

Math. 113. Syllabus. Spring 2008.

Textbook: "Trigonometry" by J.D. Baley and G. Sarell, Mc Graw Hill, revised 3rd edition.

HOMEWORK: due every Tuesday (on the sections covered in class the week before). Instructors may change the assignments.

ADDITIONAL PRACTICE: Many students will need to do more problems than assigned. Use the odd numbered problems (with solution) often paired with the even numbered problems that are assigned.

Day	Sections	Homework (page as indicated or next)
Jan 22	1.1 1.2 (degrees and radians, arc length).	2,4,6,10,12,14,16 Page 8,
24	1.2 (sector area) and 1.3 (circular motion).	2,4,20,24,26,34,36,38 Page 12, 2,4,14 Page 18, 12,14,18,24 Page 24.
29	2.1 2.2 (Trig. functions).	----- 2,4,6 (sin, cos and tan only), 8,10,12 Page 34, 2,4,20,24 (sin, cos and tan only) Page 42.
31	and Pyth. Identities (12)(13) page 164. 2.3 2.4 (right triangles).	20,22,24 Page 34. 10,12 Page 50. 2,4 Page 56.
Feb 5	2.5 (right triangles, applic.).	----- 4 , 5,9 Page 62, 22 Page 75.
7	3.1 (graphing sine and cosine).	18,20,28,34 Page 91.
12	3.2 (graphing).	----- 16,18,32,34 Page 105.
14	Special lecture (review or/and special topics. , up to instructor).	-----
• EXAM 1. Monday Feb. 18, 5:30-6:20. •		
19	3.2 (cont.) and 3.3 (tangent only).	Graph $y = \tan 2x$, $y = \tan \frac{x}{2}$, and $y = \tan \frac{1}{2}$.
21	4.1 4.2 (inverse functions). Read Comment 1 in the Math 113 handout	14,16,18,20 Page 149.
26	4.1 4.2 (continued).	----- 2,4,8 Page 151.
28	5.1 5.2 5.3 (identities).	48,56,70 Page 168. 28,30,34 Page 175. 26 Page 181
Mar 4	6.1 6.3 (sum,diff).	----- 2,4,16,18,24,26,36 Page 193, 4,8,10 Page 198.
6	7.1 7.2 (double, half angle). READ the important note on FORMULAS in the semester information sheet.	2,6,10,12,14,16,18,20,30,34 Page 216, 21,35,36,37,38,39,40,54 Page 222.
11	8.1 (basic trig eq.).	----- 4,10,20,24 Page 241.

Mar13 8.2 8.3 (trig eq.). 2,22,30 Page 244, 8,14 Page 250.

Spring Recess March 15-22

25 9.1 9.4 (law of sines, law of cosines). 2,10 Page 272, 2,8,16,18 Page 291.
Read Comment 2 in the Math 113 handout

27 Special lecture.

• EXAM 2. Monday March 31, 5:30-6:30. •

Apr 1 9.3 9.5 (applic.), 9.2 to read. 2,6,8 Page 297,
draw the figures very carefully (ruler and compass) for 1,3,9 Page 277, do not solve.

3 9.2 9.3 9.5 (continued), and starting 10. 8,18 Page 277, 12,14 Page 305.

8 10.1 (vectors). 4,11 Page 313, 17 Page 337.

10 10.2 10.3 (vectors). 1,4,8 Page 321, 2,4,14,16,18,20 Page 326.

15 3 weights problems (see the 3 weights problems handout) With the notations of the
the handout, given $W_1 = 10$ lbs, $W_2 = 20$ lbs, and $\alpha + \beta = 90^\circ$, draw a figure and find W_3 and the angles.

17 10.4. 6,8,10,13,15,16,22,23 Page 334.

22 Special lecture.

• EXAM 3. Wednesday April 23, 5:30-6:30. •

24 11.1 (complex numbers). 2,4,9,18,24,26,34 Page 344.

29 11.2 (complex numbers). 14,16,18,20,38,40 Page 352.
Read Comment 3 in the Math 113 handout

May 1 11.3 (n^{th} power and roots). 15,23,27,31 Page 358.
Read Comment 4 in the Math 113 handout

6 11.3 (cont.) and REVIEW

8 REVIEW.

FINAL, Wednesday May 14, at 7:45 a.m.

Each exam is on the material covered since the beginning of semester (Mathematics is unavoidably cumulative). But on the midterms material covered since the previous midterm will be emphasized. For make up exams, ask your instructor. A strong justification is needed. Except under totally exceptional circumstances, registration for a make up exam is necessary AT LEAST A WEEK before the regular exam.