Math 1Z04 Course Calendar

Week 1: September 2-5, 2008	
Lecture 1	Introduction 1.3 New Functions from Old Functions
Week 2: September 8-12, 2008	
Lecture 2	1.3 New Functions from Old Functions (Continued) 1.6 Inverse Functions and Logarithms
Lecture 3	1.6 Inverse Functions and Logarithms (Continued)
Lecture 4	1.6 Inverse Functions and Logarithms (Continued) 2.2 The Limit of a Function
Lecture 5	*Review of Trigonometry (Appendix D)*
Week 3: September 15-19, 2008	
MAPLE LAB #0: Do the introductory Maple Lab. (Not to be handed in, but should be completed no later than Tuesday Sept. 16th)	
Lecture 6	2.2 The Limit of a Function (Continued) 2.3 Calculating Limits Using Limit Laws (omit the Squeeze Theorem)
Lecture 7	2.5 Continuity (omit the Intermediate Value Theorem) 2.6 Limits at Inifnity; Horizontal Asymptotes (omit precise definitions)
Lecture 8	2.7 Derivatives and Rates of Change 2.8 The Derivative as a Function
Lecture 9	*Problem Session/Review*
Week 4: September 22-26, 2008	
MAPLE LAB #1 Due Date: 12:00 midnight on Tuesday Sept. 23rd	
Lecture 10	3.1 Derivatives of Polynomials and Exponential Functions 3.2 The Product and Quotient Rule 3.3 Derivatives of Trigonometric Functions
Lecture 11	3.4 The Chain Rule
Lecture 12	3.5 Implicit Differentiation (Note: Do Exercise 67(a) in 3.5, or state the result in class) 3.6 Derivatives of Logarithmic Functions
Lecture 13	*Problem Session/Review*
Week 5: September 29-Oct 3, 2008	
TEST 1: Evening of Friday October 3	
Lecture 14	3.6 Derivatives of Logarithmic Functions (Continued) 3.11 Hyperbolic Functions
Lecture 15	4.1 Maximum and Minimum Values
Lecture 16	4.3 How Derivatives Affect the Shape of a Graph
Lecture 17	*Problem Session/Review*

Week 6: October 6-10, 2008	
MAPLE LAB #2 Due Date: 12:00 midnight on Tuesday Oct. 7th	
Lecture 18	4.4 Indeterminate Forms and L'Hospital's Rule
Lecture 19	4.5 Summary of Curve Sketching
Lecture 20	4.7 Optimization Problems
Lecture 21	*Problem Session/Review*
Week 7: October 14-17, 2008	
THANKSGIVING WEEK (Holiday Monday, October 13th)	
Lecture 22	4.8 Newton's Method
Lecture 23	4.9/5.4* Antiderivatives *Introduce indefinite integral notation from Section 5.4 while doing 4.9; but otherwise do not do anything from 5.4
Lecture 24	*Problem Session/Review*
Week 8: October 20-24, 2008	
Test 2 (Midterm Exam): Evening of Friday October 24	
Lecture 25	9.1 Modeling With Differential Equations 3.8 Exponential Growth and Decay (omit continuously compounded interest)
Lecture 26	3.8 Exponential Growth and Decay (continued) Appendix E (Including Mathematical Induction)
Lecture 27	Appendix E (continued)
Lecture 28	*Problem Session/Review*
Week 9: October 27-31, 2008	
MAPLE LAB #3 Due Date: 12:00 midnight on Tuesday Oct. 28th	
Lecture 29	11.1 Sequences (omit Definition 2)
Lecture 30	11.1 Sequences (continued) 11.2 Series
Lecture 31	11.2 Series (continued) 11.3 (Only the p-series result given in box 1)
Lecture 32	*Problem Session/Review*
Week 10: November 2-7, 2008	
Lecture 33	11.4 The Comparison Tests (omit estimating sums)
Lecture 34	11.5 Alternating Series
Lecture 35	11.6 Absolute Convergence and the Ratio and Root Tests
Lecture 36	*Problem Session/Review*
Week 11: November 10-14, 2008	
Test 3: Evening of Friday November 14	
Lecture 37	11.8 Power Series
Lecture 38	11.9 Representations of Functions as Power Series (omit Example 8(b))
Lecture 39	11.10 Taylor and Maclaurin Series (omit multiplication and division of power series)
Lecture 40	*Problem Session/Review*

Week 12: November 17-21, 2008	
MAPLE LAB #4 Due Date: 12:00 midnight on Tuesday November 18th	
Lecture 41	11.10 Taylor and Maclaurin Series (continued)
Lecture 42	11.11 Applications of Taylor Polynomials (omit applications to physics)
Lecture 43	12.1 Three-Dimensional Coordinate Systems 12.2 Vectors
Lecture 44	*Problem Session/Review*
Week 13: November 24-28, 2008	
Lecture 45	12.3 The Dot Product 12.4 The Cross Product
Lecture 46	12.4 The Cross Product (continued) 12.5 Equations of Lines and Planes
Lecture 47	12.5 Equations of Lines and Planes (continued)
Lecture 48	*Problem Session/Review*
Week 14: December 1-5, 2008	
MAPLE LAB #5 Due Date: 12:00 midnight on Tuesday December 2nd	
Lecture 49	Review