MATH 150 – SPRING 2008
TRIGONOMETRY

Instructor:	Alina Birca
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Office hours:	**MW: 11:25 AM – 12:00 pm & 1:35 – 2:15 pm**
	F: 11:25 am – 12:00 pm & 1:35 – 2:30 pm
Text:	Trigonometry *(5th edition)* by McKeague and Turner
Section #96310	MW 5:25 – 6:50 pm 40 – 109

Course Objectives

This is a course of study in the trigonometric functions with emphasis on periodic functions, trigonometric identities, solving trigonometric equations, graphical methods, inverse functions, solving triangles with applications including the law of sines and law of cosines. Additional topics include vectors and complex numbers.

Upon completion of this course, the student will be able to:

- Recognize classical and analytic definitions of the trigonometric functions;
- Solve triangles using right triangle trigonometry, the law of sines and the law of cosines;
- Analyze independently and set up application problems, thus applying problem-solving technique to new situations. Demonstrate the ability to anticipate and check their proposed solutions;
- Recognize, solve, utilize trigonometric identities;
- Convert from radian to degree measure and vice-versa;
- Solve trigonometric and inverse trigonometric equations;
- Communicate effectively using proper terminology verbally as well as proper written notation;
- Graph the trigonometric functions and their inverses, including the ability to change parameters and predict corresponding graphic behavior;
- Use trigonometric functions to model periodic behavior;
- Use, manipulate, recognize function notation as related to the trigonometric functions.

Methods of Instruction

This course will combine lecture, teamwork, and class discussion. Students will be required to do homework, group problems, quizzes and examinations.

Attendance and Participation

Understanding math requires more than just reading a textbook. Listening and participating in the class activities are as important as solving problems. College policy requires that you attend every class meeting. Moreover, I do notice when you do not show up. If your grade is on a borderline, those with regular attendance are more likely to be on the higher side of the line. In addition, you miss the material from that day and that day's quiz. Do not be late to class. You might miss the quiz if you are late. NOTE: You the student are responsible for dropping the course should you decide not to continue in it. If you stop attending and doing the work and you fail to drop, you will receive a failing grade in this course. **You may be dropped from this class if you miss class during the first 2 weeks of instruction**. Your seat will be given to a student who has been attending each day.

Prerequisites

There is an official prerequisite for this course (Math 71 Intermediate Algebra and Math 61 Plane geometry), and I expect that you demonstrate college algebra and geometry skills (linear, quadratic and rational equations and plane geometric figures.) It is your responsibility to know the prerequisite material when you register for this class.

Study time & Extra help

You are expected to study two hours outside class for every hour in class – that is at least 6 hours a week. If you have trouble completing assignments or understanding the mathematics, get help as soon as you need it. My office hours and email are listed above. Free tutorial services are available in the Learning Assistance Center, Building 6, room 101. Tel: 909-594-5611 x 4300 as well as in building 40 (math).

Late Work

Be prepared with all assignments on the day they are due. As a rule, I do not accept late written work nor are there any make up tests or quizzes.

Academic Honesty

Plagiarism or cheating will not be tolerated. There will be a zero on the assignment and risk failing the course.

Calculators

Most of the homework problems I will assign this semester will be done using paper, pencil, ruler and a scientific calculator. However, a graphing calculator will be necessary for some of the homework problems. You could borrow a graphing calculators for the day (free) or you could rent one for the semester ($20) from MARC. No graphing calculator will be allowed during most of the tests and quizzes.

If you have a phone or pager, please turn it to vibrate and sit close to the door in case you need to use it in an emergency. Thank you.

Organization, Grading and Requirements

You will need a 3-hole binder with 3 separators, labeled as follows:

LECTURES   **HOMEWORK**   **TESTS & QUIZZES**

- **LECTURES** – Pay attention in class to what I say and do, and make careful notes. In particular, note the problems I work on the board, and copy the complete solutions as well as the theory presented in each section. Work as neatly as you can. Write your symbols clearly, and make sure the exercises are clearly separated from each other. Do not hesitate to ask questions in class. It is not a sign of weakness, but of strength. There are always other students with the same question who are too shy to ask.

- **HOMEWORK** – Before you start on homework assignments, rework the problems I worked in class as well as all examples from the textbook. This will reinforce what you have learned. Make sure you check your previous work against the solution sections posted on my website. Print out the solutions from my website for your reference.

- Keep all quizzes and tests that are returned to you in your binder. Use them when you study for future tests and for the final exam.

Assignments in the course are divided into four areas and are worth a total of 1000 points. Those earning 900 points or more will be awarded an A, 800 to 899 points a B, 700 to 799 points a C, 600 to 699 points a D and less than 599 points an F.

Homework 160 points

Homework and reading will be assigned each day. Homework will be collected eight times (see due dates on the Tentative Class Schedule). Staple each section separately, as I might collect and grade one or more of the assigned sections. Each homework is worth 20 points. Homework is due at the beginning of the class. Read carefully all the directions from the homework handout. Late homework will not be accepted for any reason with the following exception: you are allowed ONE grace period until the next class period for ONE assignment. You get only one grace period – use it wisely! You are encouraged to discuss assignments with your classmates; however, you are required to write up your work independently. Copied homework will not be tolerated and identical, or nearly identical, assignments will *share* a single homework score. I will make every effort to address homework questions in class as time permits. Please feel free to visit me during office hours or contact me by email if you need additional help.

Quizzes 255 points

Three quizzes will be given (see Tentative Class Schedule). They may be given at the beginning or at the end of the class. These quizzes will be given from exercises and examples done in class as well as homework problems assigned from the topics covered up to that point. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!** Each quiz is worth 85points.

Tests 300 points

Two tests will be given over the major areas addressed in the course. Each test is worth 150 points. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!**

Comprehensive final 285 points

The final is a 2 ½ hour exam and it is held on Wednesday, June 11th from 4:30 – 7:00 pm. The final is a cumulative exam. You may use the final exam percent score to replace your lowest test score. You must take the final to pass this class.

Grade Sheet

Homework 1		/20
Homework 2	+	/20
Homework 3	+	/20
Homework 4	+	/20
Homework 5	+	/20
Homework 6	+	/20
Homework 7	+	/20
Homework 8	+	/20
HOMEWORK	=	**/ 160**
Quiz 1		/85
Quiz 2	+	/85
Quiz 3	+	/85
QUIZZES	=	**/255**
Test 1		/150
Test 2	+	/150
TESTS	=	**/300**
FINAL EXAM	=	**/285**
TOTAL	=	**/1000**