

Math 231 Schedule - Spring 2007

Text: Smith and Minton, "Calculus: Early Transcendental Functions", 3rd edition, McGraw Hill.

Instructor: Bronski

- Chapter 6 : Techniques of Integration (6 lectures)
 - 6.1 Review of formulas and techniques (0 lectures)
 - 6.2 Integration by parts (1 lecture)
 - 6.3 Powers of trig functions; trig substitution (2 lectures)
 - 6.4 Rational functions; partial fraction decomposition (1 lecture)
 - 6.5 Integration tables and computer algebra systems (0 lectures)
 - 6.6 Improper integrals; comparison test (2 lectures)
- Chapter 7 : First-Order Differential Equations (1 lecture)
 - 7.1 Exponential growth and decay (1 lecture)
- Chapter 8 : Infinite Series (12 lectures)
 - 8.1 Sequences (2 lectures)
 - 8.2 Infinite series (1.5 lectures)
 - 8.3 Integral test; comparison tests (1.5 lectures)
 - 8.4 Alternating series (1 lecture)
 - 8.5 Absolute convergence; ratio test (1 lecture)
 - 8.6 Power series (1.5 lectures)
 - 8.7 Taylor series (2 lectures)
 - 8.8 Applications of Taylor series (1.5 lectures)
 - 8.9 Fourier series (Time permitting)
- Chapter 9 : Parametric equations and polar coordinates (6 lectures)
 - 9.1 Plane curves and parametric equations (1 lecture)
 - 9.2 Calculus and parametric equations (1 lecture)

- 9.3 Arc length and surface area in parametric equations (1 lecture)
- 9.4 Polar coordinates (1 lecture)
- 9.5 Calculus and polar coordinates (1 lecture)
- 9.6 Conic sections (1 lecture)
- 9.7 Conic sections in polar coordinates (Time permitting)

Note: Material Designated as 0 lecture hours will be covered in recitation sections.

The following gives a rough schedule for the class, together with reading assignments. Please do the reading before the following Monday lecture.

Monday (Lecture)	Wednesday (Lecture)	Weekend Reading Assignment)
Jan 14 Section 6.2	16 Section 6.3	18 509-528
21 MLK Day	23 Section 6.3	25 530-557
28 Section 6.4	30 Section 6.6	Feb 1 565-573
4 Section 6.6	6 Section 7.1	8 611-623
11 Section 8.1	13 Exam # 1	15 626-634
18 Section 8.1	20 Section 8.2	22 636-645
25 Section 8.2,Section 8.3	27 Section 8.3	29 648-662
Mar. 3 Section 8.4	5 Section 8.5	7 664-670
10 Section 8.6	12 Exam # 2	14 672-683
17 Break Week	19 Break Week	21 Break Week
24 Section 8.6,8.7	26 Section 8.7	28 685-692
31 Section 8.7,8.8	Apr. 2 Section 8.8	4 716-731
7 Section 9.1	9 Section 9.2	11 734-739
14 Section 9.3	16 Exam # 3	18 742-762
21 Section 9.4	23 Section 9.5	25 764-772
28 Section 9.6	30 Review/Instructor's choice	May 2 Final Exam 1:30-4:30