

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATH

Course #: M1508 (CRN: 17164)
Course Title: Pre-Calculus
Credit Hrs: 5
Term: Fall 2015
Course Meetings & Location: MW 6:00 – 8:20PM COTT 207
Prerequisite Courses: M0311 or TSI score between 350 – 390 or placement by previous Accuplacer scores

Instructor: Francisco Avila
Office Location: Library 521
Contact Info: 747-8752
E-mail address favila2@utep.edu
(fco.avila.mat@gmail.com)
Emergency Contact: 747-5761
Office Hrs: TR 4:30 – 5:50PM or by appointment


Textbook(s), Materials: Required: Pre-Calculus by Larson, 9th Edition
(available as e-book and hardcover)

Suggested: Laptop and Graphing Calculator

Course Objectives (Learning Outcomes): Students are expected to have a clear understanding of the ideas of Precalculus as a solid foundation for subsequent courses in mathematics and other disciplines as well as for direct application to real life situations.

The content of the entire course covers topics from basic mathematics and develop them using practical and theoretical tools, building applications and making a strong support for Calculus classes.

A student passing MATH1508 Precalculus course will be able to work with the concepts of functions (functions in general, exponential and logarithmic functions, polynomial and rational functions, trigonometric functions, etc), to solve a system of linear and non-linear equations and inequalities, to make basic operations with matrices, to apply mathematical induction method, to work with trigonometric functions and their properties, and to apply them in problems related to other branches of Science: Calculus, Algebra, Physics, Chemistry, Biology, Pharmacy, Engineering, Statistics, etc.

Course Activities/Assignments: You will find all assignments on <http://webassign.net/> . Please use Mozilla Firefox,  since WebAssign works best with this browser. Unannounced quizzes may be administered in the classroom. Students may have 20 – 30 minute reading assignments due on WebAssign the day of each lecture.

Assessment of Course Objectives: There will be 3 exams. All exams, written by a committee, are administered in the classroom. A WebAssign Retake Exam is administered in the library after each exam. Failure to register online at <http://www.math.utep.edu/classes/testout.php>, for the retake means that you may not take this optional exam. If a student receives a grade of D or F, they may register for wintermester or take a comprehensive TestOut exam after wintermester. A grade of 70% or better on the comprehensive wintermester exam or a 70% or better on the TestOut exam will replace a failing course grade with a grade of C. (A grade change form will be signed and submitted by Mr. Julian Viera.)

Grading Policy: Your grade will be calculated as follows:

WebAssign assignments	15%
In Class Quizzes	10%
Exam 1	25%
Exam 2	25%
Exam 3	25%

The grading scale for this course is:

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

0 – 59 = F.

The Drop Date for this semester is Friday October 30, 2015.

- Make-up Policy: No makeup exams will be allowed except with proper documentation, i.e. doctor’s note, hospital’s note, or UTEP excused absence document.
- Attendance Policy: Students must attend every class and attend all lectures and workshops. Attendance will be taken. A student will be dropped if he/she misses 3 lectures or 4 workshop sessions. Students are to arrive to class on time. It is the student’s responsibility to make up missed assignments as determined by their instructor.
- Civility Statement: Please turn off cell phones when you enter class and participate in class, active participation in this class is a vital part of your success.

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.utep.edu/CASS. *CASS' Staff are the only individuals who can validate and if need be, authorize accommodations for students with disabilities.*

Academic Integrity Policy: Each student is responsible for notice of and compliance with the provisions of the Regents' [Rules and Regulations](#), which are available for inspection electronically at <http://www.utsystem.edu/bor/rules/homepage.htm>.

All students are expected and required to obey the law, to comply with the Regents' [Rules and Regulations](#), with System and University rules, with directives issued by an administrative official in the course of his or her authorized duties, and to observe standards of conduct appropriate for the University. A student who enrolls at the University is charged with the obligation to conduct himself/herself in a manner compatible with the University's function as an educational institution.

Any student who engages in conduct that is prohibited by Regents' [Rules and Regulations](#), U. T. System or University rules, specific instructions issued by an administrative official or by federal, state, or local laws is subject to discipline, whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct.

Military Statement: If you are a military student with the potential of being called to military service and /or training during the course of the semester, you must contact me as soon as possible **before** you leave.

Webpage's for Pre-Calculus: <http://www.math.utep.edu/classes/precalculus/>
<https://www.facebook.com/utep.precal.cal?ref=hl>

Course Schedule:

Material for Exam 1 : chapter 1 and chapter 2 up to 2.5

Date	Day	Sections	Description
8/24/15	Monday	Syllabus	
		1.1 - 1.2	Rectangular Coordinates/Graphs of Equations
8/26/15	Wednesday	1.3 - 1.4	Linear Equations in Two Variables/Functions
8/31/15	Monday	1.4 - 1.5	Functions/Analyzing Graphs of Functions
9/2/15	Wednesday	1.6	Library of Parent Functions
		1.7	Transformations of Functions
9/7/15	Monday	No Classes	Labor Day
9/9/15	Wednesday	1.8	Combinations of Functions
		1.9	Inverse Functions
9/14/15	Monday	2.1	Quadratic functions and Models
		2.3 - 2.4	Polynomials and Synthetic Division/Complex Numbers
9/16/15	Wednesday	2.4	Complex Numbers
9/21/15	Monday	2.5/Review	Zeroes of Polynomial Functions
9/23/15	Wednesday	Review/Exam 1	
Oct. 2	Exam1 Retakes Library 204A Online Testing Students will not be allowed to begin the exam after 5:45PM.		

Material for Exam 2: Section 2.6; Chapter 3; 7.1 - 7.4 and 8.1 - 8.3

Date	Day	Sections	Description
9/28/15	Monday	2.6 - 3.1	Rational Functions/Exponential Functions&Their Graphs
9/30/15	Wednesday	3.2	Logarithmic Functions&their Graphs
		3.3	Properties of Logarithms
10/2/15	Friday	Retake exam 1	
10/5/15	Monday	3.4	Exponential and Logarithmic Equations
		3.5	Exponential and Logarithmic Models
10/7/15	Wednesday	7.1	Linear and Nonlinear Systems of Equations
10/12/15	Monday	7.2	Two-Variable Linear Systems
		7.3	Multivariable Linear Systems
10/14/15	Wednesday	7.4	Partial Fractions
10/19/15	Monday	8.1	Matrices and Systems of Equations
		8.2	Operations with Matrices
10/21/15	Wednesday	8.3/Review	The Inverse of a Square Matrix
10/26/15	Monday	Review	
		Exam 2	Section 2.6; Chapter 3; 7.1 - 7.4 and 8.1 - 8.3
10/28/15	Wednesday	4.1 - 4.2	Radian and Degree Measure/Trig Functions: The unit Circle
10/30/15	Friday	Course Drop Deadline	Students must have grade from Exam 2 in order to drop on time

Nov. 6	Exam2 Retake Library 204A Online Testing
	Students will not be allowed to begin the exam after 5:45PM.

Material for Exam 3: chapter 4 and chapter 5, with 6.1 and 6.2

Date	Day	Sections	Description
11/2/15	Monday	4.3	Right Triangle Trigonometry
		4.4	Trigonometric functions of any Angle
11/4/15	Wednesday	4.5	Graphs of Sine and Cosine
11/6/15	Friday	Test Out Exams for Exam 2	
11/9/15	Monday	4.6	Graphs of Other Trig functions
		4.7	Inverse Trigonometric functions
11/11/15	Wednesday	4.8	Applications and Models
11/16/15	Monday	5.1	Using fundamental Identities
		5.2	Verifying Trigonometric Identities
11/18/15	Wednesday	5.3 - 5.4	Solving Trigonometric Equations/Sum and Difference Formulas
11/23/15	Monday	5.5	Multiple Angle and Product-to-Sum Formulas
11/25/15	Wednesday	6.1	Law of Sines
11/26/15	Thursday	No classes	
11/30/15	Monday	6.2	Law of Cosines
		Review (15 sections)	
12/2/15	Wednesday	Review/ Exam 3	
12/4/15	Friday	No Lab - Dead Day	
Dec. 7 - Dec. 11	Instructors will schedule a day during finals week to meet with students to return exam 3.		
12/10/14	Exam 3 Retake	Library 204A	Online Testing