

MATHEMATICS ASSIGNMENTS
 PRECALCULUS WITH ANALYSIS
 MS. WILDSTROM
 AUGUST 31-SEPTEMBER 22, 2009

DATE	READING LECTURE	PROBLEMS DUE	WORKSHEET QUIZ/TEST
Mon., 8-31	Introduction		
Tues., 9-1	5-1,2,3,4		
Wed., 9-2		p. 98-99,#3,4,5,8,11,12,13,15,20,21,23,25-29 all. p. 102,#2,4,6,7-10	
Thurs., 9-3		p. 105 #1-11 odd, 16-18. Foerster angular and linear velocity sheet (#1-4,6-14,18,19,24)	
Fri., 9-4		Continue Foerster angular and linear velocity sheet (#1-4,6-14,18,19,24)	
Mon., 9-7		NO SCHOOL!	Journal (9-7)
Tues., 9-8	5-5,6,7		
Wed., 9-9		Group Work during class.	
Thurs., 9-10	5-8,9,10	p. 107 #26,27,29,30. p. 112 #3-72 by 3's	
Fri., 9-11		p. 110 #1-5, 15-23. p. 115 #1-6.	
Mon., 9-14		Graphing worksheet Columns 2 and 3	
Tues 9-15	5-11	Graphing worksheet Column 4 and Foerster graph to equation sheet	
Wed., 9-16		p. 124 #1-4, 20-22 (use a graphing calculator)	Competency Quiz (10)
Thurs., 9-17	Review	p. 126 #1-24.	
Fri., 9-18	6-1,2,3		Journal (9-20)
Mon., 9-21		(Loose ends from chapter 5)	
Tues., 9-22		NOTEBOOKS DUE!	CHAPTER 5 TEST

OBJECTIVES: Students should be able to:

1. use both radians and degrees to express angle measures realizing that $360^\circ = 2\pi$ radians and solve narrative problems involving circles and their measures and the notions of angular and linear velocity. (5-2)
2. use a circle of radius 1 and a number line to which it is tangent to visualize and define a wrapping function; in which an infinitude of values on the number line map to each point on the circle with this function (5-3)
3. use central angle radian measure to coordinatize the circle and determine multiple points on the number line that describe the same point on the circle through "wrapping" the line around the circle; use special triangles to determine actual points on the circle to which certain numbers on the line will map. (5-4)
4. define two functions cosine θ and sine θ as the x - and y - coordinates respectively of a point P on the unit circle where the measure of the arc formed from the positive x -axis (the point (1,0)) to the point P is θ ; use this definition and the Pythagorean theorem to determine $\sin \theta$ and $\cos \theta$ for values of θ corresponding to measures of $\frac{\pi}{4}, \frac{\pi}{6}$ and their multiples. (5-5)
5. define tangent, cotangent, secant, and cosecant functions in terms of x and y ($\sin \theta$ and $\cos \theta$)(5-6)
6. use special triangle relationships (30-60-90 and 45-45-90) to determine these additional trig function values for $\frac{\pi}{4}, \frac{\pi}{6}$ and their multiples. (5-7)
7. examine graphs of trig functions to determine patterns such as range, cyclic frequency, undefined values, vertical and horizontal displacement, and increasing or decreasing behavior. (5-8)
8. analyze periodic functions for amplitude, circular frequency, period, phase shift and vertical displacement and then sketch a graph. (5-9,10)
9. determine the periods of functions that are sums of other periodic functions and sketch their graphs. (5-11)