236 Syllabus

Day Date Sxn Topic/Homework

Week 1						
1-M	5/13	*	<i>Logistics and Review</i> 1.6: 31, 33 / 1.7: 39 / 2.3: 20, 37 / 3.5: 22, 57 / 3.6: 12 / 3.7: 33 / 4.8: 11, 15, 17 / 5.1: 7 / 5.2: 17 / 5.3: 9 / 5.5: 7 / 5.6: 14, 31, 46, 47 / 6.1: 31 / 6.2: 5, 21 / 6.3: 3.			
		7.1	One-to-One Functions; Inverses 4, 8, 13, 21, 22, 24, 25, 26, 27, 28, 31, 32, 35, 40, 41, 44, 46, 49, 54, 58, 59.			
1-T	5/14	7.2	The Logarithm Function, Part I 1*, 4, 5, 6, 7, 8, 12, 13, 14*, 18, 19, 20, 21, 22, 23*, 25ab, 28, 29.			
		7.3	The Logarithm Function, Part II 7, 8, 11, 14, 17, 19, 29, 34, 36, 44, 47, 48, 55, 57, 59, 61, 66, 69, 70, 78, 82.			
1-W	5/15	7.4	The Exponential Function 9, 11, 19*, 20*, 21, 22, 24, 26, 31, 35, 42, 50, 52, 56, 60, 61, 66, 73*, 77.			
		*	Problems $(7.1-7.4)$			
1-R	5/16	7.5	Arbitrary Powers; Other Bases 2*, 5, 6, 9*, 11, 14, 15, 16, 21, 23, 30, 35, 36*, 40, 41*, 43, 49, 53, 58, 59, 65, 68*.			
		7.6	Exponential Growth and Decay 1, 2, 3, 5, 6, 7, 9, 10, 11, 12, 13*, 15, 16, 17, 18, 21, 29.			
Week 2						
2-M	5/20	7.7	The Inverse Trigonometric Functions 2, 3, 4, 7, 10, 17, 20, 25, 35, 37, 46*, 47, 54, 55, 60, 64, 65, 69, 72, 75, 76, 78.			
		7.8	The Hyperbolic Sine and Cosine 5, 12, 13, 14, 17, 19, 20, 22, 24, 27, 30, 31, 36, 40, 43, 46, 47, 48.			
2-T	5/21	7.9	The Other Hyperbolic Functions 1, 4, 5, 6, 7, 9, 11, 12, 15, 18, 21, 25, 27, 30, 32, 33, 35, 38.			
		*	Review for Test I			
2-W	5/22	*	<u>TEST I</u> (7.1–7.9)			
		8.1	Integral Tables and Review 5*, 6, 10, 12, 15, 16, 17, 23, 25, 26, 31, 33, 36, 38, 39*, 42, 43, 47, 50, 54.			
2-R	5/23	8.2	Integration by Parts 3, 5, 6, 7, 9, 11, 13, 14, 18, 20, 23, 25, 29, 33, 35, 38, 41, 42, 48, 50, 52, 60, 61.			
		8.3	Powers and Products of Trigonometric Functions 3, 4, 6, 8, 11, 13, 15, 19, 24, 25, 28, 30, 33, 40, 41, 46, 49, 51, 53, 55, 61.			
Week 3						
3-M	5/27	*	Memorial Day (no class)			
3-T	5/28	8.4	Trigonometric Substitution 3, 5, 6, 7, 8, 9, 13, 15, 16, 17, 22, 23, 29, 32, 33, 42, 43, 44, 45.			
		8.5	Partial Fractions 2, 4, 6, 8, 9, 10, 11, 13, 16, 18, 19, 21, 22, 24, 27, 32, 39, 41, 48*.			
3-W	5/29	8.6	Some Rationalizing Substitutions 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 14, 15, 16, 17, 19, 31, 32, 36.			
		*	Problems (8.1–8.6)			
3-R	5/30	8.7	Numerical Integration 1abcd, 2ab, 3abcd, 7ab, 8ab, 9a, 10ab, 13a, 15a, 19a, 21a, 22a, 24.			
		8.8	Differential Equations; First-Order Linear Equations 2, 3, 4, 5, 8, 9, 11, 12, 15, 20, 21, 23, 25, 27, 29, 30, 33, 34, 35, 36.			

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Week 4						
4-M	6/3	8.9	Separable Equations 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 26, 29, 30*.			
		*	Review for Test II			
4-T	6/4	*	<u>TEST II</u> (8.1–8.9)			
		10.1	The Least Upper Bound Axiom 2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 27, 28.			
4-W	6/5	10.2	Sequences of Real Numbers 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 26, 27, 30, 32, 36, 38, 41, 45, 47, 49, 50, 61, 62.			
		10.3	Limit of a Sequence 2, 6, 8, 12, 13, 14, 16, 17, 18, 22, 25, 28, 29, 31, 36, 37, 40, 46, 52, 53, 59, 64.			
4-R	6/6	10.4	Some Important Limits 1*, 3, 4, 5, 7, 11, 14, 15, 16, 17, 19, 21, 24, 31, 33, 34, 37*, 41, 51, 52.			
		*	Problems $(10.1-10.4)$			
Week 5						
5-M	6/10	10.5	The Indeterminate Form $\frac{0}{0}$ 2, 5, 10, 11, 12, 16, 19, 20, 21, 23, 25, 26, 31, 34, 35, 37, 39, 41, 45, 47.			
		10.6	The Indeterminate Form $\frac{\infty}{\infty}$; Other Indeterminate Forms 3, 5, 6, 9, 14, 17, 19, 21, 25, 28, 31, 33, 34, 35, 36, 37, 38, 44, 47, 53, 57, 58.			
5-T	6/11	10.7	Improper Integrals 2, 4, 5, 6, 8, 9, 10, 13, 14, 15, 19, 24, 25, 30, 32, 35, 37, 39, 40*, 47, 48*, 50, 51*.			
		11.1	Infinite Series 1, 5, 8, 14, 16, 17, 18, 23*, 24, 25, 26*, 27, 30, 31, 36, 38*, 41, 45, 47, 50, 51, 52, 53, 55, 59, 60*, 64.			
5-W	6/12	11.2	The Integral Test; Comparison Theorems 3, 7, 11, 12, 13, 14, 15, 17, 21, 22, 23, 24, 27, 29, 31, 33, 35, 36, 53.			
		*	Review for Test III			
5-R	6/13	*	<u>TEST III</u> (10.1–11.2)			
		11.3	The Root Test; The Ratio Test 1, 5, 7, 8, 11, 12, 13, 17, 18, 19, 21, 24, 26, 30, 34, 35, 37, 42, 43, 46.			
Week 6						
6-M	6/17	11.4	Absolute and Conditional Convergence; Alternating Series 1, 4, 5, 6, 7, 10, 14, 21, 22, 23, 24, 26, 28, 32, 34, 36, 37, 38, 39, 41.			
		11.5	Taylor Polynomials and Taylor Series in <i>x</i> 1, 3, 6, 7, 9, 11, 14, 17, 18, 28, 29, 33, 36, 37, 41, 42, 43, 45, 46, 48, 56, 57.			
6-T	6/18	11.6	Taylor Polynomials and Series in $x - a$ 1, 2, 4, 5, 7, 8, 10 [*] , 14, 15 [*] , 16 [*] , 20 [*] , 21, 23, 25 [*] , 27, 31, 32, 37 [*] .			
		*	Problems 11.3–11.6			
6-W	6/19	11.7	Power Series			
			$1, 2, 3, 4, 5, 6, 7, 10, 12, 14, 18, 20, 22, 23, 25, 28, 34, 37, 38, 42^*.$			
		11.8	Differentiation and Integration of Power Series 1, 2, 4, 5, 7, 9*, 11, 14*, 17, 21, 24, 25, 27, 28, 31, 32, 41, 42, 43, 50, 51, 52.			
6-R	6/20	*	Review for Final Exam			

 $\underline{FINAL~EXAM:}$ Friday, June 21, same bat time, same bat room 40% from 11.3–11.8, 60% from 7.1–8.9 and 10.1–11.2