the assignment list on MyLab Math. Unlike the homework assignments, the quizzes must be taken in one sitting, they are timed, and the student gets only one attempt to answer each question. The quizzes may be retaken one time. The higher of the two grades will be used to determine the student's quiz average.

Chapter Exams: There are four exams which cover the chapters in the text book. The exams are taken in class on the due dates shown on the course outline in the syllabus. The student has 90 minutes to take each exam. 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 lowest chapter exam grade. *Comprehensive Final Exam:* The final exam is taken in class on the due date shown on the course outline in the syllabus. The student has 90 minutes to take the final exam. The final exam may not be retaken.

Determination of Course Grade/Detailed Grading Formula:

Comprehensive Final Exam 20%

Average of Chapter Exams 60%

Homework Average 10%

Quiz Average 10%

Late Work, Make-Up, and Extra-Credit Policy:

Late homework will be penalized 25%. There are no make-up exams or quizzes and no extra credit.

Attendance Policy:

Students at COM are expected to attend and participate in every session of all classes for which they are registered. College of the Mainland recognizes no excused absences other than those prescribed by law. 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. They are still responsible for work that is assigned during an absence and due dates still hold. A student is tardy if they enter the classroom after class begins. Punctuality is a matter of consideration for other people. When a student arrives to class late or leaves early, they create a distraction to their peers and the professor, delaying or disrupting the learning process. Students who repeatedly arrive late or leave early will be referred to Student Services.

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. The preferred method of communication in this course is in person. If that is not possible, an email or phone call will be satisfactory. Be sure to include your name, the course in which you are enrolled, and state your question completely. I do not reply to text messages, so do not bother with them.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Demonstrate and apply knowledge of properties of functions	Communication Skills	Exam
2. Recognize and apply algebraic and Transcendental functions and solve related equations.	Critical Thinking Skills	Quiz

3. Apply graphing techniques to algebraic and transcendental functions.	Communication Skills	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	Quiz
5. Prove trigonometric identities.	Critical Thinking Skills	Exam
6. Solve right triangles and oblique triangles.	Critical Thinking Skills	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 of 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 Mr. Leslie Richardson, Math Department Chair, at 409-933-8329 or lrichardson@com.edu.

Course Outline:

Week	Date	Sections Covered
1	8/29	Orientation Exercises
		4.6 Real Zeros of Polynomial Functions
	8/31	4.7 Complex Zeros
		5.1 Composite Functions
2	9/5	5.2 Inverse Functions
	9/7	5.3 Exponential Functions
		5.4 Logarithmic Functions
3	9/12	5.5 Properties of Logarithms
		Quiz 1 (5.3 – 5.5)
	9/14	5.6 Exponential and Logarithmic Equations
		5.8 Applications
4	9/19	Review for Exam 1
	9/21	Exam 1 (4.6 – 5.8)
		6.1 Angles and their Measure
5	9/26	6.2 Trigonometric Functions

	9/28	6.3 Properties of Trig Functions Quiz 2 (6.2 – 6.3) 6.4 Graphs of Sine, Cosine Functions
6	10/3 10/5	6.5 Graphs of the Other Trigonometric Functions 6.6 Phase Shift Review for Exam 2
7	10/10 10/12	Exam 2 (6.1 – 6.6) 7.1 Inverse Trigonometric Functions 7.2 Inverse Trigonometric Functions
8	10/17 10/19	7.3 Trigonometric Equations 7.4 Trigonometric Identities 7.5 Sum and Difference Formulas
9	10/24 10/26	7.6 Double-Angle and Half-Angle Formulas 7.7 Product to Sum and Sum to Product Formulas 8.1 Right Triangle Trigonometry
10	10/31 11/2	8.2 The Law of Sines 8.3 The Law of Cosines Quiz 3 (8.1 – 8.3) Review for Exam 3
11	11/7 11/9	Exam 3 (7.1 – 8.3) 9.4 Vectors
12	11/14 11/16	10.2 The Parabola 10.3 The Ellipse
13	11/21 11/23	10.4 The Hyperbola Quiz 4 (10.2 – 10.4) 11.5 Partial Fraction Decomposition 12.1 Sequences
14	11/28 11/30	12.2 Arithmetic Sequences 12.3 Geometric Sequences and Series Review for Exam 4
15	12/5 12/7	Exam 4 (10.2 – 12.3) Review for the Comprehensive Final Exam
16	12/12 12/14	Review for the Comprehensive Final Exam Comprehensive Final Exam

Due Dates for all homework and quiz assignments are listed in MyLab Math.

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 October 11. The last date to withdraw from the 16-week session is November 28. The last date to withdraw for the 2nd 8-week session is December 7.

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.