

## Math 1AA3/1ZB3 Course Calendar – Winter 2013

<b>Week 1: January 7-11</b>	
Lecture 1	7.5 Review of Integration
Lecture 2	7.8 Improper Integrals
Lecture 3	7.8 Improper Integrals (Continued) Appendix E - Mathematical Induction
<b>Week 2: January 14-18</b>	
<b>WebAssign Homework #1:</b> Due at 11:59pm on Thursday January 17 <sup>th</sup>	
Lecture 4	Appendix E - Mathematical Induction (Continued) 11.1 Sequences (omit Definition 2)
Lecture 5	11.1 Sequences (continued)
Lecture 6	11.2 Series
<b>Week 3: January 21-25</b>	
<b>WebAssign Homework #2:</b> Due at 11:59pm on Thursday January 24 <sup>th</sup>	
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)
<b>Week 4: January 28 – February 1</b>	
<b>LAB #1 (Maple):</b> Due at 11:59pm on Thursday January 31 <sup>st</sup>	
Lecture 10	11.5 Alternating Series
Lecture 11	11.6 Absolute Convergence and the Ratio and Root Tests
Lecture 12	11.8 Power Series
<b>Week 5: February 4-8</b>	
<b>WebAssign Homework #3:</b> Due at 11:59pm on Thursday February 7 <sup>th</sup>	
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)
<b>Week 6: February 11-15</b>	
<b>Test 1:</b> Evening of Monday February 11	
<b>LAB #2 (Maple):</b> Due at 11:59pm on Thursday February 14 <sup>th</sup>	
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)
<b>WEEK 7: READING WEEK, FEBRUARY 18-22</b>	

**Week 8: February 25 - March 1****WebAssign Homework #4:** Due at 11:59pm on Thursday February 28<sup>th</sup>

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 4-8****WebAssign Homework #5:** Due at 11:59pm on Thursday March 7<sup>th</sup>

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 11-15****LAB #3 (Maple):** Due at 11:59pm on Thursday March 14<sup>th</sup>

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 18-22****Test 2:** Evening of Monday March 18**WebAssign Homework #6:** Due at 11:59pm on Thursday March 21<sup>st</sup>

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 25-28  
(No Classes on March 29<sup>th</sup>)****LAB #4 (Maple):** Due at 11:59pm on Thursday March 28<sup>th</sup>

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)

**Week 13: April 1-5****WebAssign Homework #7:** Due at 11:59pm on Thursday April 4<sup>th</sup>

Lecture 33	15.1 Double Integrals over Rectangles
Lecture 34	15.2 Iterated Integrals
Lecture 35	15.3 Double Integrals over General Regions

**Week 14: April 8-10** (April 10 is the last day of classes)**WebAssign Homework #8:** Due at 11:59pm on Thursday April 11<sup>th</sup>

Lecture 36	Review
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