MATH 252X: Calculus II – Daily Schedule

This schedule is based on a 14 week semester, with 4 days of class meetings (excluding recitations). Textbook sections are from <u>Calculus: Early Transcendentals</u>, 8th edition, by James Stewart.

Note the order of topics is *not* the same as the order of chapters in the text, and the optional §8.5 is included.

Instructors may choose to follow a different schedule.

Day	Topic	Section
1	Intro & Review: Derivatives, Integrals, FTC	
2	Review: Chain Rule, Integration by Substitution	
3	Integration by Parts	§7.1
4	Trigonometric Integrals	§7.2
5	Trigonometric Substitutions	§7.3
6	Trigonometric Substitutions	§7.3
7	Integration of Rational Functions by Partial Fractions	§7.4
8	Integration of Rational Functions by Partial Fractions	§7.4
9	Strategy for Integration	§7.5
10	Approximate Integration	§7.7
11	Approximate Integration	§7.7
12	Review: Limits; Improper Integrals	§7.8
13	Improper Integrals	§7.8
14	Review for Midterm Exam 1	
15	MIDTERM EXAM 1	
16	Areas Between Curves	§6.1
17	Volumes	§6.2
18	Volumes, Volumes by Cylindrical Shells	§6.2-3
19	Volumes by Cylindrical Shells	§6.3
20	Work	§6.4
21	Average Value of a Function	§6.5
22	Arc Length	§8.1
23	Area of a Surface of Revolution	§8.2
24	Applications to Physics and Engineering	§8.3
25	Applications to Physics and Engineering	§8.3
26	Probability	§8.5
27	Probability	§8.5
28	Review for Midterm Exam 2	
29	Review for Midterm Exam 2	
30	MIDTERM EXAM 2	

(continued)

Day	Topic	Section
31	Sequences	§11.1
32	Sequences; Series	§11.1-2
33	Series	§11.2
34	The Integral Test and Estimates of Sums	§11.3
35	The Integral Test and Estimates of Sums; The Comparison Tests	§11.3-4
36	The Comparison Tests	§11.4
37	Alternating Series	§11.5
38	Absolute Convergence and the Ratio and Root Tests	§11.6
39	Absolute Convergence and the Ratio and Root Tests	§11.6
40	Strategy for Testing Series	§11.7
41	Power Series	§11.8
42	Representations of Functions as Power Series	§11.9
43	Representations of Functions as Power Series	§11.9
44	Taylor and Maclaurin Series	§11.10
45	Taylor and Maclaurin Series	§11.10
46	Applications of Taylor Polynomials	§11.11
47	Applications of Taylor Polynomials	§11.11
48	Review for Midterm Exam 3	
49	Review for Midterm Exam 3	
50	MIDTERM EXAM 3	§11.1-11
51	Curves Defined by Parametric Equations	§10.1
52	Calculus with Parametric Curves	§10.2
53	Polar Coordinates	§10.3
54	Areas and Lengths in Polar Coordinates	§10.4
55	Review for Final Exam	
56	Review for Final Exam	