

Math 1ZZ5 Course Calendar

Week 1: January 4-8, 2010	
Lecture 1	5.1 Areas and Distances
Lecture 2	5.2 The Definite Integral
Lecture 3	5.3 The Fundamental Theorem of Calculus
Lecture 4	5.5 The Substitution Rule
<i>Lecture 5</i>	<i>Problem Session/Review</i>
Week 2: January 11-15, 2010	
Lecture 6	6.1 Areas Between Curves
Lecture 7	6.2 Volumes
Lecture 8	6.4 Work
Lecture 9	6.5 Average Value of a Function 7.1 Integration by Parts
<i>Lecture 10</i>	<i>Problem Session/Review</i>
Week 3: January 18-22, 2010	
MAPLE LAB #1 Due Date: 11:59pm on Tuesday January 19	
Lecture 11	7.1 Integration by Parts (continued)
Lecture 12	7.2 Trigonometric Integrals
Lecture 13	7.3 Trigonometric Substitution
Lecture 14	7.4 Integration of Rational Functions by Partial Fractions (omit rationalizing substitutions)
<i>Lecture 15</i>	<i>Problem Session/Review</i>
Week 4: January 25-29, 2010	
TEST 1: Evening of Wednesday January 27	
Lecture 16	7.4 Integration of Rational Functions by Partial Fractions (Continued) 7.8 Improper Integrals
Lecture 17	7.8 Improper Integrals (Continued)
Lecture 18	11.3 The Integral Test and Estimates of Sums
Lecture 19	11.3 The Integral Test and Estimates of Sums (Continued) 8.1 Arc Length
<i>Lecture 20</i>	<i>Problem Session/Review</i>
Week 5: February 1-5, 2010	
MAPLE LAB #2 Due Date: 11:59pm on Tuesday February 2	
Lecture 21	8.2 Area of a Surface of Revolution
Lecture 22	8.3 Applications to Physics and Engineering (only hydrostatic force and pressure)
Lecture 23	8.5 Probability
Lecture 24	9.3 Separable Equations
<i>Lecture 25</i>	<i>Problem Session/Review</i>
Week 6: February 8-12, 2010	
TEST 2: Evening of Friday February 12	
Lecture 26	9.5 Linear Equations
Lecture 27	10.1 Curves Defined by Parametric Equations
Lecture 28	10.2 Calculus with Parametric Curves
Lecture 29	10.2 Calculus with Parametric Curves Cont'd

<i>Lecture 30</i>	<i>Problem Session/Review</i>
WEEK 7: READING WEEK, FEBRUARY 15-19	
Week 8: February 22-26, 2010	
MAPLE LAB #3 Due Date: 11:59pm on Tuesday February 23	
<i>Lecture 31</i>	10.3 Polar Coordinates
<i>Lecture 32</i>	10.4 Areas and Lengths in Polar Coordinates
<i>Lecture 33</i>	14.1 Functions of Several Variables
<i>Lecture 34</i>	2.3 (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)
<i>Lecture 35</i>	<i>Problem Session/Review</i>
Week 9: March 1-5, 2010	
Test 3 (Midterm Exam): Evening of Wednesday March 3	
<i>Lecture 36</i>	14.3 Partial Derivatives (Omit the Cobb-Douglas production function)
<i>Lecture 37</i>	14.4 Tangent Planes and Linear Approximations
<i>Lecture 38</i>	14.5 The Chain Rule
<i>Lecture 39</i>	14.6 Directional Derivatives and the Gradient Vector (omit tangent planes to level surfaces and significance of the gradient vector)
<i>Lecture 40</i>	<i>Problem Session/Review</i>
Week 10: March 8-12, 2010	
MAPLE LAB #4 Due Date: 11:59pm on Tuesday March 9	
<i>Lecture 41</i>	Appendix H: Complex Numbers
<i>Lecture 42</i>	Appendix H: Complex Numbers
<i>Lecture 43</i>	15.1 Double Integrals over Rectangles
<i>Lecture 44</i>	15.2 Iterated Integrals
<i>Lecture 45</i>	<i>Problem Session/Review</i>
Week 11: March 15-19, 2010	
<i>Lecture 46</i>	15.3 Double Integrals over General Regions
<i>Lecture 47</i>	7.6 Vector Spaces
<i>Lecture 48</i>	7.6 Vector Spaces Cont'd
<i>Lecture 49</i>	7.7 Gram-Schmidt Orthogonalization Process
<i>Lecture 50</i>	<i>Problem Session/Review</i>
Week 12: March 22-26, 2010	
Test 4: Evening of Friday March 26 th	
<i>Lecture 51</i>	8.1 Matrix Algebra
<i>Lecture 52</i>	8.2 Systems of Linear Algebraic Equations
<i>Lecture 53</i>	8.2 Systems of Linear Algebraic Equations Cont'd
<i>Lecture 54</i>	8.3 Rank of a Matrix
<i>Lecture 55</i>	<i>Problem Session/Review</i>
Week 13: March 29-April 1, 2010 (No class on April 2 – Good Friday)	
MATLAB LAB #5 Due Date: 11:59pm on Tuesday March 30	
<i>Lecture 56</i>	8.4 Determinants 8.5 Properties of Determinants

Lecture 57	8.5 Properties of Determinants Cont'd 8.6 Inverse of a Matrix
Lecture 58	8.6 Inverse of a Matrix Cont'd
<i>Lecture 59</i>	<i>Problem Session/Review</i>
Week 14: April 5-8 (April 8 is the last day of classes)	
Lecture 60	8.7 Cramer's Rule
Lecture 61	Review
Lecture 62	Review