Trigonometry
Fall 2014 Semester[1]
MATH 110.01 (2 credits), MWF 2:00P-2:50P, Wickersham 219

Prerequisites: A grade of C- or better in MATH 101 (*College Algebra*) or mathematics placement MPT 110 or mathematics placement MPT 160 is a prerequisite for this course.

Instructor: Dr. Buchanan

    Office: Wickersham 217-1, Phone: 872-3659, FAX: 871-2320

    Office Hours: 10:00A-10:50A (MWF), 1:00-1:50P (TuTh), or by appointment

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Textbook: *Schaum's Outline of Trigonometry*, 5th edition, Robert E. Moyer and Frank Ayers, Jr., McGraw-Hill Companies, Inc., New York, NY 2013, ISBN: 978-0-07-179535-7.

Objectives: The overall objective of the course is to provide the student who intends to take calculus with a foundation in analytical trigonometry. Thus the student is prepared for future application and manipulation of trigonometry required to understand new concepts in calculus.

The student will be expected to master basic ideas of trigonometry and to utilize the concepts developed to solve related problems. Scientific calculators such as the TI-83 or TI-84 with trigonometric and inverse trigonometric functions will be used. Students should have access to such a calculator.

At the end of this course a student will be expected to:

- use the definition of the six trigonometric functions in equations,
- sketch the graph of the six trigonometric functions,
- prove trigonometric identities,
- solve trigonometric equations,
- apply the law of sines and cosines,
- write a complex number in trigonometric form,
- solve real world problems using the concepts of trigonometry.

Course Contents:

- Measurement of angles, arcs, and sectors (Chap. 1)
- Trigonometric functions of a general angle (Chap. 2)
- Trigonometric functions of an acute angle (Chap. 3)
- Reduction to functions of positive acute angles (Chap. 6)
- Graphs of the trigonometric functions (Chap. 7)
- Basic relationships and trigonometric identities (Chap. 8)

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[1]This course meets from Monday 08/25/2014 until Wednesday 10/29/2014.

- Additional trigonometric identities and formulae (Chap. 9, 10)
- Laws of sines and cosines (Chap. 11)
- Inverse trigonometric functions (Chap. 13)
- Trigonometric equations (Chap. 14)
- Complex numbers (Chap. 15)

If time permits or necessity requires other topics may be covered as well.

Attendance: Students are expected to attend all class meetings per the University Approved Guidelines. If you know beforehand that you will be absent from class on the day an assignment is due, you must complete and hand in the assignment prior to the absence. If you are unexpectedly absent the day that an assignment is due you must hand in the assignment at the beginning of the class hour on the first day that you return to class. If you know you will be absent on the day of a test, you must notify me before the time the test is scheduled in order to schedule a make-up test. Students who miss a test should provide a valid excuse, otherwise you will not be allowed to make up the test. No final exam exemptions.

Homework: Students are expected to do their homework and participate in class. Students should expect to spend a minimum of three hours outside of class on homework and review for every hour spent in class. Homework exercises help students review and reinforce concepts covered in class. The textbook exercises are arranged in generally increasing level of difficulty. Working only the low-numbered exercises will not prepare a student sufficiently for the test and final examination exercises. All assigned homework exercises must be worked until successful completion. Other homework exercises may be distributed on paper handouts, sent as email attachments, or posted under Desire2Learn.

Tests: There will be two 50-minute in-class tests and a final examination. Dates for the tests have been set as follows.

- Test #1, Monday, September 15, 2014
- Test #2, Wednesday, October 8, 2014
- Final Examination, Wednesday, October 29, 2014

I will not "curve" test or exam grades.

Grades: Course grade will be calculated as follows.

Homework	25%
Tests	50%
Exam	25%

Tests and the final examination will be graded individually on a 100-point scale. I keep a record of students' test, homework, and exam scores. Students should also keep a record of graded assignments, tests, and other materials.

The course letter grade will be assigned as follows. I will not "curve" course grades.

90-92	A−	93-100	A		
80-82	B−	83-86	B	87-89	B+
70-72	C−	73-76	C	77-79	C+
60-62	D−	63-66	D	67-69	D+
		0-59	F		

Course Repeat Policy: An undergraduate student may not take an undergraduate course of record more than three times. A course of record is defined as a course in which a student receives a grade of A, B, C, D, (including + and −) F, U, Z or W. The academic department offering a course may drop a student from a course if the student attempts to take a course more than three times.[2]

The last day to withdraw from a course (and receive the W grade) is Thursday, October 2, 2014.

Inclement Weather Policy: If we should miss a class day due to a school delay or cancellation, any activities planned for that missed day will take place the next time the class meets. For example, if a test is scheduled for a day that class is canceled on account of snow, the test will be given the next time the class meets.

Final Word: Mathematics is not a spectator sport. What you learn from this course and your final grade depend mainly on the amount of work you put forth. Daily contact with the material through homework assignments and review of notes taken during lectures is extremely important. Organizing and conducting regular study sessions with other students in this class will help you to understand the material better.

No one can guarantee you success in this course. Your responsibilities and the instructor's expectation are outlined above. There will be no second chances, "do-overs", or extra credit assignments.

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[2]Memorandum to mathematics faculty from Dr. Charles G. Denlinger, Assistant Chair, Department of Mathematics, August 30, 2004.