

Calculus I Spring 2020				VICTOR SIRELSON	
MAT 1475 D601 MW 8:00-9:40 Room N1107				Text: Calculus, Volume 1, openstax.org E. Herman and G. Strang	
Class	Date	Day	Session Topics	Text	Web Work Assignments
1	1/27	M	2.2 The Limit of a Function	pp 135 – 153	Explore - Piecewise Functions; Limits Introduction
2	1/29	W	2.3 The Limit Laws	pp 160 – 174	Limits-Analytic; Limits-Limit Properties; One-sided Limits; Limits - Infinite
3	2/3	M	2.4 Continuity	pp 179 – 188	Limits-Continuity; Intermediate Value Theorem; Limits Rates of Change
4	2/5	W	3.1 Defining the Derivative	pp 213 – 227	Derivative-Limit Definition Explore - Instantaneous Rates of Change
5	2/10	M	3.2 The Derivative as a Function	pp 232 – 242	Derivative - Functions
	2/12	W	COLLEGE CLOSED		
	2/17	M	COLLEGE CLOSED		
6	2/19	W	3.3 Differentiation Rules	pp 247 – 260	Derivatives-Power Rule; Product Rule; Quotient Rule
7	2/24	M	3.4 Derivatives as Rates of Change	pp 266 – 270	Derivatives - Rates of Change; Higher Order
8	2/26	W	Exam 1		
9	3/2	M	3.5 Derivatives of Trigonometric Functions	pp 277 – 284	Derivatives - Trigonometric
10	3/4	W	3.6 The Chain Rule	pp 287 – 296	Derivatives-ChainRule
11	3/9	M	3.7 Derivatives of Inverse Functions	pp 299 – 305	Derivatives - Inverses
12	3/11	M	3.8 Implicit Differentiation	pp 309 – 316	Derivatives - Implicit
13	3/16	W	3.9 Derivatives of Exponential and Logarithmic Functions	pp 319 – 330	Derivatives-Exponential; Logarithms; Logarithmic
14	3/18	M	4.1 Related Rates	pp 341 – 349	Application Related Rates
15	3/23	W	Exam 2		
16	3/25	M	4.2 Linear Approximations and Differentials	pp 354 – 363	Application - Linearization; - Differentials
17	3/30	W	4.3 Maxima and Minima	pp 366-375	Application - Extrema
18	4/1	M	4.4 The Mean Value Theorem	pp 379-387	Application - The Mean Value Theorem
19	4/6	M	4.5 Derivatives and the Shape of a Graph	pp 390-402	Graphing the Derivative
20	4/7	T	4.6 Limits at Infinity and Asymptotes	pp 407-425	
	April 8-16		4.7 Applied Optimization	pp 439-450	
21	4/20	W	SPRING RECESS		
22	4/22	M	4.7 Applied Optimization	pp 439-450	
23	4/27	W	4.8 L'Hôpital's Rule	pp 454-464	
24	4/29	M	Exam 3		
25	5/4	W	4.10 Antiderivatives	pp 485-496	
26	5/6	M	5.1 Approximating Areas	pp 507-522	
27	5/11	W	5.2 The Definite Integral	pp 529-543	
28	5/13	W	5.3 The Fundamental Theorem of Calculus	pp 549-559	
29	5/18	M	REVIEW		
30	5/20	W	Final Exam		