

Unified Calculus I Suggested Syllabus

Week	Sections	Topics	Assignments
1	1.1	Precalculus review: Real numbers and functions	Q4, 25, 30, 32, 34, 42, 46, 50
	1.3	Precalculus review: Manipulating functions, review of trigonometry	Q4, 8, 14, 16, 34, 38, 46, 48, 52
2	1.5	Introduction to limits	Q4, 8, 11, 18, 22, 32, 38
	1.6	Evaluating limits analytically	Q12, 16, 18, 26, 30, 32, 40, 50
3	1.8	Continuity, Intermediate Value Theorem	Q6, 18, 22, 40, 46, 54, 56, 58(a)
	3.4	Limits at infinity	Q4, 10, 18, 20, 24, 28, 32, 36, 40
4	2.1	Introduction to the derivative	Q6, 8, 18, 22, 32, 36, 40, 42
	2.2	Derivative of a function	Q22, 24, 26, 28, 56, 60
5		Test 1 review	
		Test 1	
6	2.3	Product Rule, Quotient Rule, trigonometric derivatives	Q8, 14, 18, 28, 34, 52, 58, 62, 78
	2.5	Chain Rule	Q24, 26, 30, 42, 44, 52, 54, 62, 70
7	2.6	Implicit differentiation	Q10, 12, 20, 28, 32, 44
	3.1	Maximum and minimum values	Q10, 18, 26, 27, 32, 36, 48, 54
8	3.2	Mean Value Theorem	Q6, 12, 22, 26, 33, 36
	3.3	Monotonicity and concavity	Q12, 14, 24, 26, 34, 40, 44, 76
9	3.5	Graphing using calculus	Q6, 10, 24, 28, 34, 40
	3.7	Optimization	Q6, 12, 14, 20, 22, 32, 44
10		Test 2 review	
		Test 2	
11	4.2	The Riemann sum/definite integral	Q4(a), 6(a), (b), 22, 23, 24, 34, 48, 49
	3.9	Antiderivatives	Q8, 12, 14, 18, 28, 34, 40
12	4.3	The Fundamental Theorem of Calculus	Q22, 28, 30, 34, 36, 38, 40
	4.5	Integration using substitution	Q10, 16, 18, 24, 26, 38, 44
13	6.1	Inverse functions	Q24, 28, 40, 41, 42, 46
	6.2	Derivatives of exponential functions	Q34, 40, 42, 52, 72, 86, 90, 94
14	6.4	Derivatives of logarithmic functions and applications	Q10, 22, 26, 38, 44, 54, 76, 80
	6.7	Hyperbolic functions	Q14, 18, 30, 34, 38, 42, 62, 66
15	6.8	l'Hôpital's Rule	Q12, 20, 28, 30, 34, 40, 44, 54, 60, 68
		Final exam review	