

Math 1AA3/1ZB3 Course Calendar – Winter 2014

Week 1: January 6-10	
Lecture 1	7.5 Review of Integration
Lecture 2	7.8 Improper Integrals
Lecture 3	7.8 Improper Integrals (Continued) Appendix E - Mathematical Induction
Week 2: January 13-17	
Lecture 4	Appendix E - Mathematical Induction (Continued) 11.1 Sequences (omit Definition 2)
Lecture 5	11.1 Sequences (continued)
Lecture 6	11.2 Series
Week 3: January 20-24	
Assignment #1: Due at 11:59pm on Thursday January 23 rd	
Lecture 7	11.2 Series (Continued) 11.3 The Integral Test and Estimates of Sums
Lecture 8	11.3 The Integral Test and Estimates of Sums (Continued)
Lecture 9	11.4 The Comparison Tests (omit estimating sums)
Week 4: January 27-31	
Maple Lab #1: Due at 11:59pm on Thursday January 30 th	
Lecture 10	11.5 Alternating Series
Lecture 11	11.6 Absolute Convergence and the Ratio and Root Tests
Lecture 12	11.8 Power Series
Week 5: February 3-7	
Assignment #2: Due at 11:59pm on Thursday February 6 th	
Lecture 13	11.9 Representations of Functions as Power Series (omit Example 8(b))
Lecture 14	11.10 Taylor and Maclaurin Series (omit multiplication and division of power series)
Lecture 15	11.10 Taylor and Maclaurin Series (continued)
Week 6: February 10-14	
Test 1: Evening of Monday February 10	
Lecture 16	11.11 Applications of Taylor Polynomials (omit applications to physics)
Lecture 17	8.2 Area of a Surface of Revolution
Lecture 18	8.3 Applications to Physics and Engineering (only hydrostatic force and pressure)
WEEK 7: READING WEEK, FEBRUARY 17-21	

Week 8: February 24-28	
Maple Lab #2: Due at 11:59pm on Thursday February 27 th	
Lecture 19	9.1 Modeling With Differential Equations
Lecture 20	9.3 Separable Equations
Lecture 21	3.8 Exponential Growth and Decay
Week 9: March 3-7	
Assignment #3: Due at 11:59pm on Thursday March 6 th	
Lecture 22	9.5 Linear Equations
Lecture 23	10.1 Curves Defined by Parametric Equations
Lecture 24	10.2 Calculus with Parametric Curves
Week 10: March 10-14	
Maple Lab #3: Due at 11:59pm on Thursday March 13 th	
Lecture 25	10.2 Calculus with Parametric Curves (Continued) 10.3 Polar Coordinates
Lecture 26	10.3 Polar Coordinates (Continued) 10.5 Conic Sections
Lecture 27	14.1 Functions of Several Variables
Week 11: March 17-21	
Test 2: Evening of Monday March 17	
Assignment #4: Due at 11:59pm on Thursday March 20 th	
Lecture 28	2.3 Limits (Squeeze Theorem only) 14.2 Limits and Continuity (Omit Definition 1, and use the Squeeze Theorem in place of the precise definition to prove the existence of limits)
Lecture 29	14.3 Partial Derivatives (Omit the Cobb-Douglas Production Function)
Lecture 30	14.4 Tangent Planes and Linear Approximations
Week 12: March 24-28	
Maple Lab #4: Due at 11:59pm on Thursday March 27 th	
Lecture 31	14.5 The Chain Rule
Lecture 32	14.6 Directional Derivatives and the Gradient Vector (Omit Tangent Planes to Level Surfaces and Significance of the Gradient Vector)
Lecture 33	15.1 Double Integrals over Rectangles
Week 13: March 31 – April 4	
Assignment #5: Due at 11:59pm on Thursday April 3 rd	
Lecture 34	15.2 Iterated Integrals
Lecture 35	15.3 Double Integrals over General Regions
Lecture 36	Review
Week 14: April 7-8 (April 8 is the last day of classes)	
Lecture 37	Review