Spring 2015 Math 152.540-545: Calculus II

Instructor: Christopher O'Neill
E-mail: coneill@math.tamu.edu

Below is a list of the topics we intend to cover, along with a rough time outline. Actual schedule is subject to change without notice. Last updated April 9th, 2015.

Week	Topic	Chapters
1/21 – 1/23	Review FTC	6.4-6.5
	Integration by Substitution	7.1
1/26 – 1/30	Area Between Curves	7.1
	Volume of Revolution: Disks	7.2
	Volume of Revolution: Washers	7.2
2/2 – 2/6	Volume of Revolution: Shells	7.3
	Volume of Revolution	7.3
	Force and Work	7.4
2/9 – 2/13	Average Value	7.5
	Integration by Parts	8.1
	Trigonometric Integration	8.2
2/16 – 2/20	Trigonometric Substitution	8.3
	Review for Exam 1	
	Partial Fractions	8.4
2/23 – 2/27	Improper Integrals	8.9
	Arc Length	9.3
	Surface Area of Revolution	9.4
3/2 – 3/6	Review of Integration Topics	
	Sequences (Day 1)	10.1
	Sequences (Day 2)	10.1
3/9 – 3/13	Review	
	Series (Day 1)	10.2
	Series (Day 2)	10.2
3/16 – 3/20	*Spring Break: No Class*	
3/23 – 3/27	Integral Test (Day 1)	10.3
	Review for Exam 2	
	Integral Test (Day 2)	10.3
3/30 – 4/3	Comparison Tests	10.3
	Alternating Series	10.4
	Reading Day: No Class	
4/6 – 4/10	Absolute Convergence and the Ratio Test	10.4
	Power Series	10.5
	Representing Functions as Power Series	10.6
4/13 – 4/17	Taylor and McLauren Series (Day 1)	10.7
	Taylor and McLauren Series (Day 2)	10.7
	Applications of Taylor Series	10.9
4/20 – 4/24	Review of Series Topics	
	3D Coordinates	11.1
	Vectors and Dot Product	11.2
4/27 – 5/1	Review for Exam 3	
	Cross Product	11.3
	Review for Final Exam	
5/4	Review for Final Exam	
5/11 – 5/12	Final Exam	