## Course Syllabus Math 1613 – Trigonometry Fall 2010

MWF 9:30am - 10:20pm MSCS (Section 002)

**Instructor** Dr Loretta Bartolini

Office 420 Mathematical Sciences

Office Hours M 11am - 12:00pm, T 1:00pm - 3:00pm

Email bartolini@math.okstate.edu

**Phone** 744-5541

Website: http://www.math.okstate.edu/~bartolini/teaching/1613fa10.html

**Textbook:** Analytic Trigonometry (9<sup>th</sup> Edition) by Barnett, Ziegler, and Byleen. Wiley

& Sons. 2006.

**Prerequisite:** Math 1513 – College Algebra or equivalent, or concurrent enrollment.

Course Aims: 1) To understand the definitions and principles of trigonometry and their applications to problem solving. 2) To complete the college mathematics requirement for further study of mathematics and courses in business, social science, or engineering which are mathematics dependent.

**Examinations:** There will be three (3) fifty-minute examinations, with a maximum possible score of 100 points each, and a 100 point comprehensive final examination, which will be recorded twice. The dates for the midterms are September 22<sup>nd</sup>, October 27<sup>th</sup> and December 1<sup>st</sup>, subject to confirmation. There will be a comprehensive final exam in the usual classroom on:

## Friday December 17<sup>th</sup> from 8:00am - 9:50am.

Make-up examinations will be given only for **very serious and unavoidable** conflicts, and ONLY if your request to present a make-up examination is approved by the Instructor in advance. If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided.

**Homework:** A list of homework problems corresponding to each section of the textbook is provided; these problems will not be submitted and graded. However, it is expected that you work these problems when the section is discussed in class to assess your knowledge of the material; these practice problems are also an excellent source of problems for quizzes and examinations.

Quizzes/Teamwork: There will be a total of eleven (11) closed-book quizzes with a maximum possible score of 10 points each during the course of the semester. There is a total of 110 points possible on the eleven (11) quizzes. You must be present for the entire class session to present the quiz; there are no make-ups for any reason whatsoever. For very special situations, the instructor reserves the right to allow a quiz to be presented early; prior approval is required.

Some written exercises may be assigned to be completed in teams. Points from Teamwork will be advised for each exercise and will be added to your total quiz score; however, the combined quiz and teamwork grade will not exceed 100 points.

Calculators: A scientific calculator will be required that is capable of evaluating the trigonometric functions (sine, cosine, and tangent) and their inverse functions, in both degrees and radians. Graphics calculators are not required and will not be permitted during quizzes or examinations. *Recommended:* TI-30X IIS.

Attendance: Class attendance involving active participation is a very important element in your success in learning trigonometry. You are expected to actively participate in each class session. The Class Attendance Score (100 points maximum) is an optional score achieved by your regular attendance at class sessions. Experience has shown a definite correlation between good class attendance and good grades.

Your Attendance Score is determined by your total number of absences during class sessions. Attendance will be taken during each class session; you must be present for the entire class session in order to be counted as present. For each absence, 4 points will be deducted from the maximum of 100 points. All absences will be counted, regardless of the circumstances. Note: Signing the class Attendance Sheet for another student is not permitted; if it is determined that a student signed in for another student, this unethical conduct will be regarded as a violation of Academic Integrity and the appropriate University policies will be employed.

**Help:** In addition to Office Hours, further consultation with the Instructor is available by appointment.

Help is also available through the Mathematics Learning Resource Center (MLRC) http://www.math.okstate.edu/mlrc/. The Center is an invaluable resource to support your mathematical learning and you are encouraged to go there regularly. The times for MLRC General Tutoring are: MTR 12:00 pm - 10:00 pm, W 12:00 pm - 6:00 pm, F 12:00 pm - 5:00 pm.

The MLRC is located on the  $4^{\rm th}$  floor of the Classroom building; you should check-in for tutoring in 420 CLB.

**Grading:** Your final grade will be based on the following, with the given scale for letter grades:

		Points	Grade	Points Needed
Quizzes/Teamwork		100	A	540 - 600
Midterm 1		100	В	480 - 539
Midterm 2		100	$\mathbf{C}$	420 - 479
Midterm 3		100	D	360 - 419
Final		100	$\mathbf{F}$	0 - 359
Final		<u>100</u>		
	Total	600		

Some discretion of the Instructor may be used in deciding borderline cases.

Notes: 1. Final grades will not be curved.

- 2. Your class attendance record will be reported along with your course grade.
- 3. Your Attendance Score (100 points maximum) will be used to replace any one of the three (3) midterm scores or one of the two (2) Final Examination scores provided it improves your letter grade and you earned at least one passing grade on these assessments. The Attendance Score will not be used to replace the Quiz score.

Any changes to this syllabus will be communicated in class by the Instructor.

University-Wide Policy: The policies herein are specific to this class. For the full OSU guidelines on matters such as withdrawal from courses, academic integrity and student disability, please refer to the University Syllabus Attachment, to be found at http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Fall.htm.

## Suggested Homework Problems

```
Ch.
      Sect.
               Pages
                         Problems
       1.1
               10 - 12
                         3-7, 11, 15, 16, 21, 39, 41, 47, 50, 52
 1
       1.2
               18-21
                         2, 4, 6, 8, 10, 12, 14, 19, 23, 29, 30
       1.3
               31-33
                         1-6, 10, 14, 16, 20, 24, 25, 30, 35, 38, 39, 41, 46, 50, 53, 58
       1.4
               38-44
                         2, 7, 11, 17, 29, 33, 38
       A3
                461
                         2, 4, 6, 8, 14, 16, 21-26, 33-38, 47, 48
 2
       2.1
                         1, 2, 3, 7, 10, 11, 14, 15, 20, 22, 30, 41, 46, 61, 83-85
               63-67
       2.2
               71 - 73
                         2, 6, 12, 17, 21
       2.3
               81 - 85
                         2, 8, 12, 14, 17, 18, 24, 30, 33, 44, 46, 48, 52, 58, 59, 65, 81
       2.5
                         1, 4, 5, 8, 11, 14, 17, 26, 29, 32, 33, 41, 52, 55, 65, 66, 73, 74
              110-113
 3
       3.1
              137-139
                         1-10, 12, 15, 16, 18, 19, 28
       3.2
                         1, 2, 4, 5, 8, 9, 17, 20, 25, 26, 28, 29, 32, 33, 57^*, 58^*  (not D)
              149-155
       3.3
              163-167
                         4, 5, 8, 9, 12, 17, 20, 25, 28, 34
              188-191
       3.5
                         3, 6, 9, 11, 12, 15, 25
       3.6
              200 - 201
                         1-5, 8, 10
 4
       4.1
              223 - 225
                         2, 4, 5, 6, 9, 13, 16, 18, 22, 26, 29, 33, 47
                         1, 4, 5, 8, 10, 14, 17, 19, 22, 27, 40, 48, 52, 59, 64
       4.2
              233-235
       4.3
              243 - 245
                         2, 11, 14, 23, 24, 29, 31, 34, 43, 49, 54, 55
              252 - 256
                         5, 6, 7, 10, 14, 16, 19, 22, 24, 28, 44, 49, 62
       4.4
       4.5
              262-264
                         1-6, 11-14, 18, 19, 21, 22, 29, 32, 36
 5
       5.1
              289 - 294
                         3, 5, 6, 10, 14, 18, 20, 22, 23, 25, 27, 28, 31, 35, 47, 49, 50, 62, 66, 68
                         2, 4, 7, 10, 18, 21, 36, 37, 43, 48, 49, 53
       5.3
              307-309
 6
       6.1
              339 - 342
                         3, 6, 9, 12, 13, 15, 22, 23, 25, 28, 45
       6.2
              348 - 351
                         5, 8, 9, 15, 20, 22, 28, 39
       6.4
              364 - 366
                         3, 8, 12, 13, 16, 20, 23, 28, 31
       6.5
              376-378
                         3, 6, 10, 16, 20, 26, 34, 45, 48, 53
 7
       7.1
              407-408
                         2, 4, 5, 12, 17, 24
       7.3
              428-429
                         2, 6, 10, 11, 14, 18, 21, 24, 27, 35, 36
```