

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

Course #: M1508
Course Title: Pre-Calculus
Credit Hrs: 5
Term: Spring 2016
Course Meetings & Location: _____
Prerequisite Courses: M0311 or TSI score between 350 – 390 or placement by previous Accuplacer scores.

Instructor: Dr. M. P. Beccar Varela
Office Location: Bell Hall 216
Contact Info: 747-8038
E-mail address mpvarela@utep.edu
Emergency Contact: 747-5761 (Math Department)
Office Hrs: Monday 3:30-5:00pm - Thursday 4:20-5:50pm but stop by anytime you need.

Textbook(s), Materials: Required: Pre-Calculus by Larson, 9th Edition (available as e-book and hardcover)
Suggested: Laptop computer
Graphical 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, , or Google Chrome since WebAssign works best with these browsers. 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. These are departmental exams and are to be taken in the classroom on the assigned dates found in the calendar. A WebAssign Retake Exam is administered in the library after each exam.

To register for a retake exam go to <http://www.math.utep.edu/classes/testout.php>. Failure to register means that you may not take this optional exam. Students must attempt the written exams, failure to take the first two written exam will result in the student to be dropped from this class.

If a student receives a grade of D or F, they may register for Maymester or take a comprehensive TestOut exam after Maymester. A grade of 70% or better on the comprehensive Maymester 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 the coordinator for Pre-Calculus, Mr. Julian Viera.).

Grading Policy:

Your grade will be calculated as follows:

WebAssign assignments	10%
Quizzes	10%
Workshop attendance grade	05%
13	100
11-12	90
9-10	80
8	70
< 7	0 - drop

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 April 1, 2016. No drops will be approved after this date.

- 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 classroom and participate in class, active participation in this class is a vital part of your success.
- 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.

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.*

Webpage's for Pre-Calculus: Visit our website and read the course information thoroughly at <http://www.math.utep.edu/classes/precalculus/> . All workshop materials will be posted on the website.
Find us on facebook for information and News,
<http://www.facebook.com/pages/UTEP-PreCalculusCalculus/180583381999326>

Course Schedule:

Spring 2016

Material for Exam 1 : chapter 1 and chapter 2 up to 2.5			
Date	Day	Sections	Description
1/18/2016	Monday	No Classes	
1/19/2016	Tuesday	Syllabus/1.1	Rectangular Coordinates
1/21/2016	Thursday	1.1 - 1.2	Rectangular Coordinates/Graphs of Equations
1/25/2016	Monday	1.3 - 1.4	Linear Equations in Two Variables/Functions
1/26/2016	Tuesday	1.4 - 1.5	Functions/Analyzing Graphs of Functions
1/28/2016	Thursday	1.6 - 1.7	Library of Parent Functions/Transformations of Functions
2/1/2016	Monday	1.7	Transformations of Functions
2/2/2016	Tuesday	1.8	Combinations of Functions
2/4/2016	Thursday	1.9	Inverse Functions
2/8/2016	Monday	2.1	Quadratic functions and Models
2/9/2016	Tuesday	2.3 - 2.4	Polynomials and Synthetic Division/Complex Numbers
2/11/2016	Thursday	2.4	Complex Numbers
2/15/2016	Monday	2.5	Zeros of Polynomial Functions
2/16/2016	Tuesday	Review (13 sections)	
2/18/2016	Thursday	Exam 1	
26-Feb	Exam1 Retakes	Library 204A or B	Online Testing

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

Date	Day	Sections	Description
2/22/2016	Monday	2.6	Rational Functions/Exponential Functions and Their Graphs
2/23/2016	Tuesday	3.1	Exponential Functions and Their Graphs
2/25/2016	Thursday	3.2 - 3.3	Properties of Logarithms/Logarithmic Functions and their Graphs
2/26/2016	Friday	Exam 1 Retake	
2/29/2016	Monday	3.4	Exponential and Logarithmic Equations
3/1/2016	Tuesday	3.5	Exponential and Logarithmic Models
3/3/2016	Thursday	7.1	Linear and Nonlinear Systems of Equations
3/7/2016	3/11/2016	No Classes	Spring Break
3/14/2016	Monday	7.2	Two-Var Linear Systems
3/15/2016	Tuesday	7.3	Multivariable Linear Systems
3/17/2016	Thursday	7.4	Partial Fractions
3/21/2016	Monday	8.1	Matrices and Systems of Equations
3/22/2016	Tuesday	8.2	Operations with Matrices
3/24/2016	Thursday	8.3	The Inverse of a Square Matrix
3/25/2016	Friday	No classes	
3/28/2016	Monday	Review	
3/29/2016	Tuesday	Exam 2	April 1 is course drop date
3/31/2016	Thursday	4.1	Radian and Degree Measure/ RETURN GRADED EXAM 2
4/1/2016	Friday	Exam 2 Retake	Drop Date
2-Apr	Exam2 Retake	Library 204A or B	Online Testing

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

Date	Day	Sections	Description
4/4/2016	Monday	4.2	Trig Functions: The unit Circle
4/5/2016	Tuesday	4.3	Right Triangle Trigonometry
4/7/2016	Thursday	4.4	Trigonometric functions of any Angle
4/11/2016	Monday	4.5	Graphs of Sine and Cosine
4/12/2016	Tuesday	4.6	Graphs of Other Trig functions
4/14/2016	Thursday	4.7 - 4.8	Inverse Trigonometric functions/Applications and Models
4/18/2016	Monday	5.1	Using fundamental Identities
4/19/2016	Tuesday	5.2	Verifying Trigonometric Identities
4/21/2016	Thursday	5.3	Solving Trigonometric Equations
4/25/2016	Monday	5.3	Solving Trigonometric Equations
4/26/2016	Tuesday	5.4 - 5.5	Sum and Difference Formulas
4/28/2016	Thursday	6.1	Law of sines
5/2/2016	Monday	6.1 - 6.2	Law of Sines/Law of Cosines
5/3/2016	Tuesday	Review (15 sections)	
5/5/2016	Thursday	Exam 3	
5/6/2016	Friday	Review & Return Exam 3	
5/9 - 5/13	Instructors will schedule a day during finals week to meet with students to return exam 3		
5/12/2016	Exam 3 Retake	Library 204A or B	Online Testing