

MATH 142 D Trigonometry with Analytic Geometry

Fall 2009

Instructor: Minnie Catral

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Course Web Page: <http://orion.math.iastate.edu/mrcatral/Math142D.html>

Office Hours: Mondays 1–2 p.m., Tuesdays 1–2 p.m., Wednesdays 12–1 p.m., Thursdays 1–3 p.m.

Text: *Algebra and Trigonometry, Eighth Edition*, by Michael Sullivan.

Lectures and Recitations. The lectures are on Mondays and Fridays 11:00 – 11:50 a.m. in Carver 0101. The recitations meet 11:00 – 11:50 a.m. on the following days:

Section D1 (Maksym Pryporov): Tuesdays in Carver 0004

Section D2 (Nicole Kingsley): Tuesdays in Carver 0068

Section E1 (Travis Peters): Wednesdays in Carver 0032

Section E2 (Nicole Kingsley): Wednesdays in Carver 0174

Section F1 (Maksym Pryporov): Thursdays in Carver 0004

Section F2 (Travis Peters): Thursdays in Carver 0068

You are scheduled for one of these recitation sections.

Plagiarism/Cheating Policy If plagiarism or cheating occurs, a zero will be assigned for that test or assignment, with possible withdrawal from the course. The tests and final exam are proctored; they are closed-book; notes or formula cards are not permitted. Copying someone else's work is cheating.

Evaluation: Your grade will be based on exams and daily work. Daily work will consist of any or all of the following: in-class or take-home quizzes, collected homework or other special assignments. The computation of the daily work scores are determined by your respective recitation instructors. Your course grade will be weighted as follows:

Daily Work	50 points
Exam 1	75 points
Trig Final Exam	100 points
Analytic Geom Final	75 points

The grades will be assigned as follows:

A	90–100 %
B	80–89 %
C	70–79 %
D	60–69 %
F	Below 60 %

Exam Schedules:

Exam 1	:	Friday, October 2 (in-class)
Trig Final	:	Wednesday, November 4, 8-9:30 P.M., Kildee 0125
Analytic Geom Final	:	To Be Announced

Missed Exams: There are no make-up tests for missed exams. The exam dates are listed in this syllabus. If you know in advance about an absence, arrange to take the test prior to the scheduled test time. You will not be allowed to take a test after papers have been returned to the class.

If an emergency should arise which causes you to miss a test unexpectedly, submit a written explanation of the emergency upon your return to school. If the absence is deemed justified, a score for the test you missed will be determined based on the corresponding material from the final exam.

MATH 142 SCHEDULE and SUGGESTED PRACTICE PROBLEMS

These problems are from the text Algebra and Trigonometry by Sullivan (8th Ed). Do the odd-numbered problems from the list unless indicated otherwise. EOO = Every Other Odd

Week**	Section	Topics	Problems
1	7.1	Angles and Their Measure	41-57, 71-77, 87, 89, 97-101, 111, 115
2	7.2	Right Triangle Trigonometry	25-47, 55, 59, 68, 71, 75, 76
3	7.3	Computing the Values of Trigonometric Functions of Acute Angles	17-27, 47-61, 71
	7.4	Trigonometric Functions of General Angles	1-105 EOO
4	7.5	Unit Circle Approach; Properties of Trig Functions	1-85 EOO, 63, 69, 72
	7.6	Graphs of Sine and Cosine Functions	9-27,43-67
5	7.7	Graphs of Other Trig Functions	7-39
	7.8	Phase Shift; Sinusoidal Curve Fitting	3-25
6		Review, Exam 1	
7	8.1	The Inverse Sine, Cosine and Tangent Functions	13-65 EOO
	8.2	The Inverse Trig Functions (Continued)	9-65 EOO, 58, 60, 64
	8.3	Trig Identities	19-99 EOO
8	8.4	Sum and Difference Formulas	9-85 EOO, 83, 84, 86
	8.5	Double-angle and Half-angle Formulas	7-67 EOO, 69-77 (All odd)
	8.6	Product-to-Sum and Sum-to-Product Formulas	1-21 EOO
9	8.7	Trigonometric Equations (I)	7-39, 55, 57, 64
	8.8	Trigonometric Equations (II)	5-45, 65, 68, 69
10	9.2	The Law of Sines	9-41 EOO, 47, 53
	9.3	The Law of Cosines	9-31 EOO, 35-41,45
11		Review, Trig Final	
	10.1	Polar Coordinates	11-79 EOO
	10.2	Polar Equations and Graphs	13-77 EOO
12	10.3	The Complex Plane; De Moivre's Theorem	11-59 EOO
13	11.2	The Parabola	11-53 EOO, 67, 69, 73
	11.3	The Ellipse	13-69 EOO, 71, 75, 79
14		THANKSGIVING BREAK	
15	11.4	The Hyperbola	13-61 EOO, 67, 71, 73
	11.6	Polar Equations of Conics	7-41
16	11.7	Plane Curves and Parametric Equations	7-43 EOO, 49, 55, 58
		Review	

** These are approximate schedules.