Math 1613: Trigonometry

Fall 2010

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Office Hours: MWF 1:30-2:30 (or appointment) OCC Website: oc.okstate.edu

University Catalog Description: Prerequisite(s): 1513 or equivalent, or concurrent enrollment. Trigonometric functions, logarithms, solution of triangles and applications to physical sciences. No credit for those with prior credit in 1715 or any course for which 1613 is a prerequisite.

Course Objective: Students will investigate triangles (right triangles) and circles. There will be an emphasis on gaining a deep conceptual understanding of topics through visual representations.

Some Initial Comments: Together with Math 1513, this course serves as a prerequisite to Math 2144 (Calculus I). To prepare adequately for calculus, students enrolled in this course will need to actively participate in their learning and take full ownership of their understanding. Do not be a passive sponge!

Required Book and Materials: The book that will be used is **Analytic Trigonometry with Applications**, **9**th **edition** by Barnett, Ziegler, and Byleen. Additionally, you will need a scientific calculator. The Mathematics Department loans (for free) graphing calculators for the semester (Details will be provided).

Course Evaluation:

Course grades will be determined according to the following distribution:

Homework 100 pts
Examination 1 100 pts
Examination 2 100 pts
Examination 3 100 pts
Final Examination 100 pts
Final Examination 100 pts
TOTAL 600 pts

Letter grades will be assigned according to the following cumulative points:

540 to 600 A 480 up to 540 B 420 up to 480 C 360 up to 420 D under 360 F

There will be no curving of the final course grade.

Homework Grade: Working and struggling with concepts is a *very* important activity. Students are expected to struggle. This means true and significant knowledge is being built. Therefore, there will be eleven homework assignments, each worth 10 points. Note that there are a possible 110 points; the homework grade will not exceed 100 points, though. Due to time constraints, not all problems on an assignment will be graded. However, students must understand how to work all assigned problems. Each assignment will be collected at the beginning of class. You must be present the entire period to turn in the assignment. Late homework assignments will not be accepted under any circumstances. Assignments turned in early will be accepted only if cleared by the instructor in advance. Homework assignments must be submitted in the following manner:

- 1. Your name must be prominently displayed on each page with work only on one side of a paper.
- 2. Textbook page and problem numbers must be prominently displayed next to each problem.
- 3. Problems must be submitted in the order in which they were assigned.
- 4. The pages must be stapled together, in proper order.
- 5. You must show all work to receive credit and all work must be neat, clear, and legible.

If these conditions are not met, your work will not be evaluated; it will be returned to you with the assigned grade of 0.

Examination Grade: There will be three preliminary exams and one comprehensive final exam. 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 your instructor *in advance*. If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided. Tentative dates for the preliminary exams are as follows:

Exam 1	Friday, September 24
Exam 2	Friday, October 29
Exam 3	Friday, December 3

The final exam will be comprehensive and is scheduled for the following times (box appropriate time):

Sec. 1: Monday, December 13 (8:00-9:50am)

Sec. 3: Wednesday, December 15 (2:00-3:50pm)

Exam Replacement Score: Daily attendance is critically important. It is difficult, and sometimes impossible, to succeed in a college course without regular attendance. To encourage good study habits, attendance and participation will be allowed to improve grades. Based on attendance and participation in class, students will be assigned an "Attendance Grade." Throughout the semester, students may earn an Attendance Grade of up to 100 points. This **optional** score is a privilege that allows students who put forth good effort to improve their grade directly. The Attendance Grade may be used to replace one of the three preliminary exams or one of the final exam scores provided three conditions are met.

- 1.) The Attendance Grade is greater than at least one of the three preliminary exams or final exam scores.
- 2.) The student has received a score of 60% or better for at least one of the three preliminary exams or final exam scores.
- 3.) The student has taken all four exams.

Attendance Policy and Grade: Students are expected to attend every class. Beginning Wednesday, August 25, attendance will be taken for every class period. To be counted present, the student must arrive on time for class and stay the entire period. A role sheet will be passed around and each student must sign with his or her own signature. Signing someone else's name will be treated as academic misconduct. Each student will begin with an Attendance Grade of 100. For each absence, 5 points will be deducted from the Attendance Grade. More than 8 absences results in a grade of 0. Absences are not excusable. The Attendance Grade will not be used to replace a homework score.

Daily Routine: On a normal day, approximately 10 minutes at the beginning of each class will be allotted for answering questions about the previous days' material. The remainder of the class period will be used for new material and/or quizzes. Students should come to class each day having read the appropriate material in the book and having reviewed their notes from the previous class periods. Students should bring their notes and their books to each class period.

Mathematics Learning Resource Center (MLRC): The MLRC is a free tutoring service provided by the Mathematics Department. Located on the 4th floor of the Classroom Building, the MLRC is a useful place to receive spot tutoring. To best use the MLRC, students should have honestly attempted the problems before asking the MLRC tutors for help. Students should not ask tutors to "teach" topics to them or to work out entire problems. This is counterproductive and interferes with proper, active learning. For more information about the MLRC and for operating hours, visit the MLRC website: http://www.math.okstate.edu/mlrc.

Office Hours: Coming to instructor office hours is another great way to utilize resources. During office hours, students will receive more one-on-one interaction with the instructor. The student should come prepared, though. Prior to coming to receive help during office hours, the student should actively think about a solution to the problem and propose this solution to the instructor. Do not expect to receive a "re-teaching" of topics or have entire problems worked out. Again, this interferes with proper, active learning.

Academic Integrity: The University has explicit rules governing academic integrity. Please consult the OSU Fall 2010 Syllabus Attachment mentioned below on the web. Working with another person can be helpful in learning the material. However, all written work submitted must be your own. Copying someone else's problem solution or showing your written work to someone else is prohibited. Such behaviors are regarded as violations of academic integrity and will be treated according to the University's policy. In order to be successful in learning the material and doing well on examinations, you must think very hard about the problems **before** discussing them with anyone else. Having someone else show how to work the entire problem is totally counterproductive and will not lead to lasting or deep understanding of the underlying concepts within the problem.

Special Accommodations for Students: According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his/her disability and requesting accommodations. If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services. Please advise the instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified. Call 405-744-7116 or go to https://www.okstate.edu/ucs/stdis/. (OSU Fall 2010 Syllabus Attachment).

Drop and Withdrawal Policy: "Dropping" means you are withdrawing from a specific course, but you are still enrolled in at least one other OSU course; the last day to drop a course with an automatic grade of "W" is November 12, 2010. "Withdrawal" means you are dropping all courses, and you are no longer enrolled for the current semester; the last day to withdraw completely from OSU classes with an assigned grade of "W" or "F" is December 3, 2010. Additional information about "dropping" and "withdrawing" is available on the Fall 2010 Syllabus Attachment. **IT IS YOUR RESPONSIBILITY TO KNOW AND COMPLY WITH ALL DEADLINES.**

Incomplete Grade: The grade of "I" is given to a student who satisfactorily completed the majority of the course work and whose work averages "D" or better, but who has been *unavoidably* prevented from completing the remaining work of the course.

Additional Information: Please consult the OSU Fall 2010 Syllabus Attachment for further guidance on important issues. A copy of the syllabus attachment can be found at:

http://osu.okstate.edu/acadaffr/aa/PDF%20Files/sylatfa.pdf

Important Note: While sitting in class, students are expected to show common courtesies to everyone else. Please refrain from distractive behavior. Discourteous students will be asked to leave the class for that day and any work that is due will not be accepted. Additionally, the use of electronic devices such as cell phones, BlackBerries, iPhones, iPods and their ilk is strictly prohibited at all times!!! Students engaged in activities such as texting, listening to music, answering cell phones, emailing, etc. will be asked to leave the class (and will be allowed to return to class only after speaking with the instructor) and any work that is due that day will not be accepted. The moral of the story is: *Turn it off!*

Final Note: Remember that you control your learning. I am here to assist and facilitate, but I can't make you or cause you to learn anything. I don't believe in the old philosophies of learning, that students are empty vessels to be filled with information by the instructors. I believe that for the most part, you actively construct your own knowledge from what you already know and based upon what you encounter. I will treat you accordingly and expect you to be an active participant this semester.

Math 1613: Student Progress Report

Score

Attendance Grade

100

(-5 for each absence) Date absent

80 75 70 65 9

8 85

Homework Grade	Score												
Home		#1	#5	#3	#4	#2	9#	L #	8#	6#	#10	#11	Total ^(a)

on Grade	New Score ^(b)						
Examination Grade	Score		ī	3			
		#1	#5	#3	Final	Final	Total

Exam Replacement Score

Final Score

Quiz Grade Attendance Grade

Total

New Score ^(b)						
Score						
	#1	#5	#3	Final	Final	Total

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Grade Assignment	Final Score	540 to 600	480 up to 540	420 up to 480	360 up to 420	under 360
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- (a) May not exceed 100. (b) By replacing one of the scores with the Exam Replacement Score, per the conditions set forth in the syllabus.