

Precalculus - MATH 2312.045 DC

Course Syllabus: Spring 2020

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

Instructor: Olivia Juarez

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	7:30-7:50	7:30-7:50	7:30-7:50	7:30-7:50	7:30-7:50	Ву
	3:30-4:00		3:30-4:00		3:30-4:00	appointment

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description: This is a standard first course in functional analysis with algebra, geometry, and geometric interpretations. Topics include the straight line, conics, translations, rotations, parametric equations, vectors, polar coordinates, and some curve sketching.

Prerequisite(s): MATH 1316 or equivalent

Student Learning Outcomes:

Upon successful completion of this course, students will

- **2312.1** Demonstrate an understanding and knowledge of the properties of functions.
- **2312.2** Recognize and apply algebraic and transcendental functions and to solve related equations both algebraically and graphically.
- **2312.3** Identify intervals of increasing, decreasing, or constant; estimate relative maxima and minima.
- **2312.4** Sketch algebraic curves with vertical, horizontal, and slant asymptotes and apply these graphs to ideas of continuity.
- 2312.5 Determine the standard equation of a conic with given conditions and solve applied problems involving a conic.
- **2312.6** Solve applied problems with parametric forms, polar coordinates, vectors, and modeling.

Evaluation/Grading Policy:

Tests/Exams 60%
Daily/Homework 20%
Final Exam 20%
"A" 90-100
"B" 80-89
"C" 70-79

"D" 60-69

"F" below 60

There will be no exemptions from the college final.

Required Instructional Materials:

Sullivan/Sullivan, Precalculus Concepts through Functions – A Right Triangle Approach to Trigonometry, 4th Edition, 2010 with MyLabMath

Publisher: Pearson, Boston, MA ISBN Number: 13:978-0321645081

Optional Instructional Materials: printed copy of Sullivan/Sullivan, Precalculus Concepts through Functions – A Right Triangle Approach to Trigonometry, 2nd Edition

Minimum Technology Requirements: laptop or computer for online homework, graphing calculator

Required Computer Literacy Skills: none

Course Structure and Overview: This is a 16-week embedded dual credit course designed for students who are concurrently enrolled in both a high school precalculus class and the college-level class. The course is managed with information and activities that are posted on the Blackboard Learning Management System. A typical class involves general participation by all students in discussions regarding mathematical principles and procedures being studied. Students are required to complete online homework in addition to in-class quizzes, projects, and exams. It is very important students keep up with course materials and assignments since this is a college-level course. Students are expected to complete all assignments by due dates.

Communications: The college's official means of communication is via your campus email address. I will use your campus email address, Mt Vernon email address, Blackboard, Google Classroom and MyMathLab to communicate with you outside of class. Make sure you keep your campus email cleaned out and below the limit so you can receive important messages.

Institutional/Course Policy: This is a dual credit class held on the Mt Vernon campus. Students are required to follow the attendance and dress code as well as all other rules and acceptable use policies stated in the MVHS student code of conduct. Students are expected to behave as responsible college students; therefore, no academic information about a student can be given to another individual or parents without the expressed written consent of the student.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action.

This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Timeline (*note* instructor reserves the right to make adjustments to this timeline at any point in the term):

Course Schedule: (Subject to Change)

Weeks	Topics	Assignments	Due Dates
Week A: 1/7/20 – 1/10/20	Functions 1.1-1.3	Assignments are posted in MyMathLab.	Assignments will open on Monday. The due date for each assignment will be posted on that assignment.
Week B: 1/13/20 – 1/17/20	Functions 1.4-1.6	Assignments are posted in MyMathLab.	
Week 1: 1/21/20 - 1/24/20	Functions 1.7, exam 1, Linear and Quadratic Functions 2.1	Assignments are posted in MyMathLab, test will be face-to-face on paper.	
Week 2: 1/27/20 - 1/31/20	Linear and Quadratic Functions 2.2-2.4	Assignments are posted in MyMathLab.	
Week 3: 2/3/20 - 2/7/20	Exam 2, Linear and Quadratic Functions 2.5-2.6	Assignments are posted in MyMathLab, test will be face-to-face on paper.	

Week 4: 2/10/20 - 2/14/20	Linear and	Assignments are	
Week 4. 2/10/20 - 2/14/20			
	Quadratic	posted in MyMathLab,	
	Functions 2.6-	test will be face, test	
	2.7, exam 3,	will be face-to-face	
	Polynomial and	and on paper.	
	Rational		
	Functions 3.1		
Week 5: 2/17/20 – 2/21/20	Polynomial and	Assignments are	
	Rational	posted in MyMathLab.	
	Functions 3.1-3.3		
Week 6: 2/24/20 - 2/28/20	Polynomial and	Assignments are	
	Rational	posted in MyMathLab,	
	Functions 3.5-	test will be face-to-	
	3.6, exam 4	face and on paper.	
Week 7: 3/2/20 – 3/6/20	Exponential and	Assignments are	
361 7. 372/20 373/20	Logarithmic	posted in MyMathLab.	
	Functions 4.1-4.3	Posted in Hymanical.	
Week 8: 3/9/20 – 3/13/20	Exponential and	Assignments are	
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	Logarithmic	posted in MyMathLab,	
	Functions 4.4,	test will be face-to-	
VV. 1 0 0/00/00 0/07/00	exam 5, 4.5	face and on paper.	
Week 9: 3/23/20 – 3/27/20	Exponential and	Assignments are	
	Logarithmic	posted in MyMathLab.	
	Functions 4.5-4.8		
Week 10: 3/30/20 – 4/3/20	Exponential and	Assignments are	
	Logarithmic	posted in MyMathLab,	
	Functions 4.9,	test will be face-to-	
	exam 6, Analytic	face and on paper.	
	Geometry 9.2		
Week 11: 4/6/20 – 4/10/20	Analytic	Assignments are	
	Geometry 9.2-	posted in MyMathLab.	
	9.5	, and the second	
Week 12: 4/13/20 – 4/17/20	Analytic	Assignments are	
Week 12. 1/13/20 1/11/20	Geometry 9.5,	posted in MyMathLab.	
	9.7	posted in NayManiEao.	
Week 13: 4/20/20 – 4/24/20	Exam 7,	Assignments are	\dashv
WCCK 13. 4/20/20 - 4/24/20	Sequences 11.2-	posted in MyMathLab,	
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	11.3	test will be face-to-	
W 1 1 1 4 4 107 100 7 14 100		face and on paper.	
Week 14: 4/27/20 – 5/1/20	Counting and	Assignments are	
	Probability 12.1-	posted in MyMathLab.	
	12.2		
Week 15: 5/4/20 – 5/8/20	Counting and	Assignments are	
	Probability 12.4-	posted in MyMathLab,	
	12.5, exam 8	test will be face-to-	
		face and on paper.	
Week 16: 5/11/20 – 5/21/20	final	Test is face-to-face.	
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