Math 1330: Precalculus
Course Syllabus

Instructor name: Dr. Blerina Xhabli
Instructor Homepage: http://math.uh.edu/~blerina
Course number: Math.1330
Section number: 14808
Lecture Time/Place: MWF 9:00am – 10:00am SR 117
Delivery format: face-to-face lecture
Prerequisites: Math.1310 - College Algebra or
a passing score on the test for placement out of College Algebra.

Textbook: The learning materials for Math 1330, including the textbook, are available online in electronic form (PDF) through CASA website at www.casa.uh.edu. **Students are required to purchase an access code at the Book Store to access the learning materials.**

The information contained in this class outline is an abbreviated description of the course. Additional important information is contained in the departmental policies statement at your instructor's personal webpage http://math.uh.edu/~blerina/math1330f15/1330policies.pdf **You are responsible for knowing all of this information.**

Upon successful completion of this course, students will be able to apply algebraic rules and transformations to simplify or elaborate on mathematical expressions. Students will understand and be able to apply methods of solution of polynomial, rational, and trigonometric equations and will understand the properties of solutions of such equations. Students will be familiar with properties of conic sections and other elementary curves and will be able to simultaneously exploit graphical and analytical techniques in solving problems. They will be able to translate ordinary language descriptions of a problem into mathematical expression and explain in English the important elements of a mathematical solution.

A student in this class is expected to complete the following assignments:
1. 4 Regular Exams
2. Final Exam
3. Online Quizzes – one per week
4. Homework – on each section of the textbook covered in class
5. Poppers – in-class quizzes given daily starting 3rd week of classes

The grading system consists of the following(s):
- Test 1: 10%
- Test 2: 15%
- Test 3: 15%
- Test 4: 15%
- Final Exam: 15%
- Online Quizzes: 10%
- Daily Classroom Quizzes (Poppers): 10%

- Homework: 10%
- Total: 100%

Exams: Each student is responsible for scheduling his/her exams and for taking his/her exams at the appointed time. There are **no makeup exams** in this course. A missed exam will result in a zero. Final exam replaces ONE missed test. No calculators are allowed during exams.

Homework: Assigned homework is generally due at midnight of the day after the lecture on the material. Homework must be submitted 10 minutes prior to the deadline in an online EMCF in your CourseWare account. Your instructor will explain how to use the EMCF at the beginning of the semester.

Online Quizzes: Online quizzes will be given through CourseWare. Please see the "Online Assignments" section on Courseware for open and close dates of each quiz. No quizzes will be reopened during the semester. You will have up to 20 attempts on each quiz. The highest grade will be used for your score. Note that attending the online sessions can directly affect your quiz grades. Check the due dates on quizzes carefully; no make ups on quizzes.

Special Accommodations: Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. Please call 713-743-5400 for more assistance.

Precalculus Topic List

Functions
      Definition and Graphs
      Techniques in Graphing
      Methods of Combining Functions
      Inverse Functions

Polynomial and Rational Functions
      Linear Functions
      Quadratic Functions
      Applied Functions – Setting up Equations
      Polynomial Functions
      Rational Functions

Conic Sections
      Parabolas
      Ellipses and Hyperbolas

Trigonometric Functions of Angles
      Trigonometric Functions of Acute Angles
      Algebra and the Trigonometric Functions
      Right-Angle Trigonometry

Trigonometric Functions of Angles
Trigonometric Identities

Trigonometric Functions of Real Numbers
Radian Measure
Radian Measure and Geometry
Trigonometric Functions of Real numbers
Graphs of the Sine and Cosine Functions
Graphs of $y = A \sin(Bx - C)$ and $y = A \cos(Bx - C)$
Graphs of the Tangent and the Reciprocal Functions

Analytical Trigonometry
The Addition Formula
The Double-Angle Formula
Trigonometric Equations
The Inverse Trigonometric Functions

Additional Topics in Trigonometry
The Law of Sines and The Law of Cosines