Syllabus

Class: MAT 113 "Trigonometry" (2 credits)

Meeting Times: 11–11:50 TR (in room 258)

Instructor: Peter L. Vachuska, office 249, phone 335-5250 ext. 249. I can also be reached by email at `Peter.Vachuska@uwc.edu`.

Office Hours: 10–10:50 M-F.

Textbook: *College Trigonometry, 6e* by Aufmann, Barker and Nation

Other Materials: All class handouts can be found online at `http://www.geocities.com/pvachusk/113/`

Grading: Grades will be based on three hour exams, each 100 points and a final worth 150 points. If you miss an exam or wish to retake the exam because of your exam grade, you must arrange with me for this to be done outside of class and these exams will not be returned to you. If you retake an exam, I will use the higher of the two scores in computing your final grade. **Use of symbolic manipulating calculators, such as the TI92, TI89 and HP49 as well as equation or triangle solving functions or programs will not be allowed on exams.**

My grading scale is: 100-90% being the A's, 90-80% being the B's, etc. ..., (with top/bottom 2 percents for +/− in each category).

Material Covered: See schedule on other side.

To do well in this class:

- Attend class and don't fall behind. — Since we only meet twice per week, it's very easy to fall way behind thinking you will catch up.
- Let the instructor know if you don't understand something. — Our schedule covers a lot each class, some of it will be on the test and some will just be used to build upon. Everything should be thought of as important.
- Do the exercises after each section. — These constitute the essence of the course.
- Read the book. — If you don't understand how to attack an exercise, look for an example in the section. Also look at definitions.
- Make use of office hours, learning center, study groups, etc.
- Do all of the review problems before an exam. — This is the very least that you need to do to prepare for an exam.
- Go beyond the minimum amount that you need to know. — Aiming for a *C* usually works up until the final when you have to know all of the material and have other class finals to worry about. Better to aim for an *A* or *B*.

Important Dates:

September 15: Last day to add or to change from or to pass/fail or from audit to credit.
November 10: Last day to drop or to change from credit to audit.
November 27-28: Thanksgiving Recess.
December 15: Last day of classes.
December 18: Final Exam, 10:30–12:30.

Schedule and Suggested Problems*

Sept. 2	Section 2.1	Angles and Arcs	p. 130: 1-69 odd
4	Section 2.2	Right Angle Trigonometry	p. 142: 1-51 odd
9	Section 2.3	Trig Functions of Any Angle	p. 153: 1-71 odd
11	Section 2.4	Trig Functions of Real Numbers	p. 166: 1-75 odd
16	Section 2.5	Graphs of Sine and Cosine	p. 177: 1-47 odd
18	Section 2.6	Graphs of Other Trig Functions	p. 189: 5-43 odd
23	Section 2.7	Graphing Techniques	p. 199: 1-49 odd
25	Section 2.8	Harmonic Motion	p. 208: 1-25 odd
30	Review		
Oct. 2	Exam 1		
7	Section 3.1	Verification of Trig Identities	p. 222: 1-55 odd
9	Section 3.2	Sum, Difference and Cofunction Identities	p. 233: 1-67 odd
14	Section 3.3	Double and Half-Angle Identities	p. 243: 1-89 odd
16	Section 3.4	Identities involving Sums of Trig Functions	p. 252: 1-75 odd
21	Section 3.5	Inverse Trig Functions	p. 265: 1-73 odd
23	Section 3.6	Trigonometric Equations	p. 278: 1-83 odd
28	Review		
30	Exam 2		
Nov 4	Section 4.1	Law of Sines	p. 298: 1-29 odd
6	Section 4.2	Law of Cosines and Area	p. 308: 1-39 odd
11	Section 4.3	Vectors	p. 325: 1-77 odd
13	Section 5.1	Complex Numbers	p. 340: 1-61 odd
18	Section 5.2	Trig Form of Complex Numbers	p. 349: 1-61 odd
20	Section 5.3	De Moivre's Theorem	p. 354: 1-41 odd
25	Review		
Dec 2	Exam 3		
4	Section 2.2	Right Triangle Applications†	p. 143 53-69 odd
9	Section 4.2	More Triangle Applications†	p. 309 41-61 odd
11	Review		
	Final Exam		

*This schedule will probably be adjusted as we find the semester progresses.

†If we do not have time, these may be omitted.