Math.1330 - 12473: Precalculus
Course Syllabus - Spring 2016

Instructor name: Dr. Blerina Xhabli
Instructor Homepage: http://math.uh.edu/~blerina
Course number: Math.1330
Section number: 12473
Lecture Time/Place: MWF 11:00am – 12:00pm 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.** All students have free access to CASA until the access code deadline posted on the course website. To have continuing access to all course materials at CASA, you need to enter the access code.

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/math1330/1330policies.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. **Course Policy Quiz** – online on your CASA account :
   You must make 100% on the course policy quiz in order to have access to the other online assignments in the course. The answers to the quiz may be found in the "Math 13xx Course Policies" document on your instructor's website.
2. 4 Regular Exams
3. Final Exam
4. Online Quizzes (14 quizzes)
5. Homework – on each section covered in class
6. Poppers – in-class quizzes given daily starting the 3rd week of classes.

Components and Weights of Semester Assignments:

- Test 1: 10%
- Test 2: 15%
- Test 3: 15%
- Test 4: 15%
- Final Exam: 15%
- Online Quizzes: 10%
- Poppers: 10%
- Homework: 10%
- Total: 100%

Grading Scale: If you call your average "x":

A $93 \leq x \leq 100$	**B-** $80 \leq x < 83$	**D+** $67 \leq x < 70$
A- $90 \leq x < 93$	**C+** $77 \leq x < 80$	**D** $63 \leq x < 67$
B+ $87 \leq x < 90$	**C** $73 \leq x < 77$	**D-** $50 \leq x < 63$
B $83 \leq x < 87$	**C-** $70 \leq x < 73$	**F** $0 \leq x < 50$

Online Quizzes: Online quizzes will be given weekly in this course, starting the first week of classes. You may take each up to 20 times during the time that it's available. Your highest score is retained as the score for that quiz.

There will be **no makeup quizzes** for any reason. Neither the instructor, nor Math Department, is responsible for any difficulty that you have in accessing the quizzes. Please don't delay taking quizzes – there are times during the week when CourseWare is slow or overloaded. There is **no amnesty period** for the quizzes; the quizzes will NOT be reopened at the end of the semester. If you miss a quiz, you will NOT have a chance to make up for it. Please contact CourseWare tech support directly if you are having technical problems for your account.

Tests: There will be 4 tests, along with a mandatory final exam. The complete schedule is on your instructor's web page. All tests are taken at CASA testing center, with reservation.

Test 1 is over pre-requisite material and will be taken at CASA Testing Center by reservation. Use "proctored exams" tab at your CASA account to reserve a seat for it.

To see the exam dates and topics covered, please visit your instructor's website. **You must make a reservation to take a test prior to the first testing day.** You should print out the web page showing your reservation time for your records and proof of your reservation.

Tests are 50 minutes long. Push the "submit" button when you're completely ready to leave the Testing Center, AFTER you've finished ALL the questions and checked your work.

If you miss a test, you receive a zero for it. When you take the final, the grade on the final will replace that zero. If you miss more than one test, only the first one will be replaced. There are no retakes or makeups in this class.

You can NOT use calculators during the tests; study accordingly.

Final Exam: Final is **c**omprehensive and compulsory unless you're eligible for an exemption. No make-ups/no excuses. **NO EARLY FINALS**

Final Exam Exemptions:
If a student has a cumulative average of 80 or higher as calculated by the official department Grade Calculator at the end of the semester, that student may choose the be exempt from the final exam. A student must claim the exemption in his or her CASA account by the time specified on their instructor's website. If the exemption is taken, the student's final grade will be the grade determined by the Grade Calculator at the time the student claims an exemption according to the grading scale above (no rounding up).

Students who are not exempt from the final, or choose not to take the exemption to possibly improve their grade MUST take the final. The final exam is comprehensive.

Extra Credit:
There are practice tests and a practice final on Courseware. If you take the practice test, then 10% of the highest score you earn will be applied to the relevant test as extra credit You can take the practice tests several times (up to 20 times) and we only take your best score. Pay attention to the "end" dates on these. None of the practice tests will ever be re-opened.

Poppers: Beginning with the third week of school, you will have daily poppers… short questions on the material from that day's lecture or from the lecture just prior to that day. Each popper will be taken on a bubbling form. We will drop 4 lowest popper scores. Popper grades will be posted in your CourseWare gradebook. There will be **no make-up** Poppers. The forms are for sale at the BOOK STORE. Please buy the package for Math 1330 with your section number printed on it. **If your popper is not graded even though you turned it in, that means you've made a bubbling mistake and there is nothing we can do about it, you will not receive credit for such poppers.**

Homework: Homework is assigned for each section. You need to submit your homework via your CASA account. Please see the link for Homework on your instructor's website for due dates and more detailed information. **NO late homework** is accepted. We will drop 4 assignments at the end of the semester.

The instructor reserves the right to make changes on these policies. Any changes will be announced on the instructor's website in a timely manner.

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