

	MA425-002 2019 Spring	
MA425 MATH ANALYSIS I		
Text Book: Introduction to Real Analysis, 3rd edition		
By Robert G. Bartle and Donald R. Sherbert		
Jan 7-11	1.1 Sets and functions 1.3 Finite and infinite sets 2.1 Algebraic and order properties	
Jan 14-18	2.2 Absolute values and real line 2.3 Completeness of \mathbb{R} 2.4 Application of the supremum	
21-Jan	Martin Luther King Jr. Day	
Jan 23-25	2.5 Intervals 3.1 Sequences and their limits	
Jan 28-31	3.2 Limit theorems 3.3 Monotone sequences	
1-Feb	3.4 Subsequence, Bolzano-Weierstrass Theorem	
Feb 4-8	3.5 The Cauchy criterion 3.6 Properly divergent sequences (optional) Test 1	
Feb 11-15	3.7 Introduction to infinite series 4.1 Limits of functions	
Feb 18-22	4.2 Limit theorems 4.3 Some extensions of the limit concept 5.1 Continuous functions	
Feb 25-28	5.2 Combination of continuous functions 5.3 Continuous functions on intervals	
1-Mar	5.4 Uniform continuity	
Mar 4-8	5.4 Uniform continuity 5.6 Monotone and inverse functions	
Mar 11-15	Spring Break Week	
Mar 18-22	Test 2 6.1 The derivative 6.2 The mean value theorem	
Mar 25-29	6.2 The mean value theorem 6.3 L'Hospital's Rules 6.4 Taylor's theorem (optional)	
April 1-5	6.4 Taylor's theorem (optional) 7.1 Riemann integral 7.2 Riemann Integrable functions	
April 8-12	Test 3 7.2 Riemann Integrable functions	

		7.3 The fundamental theorem	
April 15-18		8.1 Pointwise and uniform convergence	
		8.2 Interchange of limits	
19-Apr		Spring Holiday	
April 22-26		9.1 Absolute convergence	
		9.2 Tests for absolute convergence	
		Review	
29-Apr		Final Exam 8:00-11:00am	

