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

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| Course #: | M1508, CRN 22604 |
| Course Title: | Pre-Calculus |
| Credit Hrs: | 5 |
| Term: | Spring 2020 |
| Course Meetings & Location: | Monday 9:30-10:20 LART 305 TTH from 9:00 to 10:20 a.m. LART 306 |
| Prerequisite Courses: | M0311 or TSI score between 350 – 390 or placement by previous Accuplacer scores |
| Instructor: | Dr. Rocio E. Gallardo |
| Office Location: | Bell Hall 130 E |
| Contact Info: | (915) 747-5703<br>E-mail: regallardo@utep.edu<br>Emergency Contact: (915)747-5761 (Math Department) |
| Office Hrs: | Monday 6:00 p.m. to 7:00 p.m.<br>Tuesday after class @ LART 306 |
| Textbook(s), Materials: | Required: Pre-Calculus by Larson, 10th edition (available as e-book and hardcover) |
| WebAssign Class Key: | utep77235195 |

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.

**Assessment of Course Objectives:** There will be 3 exams. These are departmental exams and must be taken in class during the assigned date (found on the calendar). NO EXTRA CREDIT OR CURVES ON EXAMS. A Retake Exam, for improvement, will be administered in the library after each exam. The best grade will be recorded for student grade.

To register for a retake exam go to **http://math.utep.edu/classes/retake.** Failure to register means that you may not take this optional exam.
If a student receives a grade of D or F, then 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 PreCalculus, Mrs. Nada Al-Hanna).

**Grading Policy:** Your grade will be calculated as follows:

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| WebAssign assignments | 10% |
| Quizzes | 10% |
| Workshop Attendance-grade | 05% |
| 12 = 100 | |
| 11 = 90 | |
| 10 = 80 | |
| 9 = 70 | |
| 8 or less = 0 | |
| 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 3, 2020. 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.

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| Attendance Policy: | Students must attend every class and attend all lectures and workshops. Attendance will be taken during each workshop. 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 do not use smart phones, smart watches, IPads, blue tooth or any smart device during quizzes and exams. Cell phones and tablets should be set to silent or vibrate, and any calls should be taken outside of class. Please do not wear headsets or blue tooth devices during class. Please don't talk in class. Cell phone calculators may not be used on quizzes or exams. Calculators may not be shared during quizzes and exams. Active participation in class is expected, teamwork in class will be implemented. Video or pictures of lectures must have written consent from the instructor and student(s). |
| 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, then 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.<br><br>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.<br><br>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, then you must contact me as soon as possible **before** you leave.

Webpage's for Pre-Calculus: http://www.math.utep.edu/classes/precalculus/

Course Schedule: See separate calendar.

| **Material for Exam 1 : chapter 1 and chapter 2 up to 2.5** | | | |
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| **Date** | **Day** | **Sections** | **Description** |
| 1/20/19 | Monday | No Classes | |
| 1/21/19 | Tuesday | Syllabus/1.1 | Rectangular Coordinates |
| 1/23/19 | Thursday | 1.1 - 1.2 | Rectangular Coordinates/Graphs of Equations |
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| 1/27/19 | Monday | 1.3 - 1.4 | Linear Equations in Two Variables/Functions |
| 1/28/19 | Tuesday | 1.4 - 1.5 | Functions/Analyzing Graphs of Functions |
| 1/30/19 | Thursday | 1.6 - 1.7 | Library of Parent Functions/Transformations of Functions |
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| 2/3/19 | Monday | 1.7 | Transformations of Functions |
| 2/4/19 | Tuesday | 1.8 | Combinations of Functions |
| 2/6/19 | Thursday | 1.9 | Inverse Functions |
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| 2/10/19 | Monday | 2.1 | Quadratic functions and Models |
| 2/11/19 | Tuesday | 2.3 - 2.4 | Polynomials and Synthetic Division/Complex Numbers |
| 2/13/19 | Thursday | 2.4 | Complex Numbers |
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| 2/17/19 | Monday | 2.5 | Zeros of Polynomial Functions |
| 2/18/19 | Tuesday | Review (13 sections) | |
| 2/20/19 | Thursday | **Exam 1** | |
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| **Feb. 28** | **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** | | | |
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| **Date** | **Day** | **Sections** | **Description** |
| 2/24/19 | Monday | 2.6 | Rational Functions/Exponential Functions and Their Graphs |
| 2/25/19 | Tuesday | 3.1 | Exponential Functions and Their Graphs |
| 2/27/19 | Thursday | 3.2 - 3.3 | Properties of Logarithms/Logarithmic Functions and their Graphs |
| 2/28/19 | Friday | Exam 1 Retake | |
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| 3/2/19 | Monday | 3.4 | Exponential and Logarithmic Equations |
| 3/3/19 | Tuesday | 3.5 | Exponential and Logarithmic Models |

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| 3/5/19 | Thursday | 7.1 | Linear and Nonlinear Systems of Equations |
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| 3/9/19 | Monday | 7.2 | Two-Var Linear Systems |
| 3/10/19 | Tuesday | 7.3 | Multivariable Linear Systems |
| 3/12/19 | Thursday | 7.4 | Partial Fractions |
| 3/16/2019 thru 3/20/2019 | | No Classes | Spring Break |
| 3/23/19 | Monday | 8.1 | Matrices and Systems of Equations |
| 3/24/19 | Tuesday | 8.2 | Operations with Matrices |
| 3/26/19 | Thursday | 8.3 | The Inverse of a Square Matrix |
| **3/27/19** | **Friday** | **No Classes** | **Cesar Chavez Day - No classes** |
| 3/30/19 | Monday | Review | |
| 3/31/19 | Tuesday | **Exam 2** | |
| 4/2/19 | Thursday | 4.1 | Radian and Degree Measure |
| 4/3/19 | Friday | | **DROP DATE DEADLINE** |
| **Apr. 17** | **Exam2 Retake** | **Library 204A or B** | **Online Testing** |

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

| Date | Day | Sections | Description |
|---|---|---|---|
| 4/6/19 | Monday | 4.2 | Trig Functions: The unit Circle |
| 4/7/19 | Tuesday | 4.3 | Right Triangle Trigonometry |
| 4/9/19 | Thursday | 4.4 | Trigonometric functions of any Angle |
| **4/10/19** | **Friday** | **No classes** | **Spring study day** |
| 4/13/19 | Monday | 4.5 | Graphs of Sine and Cosine |
| 4/14/19 | Tuesday | 4.6 | Graphs of Other Trig functions |
| 4/16/19 | Thursday | 4.7 - 4.8 | Inverse Trigonometric functions/Applications and Models |
| 4/17/19 | Friday | Exam 2 Retake | |
| 4/20/19 | Monday | 5.1 | Using fundamental Identities |
| 4/21/19 | Tuesday | 5.2 | Verifying Trigonometric Identities |
| 4/23/19 | Thursday | 5.3 | Solving Trigonometric Equations |
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| 4/27/19 | Monday | 5.3 | Solving Trigonometric Equations |
| 4/28/19 | Tuesday | 5.4 - 5.5 | Sum and Difference Formulas |
| 4/30/19 | Thursday | 6.1 | Law of sines |
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| 5/4/19 | Monday | 6.1 - 6.2 | Law of Sines/Law of Cosines |
| 5/5/19 | Tuesday | Review (15 sections) | |
| 5/7/19 | Thursday | **Exam 3** | |
| 5/8/19 | Friday | NO CLASSES | **Dead day** |
| **5/14/19** | | **Exam 3 Retake** | **Library 204A or B** **Online Testing** |
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