MATH 113 Summer 2015
TTh 6:00 PM – 8:45 PM in Room N027

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SYLLABUS

Text and Required Materials:
o Text: Trigonometry", by Lial, Hornsby, Schneider, 10th edition
o Writing utensils, colored pens/pencils, and #2 pencils.

Course Description: Trigonometric functions, properties and graphs, identities, inverse trigonometric functions, solving trigonometric equations, solutions of triangles.

PREREQUISITE: (a) a grade of C or better in MAT 110 or (b) concurrent registration in MAT 110. or (c) placement based on placement test score.

Objectives: The primary objective is to develop content proficiencies listed below-
➢ Basic concepts of the circular functions
➢ Applications of triangle trigonometry
➢ Use of trig identities
➢ Understanding of graphs of the trig functions
➢ Understanding of inverse trig functions

Grading Policy: All work turned in on projects, quizzes, and exams must be written neatly; i.e., the handwriting should be legible to me, there should be minimal scratch-outs (I recommend using a #2 pencil and an eraser), and the general format should conform to sample problems done in class and the text. If you turn in assignment with multiple pages, you must staple it. Following the format of sample problems will help your math writing and thinking abilities. So please pay careful attention to how you write; some of you may even have to occasionally rewrite the assignment to conform to these guidelines. If these guidelines are not followed, you may receive a score of zero for that assignment, exam or quiz.

o **Homework**
➢ Homework is primarily to help you learn the daily material.
➢ Although the homework will not be collected, you may have to present to the class and/or take oral exams on these problems.
➢ Additionally homework questions in some form may appear on your quizzes and exams.
➢ In this class each problem/activity may seem different from each other even though the problems are from the same section. This nature of the class may make it harder for some individuals to do the homework. To address this issue, some class time will be devoted to solving problems and doing the activities. However, since there is only finite time allowed for each class period, we may not have time to discuss each question/activity. It is _your responsibility_ to make sure you get your questions answered.

o **Take Homes: Two take homes** will be given and each take home is worth **13%** of your grade.

- o **Exams: Two exams** will be given and each exam is **20%** of your grade.

- o **Class Participation, Oral quizzes, and Written quizzes:** During class, I am give written quizzes, or oral quizzes, and your participation in class is worth **4%** of your grade.

- o **Final Exam:** The final exam is worth **30%** of your grade.
  - ➢ In any exam, quiz or homework assignment, write neatly and show all your work to be assured full credit.
  - ➢ All in-class quizzes and exams are cumulative unless specified otherwise.
  - ➢ All exams are about 50 minutes long. However, the clock in this room might not always give the accurate time and so cannot be used to judge the allotted time. I will announce the time close to the end, or you can bring your own time pieces.
  - ➢ You are responsible for anything covered in class. If you are absent or late, you can ask me what you missed. Do not make plans based on the "tentative schedule" since it may change.

Makeup Exam Policy:

Under extenuating circumstances a makeup exam will be considered only if
- o you have attended 90% of the scheduled classes at the time of the request
- o you have contacted the instructor prior to, or on the day of the test or quiz.

The instructor will reserve the rights to decide which circumstances are extenuating case by case.
DO NOT HESITATE TO GET HELP. If you need help on anything, I will be readily available.

Grading Scale: The tentative grading scale for course grades is as follows:

- Your grade in MAT113 will be determined by <u>three factors</u>: % on each of the 2 tests (may include written/oral exams), % on 2 take homes, and % on the final exam.
- The total % break down for your grade is as follows:

ITEM	%	Variable
Take Home 1	13	A
Take Home 2	13	B
Exam 1	20	C
Exam 2	20	D
Participation and Quizzes	4	E
Final Exam	30	F
Total	100	

Grading Scale: Standard grading scale is used where scoring above 93% is an A, 90-92% is an A- and so on. To compute your grade, the following formula will be used

Total % = 0.13(A+B) + 0.2(C+D) + 0.04(E) + 0.3(F)

- **Extra Credit %**: From time to time your instructor may choose to give you additional opportunities to earn extra credit points at their discretion.

Calculator Policy: No graphing calculator will be allowed on quizzes/exams. It would be beneficial to own a scientific calculator. If you forget to bring a scientific calculator for the quiz/exam, you may risk having no calculator at all on that quiz/exam. **(No cell phones or any other electronic devices may be used as a calculator.)**

Additional Information:
- o This course is **NOT** a methods course. It is a mathematics __CONTENT__ course, and the content is not necessarily "elementary" or simple. You will learn not only the standard arithmetic and algebra topics, but also the logic and reasoning underlying those areas.
- o Not all homework problems and class activities from your text are done in class, and it is your responsibility to get your questions answered (e.g., in office hours, Tutoring,…) if they are not addressed in class. The nature of the exercises and problems in your text are such that even if sample problems are done in class, it may appear that each problem is new and you are not prepared for it. Therefore, it is important to concentrate on the logic and mathematical principles (underlying the material) which may help you solve any problem of a particular type.
- o We will also cover material not in the text, and therefore it is important to attend all classes.

UW Colleges Assessment: A UW Colleges-wide assessment program has been put into place to enhance the quality and effectiveness of the curriculum, programs, and services of the institution. The following areas of proficiency will be assessed because they are of primary importance in the education of our students: Analytical Skills, Quantitative Skills, Communication Skills, and Aesthetic Engagement. The Mathematics Department has also determined a number of areas where common mistakes are made throughout the mathematical curriculum. These areas are: (1) improper distribution through parentheses, (2) improper distribution of exponents, (3) selective canceling of denominators, (4) analyzing functions with a compound input, such as $f(x + h)$, and (5) improper use of exponents. Results from problems in these areas will collectively be used to assess the colleges-wide proficiency: "Analytical Skills; Select and apply scientific and other appropriate methodologies".

Classroom Etiquette: Most students do not need this section. However, there have been some exceptions over the years that have disrupted class and students' understanding of the material. Following the guidelines will make the semester a more pleasant/fun/comfortable experience for all the students and the teacher.
- Different people need different amounts of time to process material and questions. When I ask a question, **PLEASE DO NOT BLURT OUT THE ANSWER** but rather raise your hand. In this way, more students will have the opportunity to participate in class.
- You are **NOT** allowed to use any electronic devices unless asked by the teacher to do so. If a student is discovered using any electronic device while class is in session without the instructor's directions to do so, the student may be asked to leave class, and further action may be taken.
- Please be courteous to your fellow classmates and me by not talking to a classmate during class while I am trying to explain something. This is mainly for non-math talk, but even math talk should not occur while I am talking. Other students who have paid to learn in the course may be distracted by your conversation, and at times I also can become distracted. I am also concerned that you yourself might be missing some important information at the board. At any point if you have questions, don't hesitate to raise your hand and ask.
- I know the material is sometimes difficult and some students have trouble following what I'm doing at the board at times. Please let me know when this occurs so that I can address it; please do not get vocally upset about it during class time. Pouting or venting is usually a healthy reaction to stress, but it is **NOT** appropriate in class and can be disruptive to other students' learning.
- After each piece of graded work is handed back to you, please avoid the following: (i) being outwardly/vocally emotional in class (e.g., if the grade does not represent what you expected), and (ii) immediately engaging me in a discussion of why you lost certain points. I will discuss individual exams

outside of class and **NOT** during class time. However, I will occasionally discuss some test problems for all students.

- All cellular phones, beepers, and electronic gadgets that could disrupt class should be in sleep mode or off while class is in session. If one is accidentally turned on or must be kept on for emergencies, please leave the classroom to respond or turn it off immediately.
- Please recycle all the plastic bottles, aluminum cans, and paper. I respectfully ask that you do not throw these items in the classroom garbage. There are several places on campus where the recycle bins are located. If you do not have the time to find such a bin, I will recycle it for you. I feel strongly about this issue and this is something we can do to try to help the environment we live in.
- If you are a student with a disability or special needs, feel free to come and talk to me.

Tentative Schedule:

May 26	Chapter 1
May 28	Chapter 2
June 2	Chapter 3
June 4	Chapter 4
June 9	Take Home 1 is due
	Test 1
June 11	Chapter 5
June 16	Chapter 6
June 18	Chapter 7
June 23	Chapter 8
June 25	Take Home 2 is due
	Test 2
June 30	Review for the Final Exam
July 2	Final Exam

Homework:

Section	Homework Number
1.1	1-81 odd
1.2	1-61odd, 62-72
1.3	1-51 odd, 56-61
1.4	1-71odd, 72-76,78-81
2.1	1-48, 54-55,60-65 odd
2.2	1-53, 54-59even, 61-66
2.3	1-29, 31, 34,41-49
2.4	1-31, 35-38, 41-47odd
2.5	1-31 odd
3.1	1-78
3.2	1-22, 25-42,45,47
3.3	1-68, 71
3.4	1-43
4.1	1-39, 43-50
4.2	1-46
4.3	1-49
5.1	1-64
5.2	1-68, 79, 80, 84
5.3	1-66
5.4	1-37, 41-66
5.5	1-64
5.6	1-30, 33-41 odd,49-55 odd
6.1	1-40, 41-51 odd, 53-59, 63-81, 83-93
6.2	1-50, 53-57 odd
6.3	1-40, 46-50
6.4	1-38, 43
7.1	1-20, 21-31 odd, 32-34, 39-53
7.2	1-32, 35, 37
7.3	1-37, 39-44, 47-53 odd, 61-74
8.1	1-99 odd
8.2	1-63
8.3	1-24
8.4	1-44