

**MATH 1112 – Trigonometry & Analytic Geometry**  
**Section 01, Summer 2005**  
**MWF 8:00 am - 9:50 am, 303 Boyd Bldg**

**Instructor:** Dr. Rui Xu  
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**Office hours:** MWF 10:00 am–11:30 am, MWF 2:00–4:00 pm or by appointment.

**Textbook:** Precalculus (2<sup>nd</sup> Edition), by Robert Blitzer

**Course Description:** Topics in analytic trigonometry and analytic geometry. Credit for this course is not allowed if the student already has credit for 1113 or 1634.

**Topics:** Trigonometric Equations, Analytic Trigonometry, Applications of Trigonometric Functions, Polar Coordinates and Analytic Geometry.

**Learning Outcomes:** Students should be able to demonstrate:

1. An understanding of how to find the values of the trigonometric functions
2. An understanding of the graphs of the trigonometric functions
3. An understanding of how to prove trigonometric identities
4. An understanding of how to use sum, difference, double angle and half angle formulas
5. An understanding of how to solve triangles using the law of sines and law of cosines
6. An understanding of polar coordinates and graphs
7. An understanding of conic sections and their graphs

**Grading Methods:** Grades will be assessed based on a total of 650 points (as shown below), using the standard decade scale: (90–100%=A, 80–89%=B, 70–79%=C, 60–69%=D, below 60%=F).

Test 1 (Covering Chapter 4.1–4.4)	100pts
Test 2 (Covering Chapter 4.5–4.8)	100pts
Test 3 (Covering Chapter 5)	100pts
Test 4 (Covering Chapter 6)	100pts
Final (Comprehensive)	150pts
Homework	100pts
<b>Total</b>	<b>650pts</b>

**Homework & Test policy:** Homework is due every class day except the first day or test days. Late homework is not accepted. Homework may be graded partially or totally. I may grade a specific problem or just look for completeness. I am interested in the solution of problems not just their answers. So you need to show your work in details. Make-up test or homework can only be given for the students who have an authorized University excuse.

**Other Policies:**

1. Class attendance will be taken every class day. You are not allowed to come to class late or to leave early. If you miss class for any reason, it is your responsibility to get the lecture notes

from a classmate, read the text, and do the homework. If a student misses more than six days of class, that student will be withdrawn from the course for failure to attend.

2. Pagers or cell phones should be set to an inaudible setting.

3. If you are a person with any kind of disability and anticipate needing any type of accommodation to participate in this class, please let me know and make appropriate arrangements with Disability Services.

**Important Dates:**

June 6–7 : Drop/Add and late registration

June 29 : Last day to withdraw with a grade of W

July 4 : Independence Day Holiday

July 26 : Last day of class

July 27 : Reading Day

July 29 : Final Exam 7:30 am–9:30 am

Please note that the homework problems assigned below have been chosen to give you an idea of the range of problems you are expected to be able to work. You are required to do all of the assigned problems and hand in on time. You should do more problems for practice.

Section 4.1: 11,15,17,19,23,25,29,31,33,37,41,45,49,65,67,69

Section 4.2: 3,5,9,13,17,19,21,23,25,29,33,35,37,39,41,44

Section 4.3: 2,5,9,11,13,15,21,23,25,27,29,33,43

Section 4.4: 3,7,9,11,13,15,17,19,21,23,29,32,37,41,45,51,57,61

Section 4.5: 3,7,11,19,33,35,43,55,59,61,71

Section 4.6: 1,3,5,13,15,19,25,29,33

Section 4.7: 1,3,5,7,9,11,13,15,17,31,33,35,41,47,51,57,61,65

Section 4.8: 1,5,13,15,17,19,21,33,39

Section 5.1: 1,3,7,9,15,19,21,23,27,35,43,47,53,59

Section 5.2: 1,3,5,7,9,13,15,17,25,27,29,33,39,41,45,51,53

Section 5.3: 1,3,5,9,15,17,19,21,25,27,31,35,37,39,41,43,47,55,59,61,63

Section 5.4: 1,5,9,11,13,14,23,25,27

Section 5.5: 1,3,7,11,13,23,25,29,39,41,47,53,55,57,63,69,71

Section 6.1: 1,3,9,15,17,23,25,33,39

Section 6.2: 1,5,9,19,25,31,35

Section 6.3: 1,3,5,9,11,17,19,21,27,29,31,35,37,41,45,49,55,59,63,69

Section 6.4: 1,2,3,4,5,6,7,9,11,13,15,17

Section 6.5: 1,5,11,15,17,27,29,31,37,39,45,49,53,59,61,63,65,67,71

Section 6.6: 1,3,5,9,13,17,21,23,31,37,41,45,47

Section 6.7: 1,3,9,11,17,23,29,33,43