

CALCULUS

Friday, Apr. 5

Handout Sec. 8.2
3, 5, 9, 15, 19, 25, 31, 37

Tuesday, Apr. 9

Handout Sec. 8.3
3, 8, 10, 11, 12, 13, 19 (change to 0 to $\frac{\pi}{6}$), 21

Final Project Checkpoint #3 Due Friday

Thursday, Apr. 11

Handout Sec. 8.4
1, 4, 5, 7, 8, 13, 17, 19, 23

Math Portion of Project Due Friday!

Monday, Apr. 15

Handout—Review of first 3 techniques
Project Work Day

Wednesday, Apr. 17

Handout Sec. 8.5
3, 4, 6, 8, 9, 13, 22, 28, 30, 39 (CAS)

**Math Matters
Due**

Friday, Apr. 19

Review Techniques of Integration
Project Work Time

Journal Due

**Final Project
Checkpoint #4
Due Friday
(2 typewritten pages)**

Thursday, Apr. 25

Techniques of Integration Test

Monday, Apr. 29

Semester Review

**Final Project
Report Due
Today!**

Wednesday, May 1

Semester Review

**Portfolio
Due**

Friday, May 3

Semester 2 Exam

Sec. 8.3

8. $\frac{1}{4}\sin^4 x - \frac{1}{6}\sin^6 x + C$

10. $-\frac{1}{3}\cos^3 x + \frac{1}{5}\cos^5 x + C$

12. $\frac{1}{16}x - \frac{1}{64}\sin 4x + \frac{1}{48}\sin^3 2x + C$

19. $\frac{2}{105}$

Sec. 8.4

4. $-\frac{\sqrt{9-x^2}}{9x} + C$

8. $\frac{\sqrt{x^2-16}}{16x} + C$

Sec. 8.5

4. $\frac{A}{x+2} + \frac{B}{(x+2)^2} + \frac{C}{(x+2)^3}$

6. $\frac{A}{x-1} + \frac{Bx+C}{x^2+6}$

8. $\frac{A}{x-2} + \frac{Bx+C}{x^2+1} + \frac{Dx+E}{(x^2+1)^2}$

22. $\frac{1}{x} + 3\ln|x-1| + C$

28. $\frac{1}{2}\ln|x| - \frac{1}{4}\ln(x^2+2) + C$ OR

$\frac{1}{4}\ln\frac{x^2}{x^2+2} + C$

30. $\tan^{-1} x + \frac{1}{2}\ln(x^2+2) + C$