

Unified Calculus II Suggested Syllabus

Week	Sections	Topics	Assignments
1		Review of Unified Calculus I	
	7.1	Integration by Parts	Q10, 18, 20, 24, 30, 34, 40, 42
2	7.2	Trigonometric integration	Q10, 16, 24, 30, 34, 42, 46, 48
	7.3	Trigonometric substitution	Q8, 14, 18, 22, 28, 30
3	7.4	Integration using partial fractions	Q12, 16, 22, 26, 38, 44, 50
	7.5	General integration techniques	Q6, 12, 14, 34, 42, 50, 58, 70, 76
4	7.8	Improper integrals	Q8, 18, 24, 32, 40, 50, 54, 58
	8.1	Arc length	Q6, 8, 10, 14, 16, 18, 20
5		Test 1 review	
		Test 1	
6	9.1	Introduction to differential equations, directional fields	Q2, 4, 8, 10
	9.3	Separable equations	Q2, 6, 10, 12, 16, 18, 22, 34
7	9.5	Linear equations	Q6, 10, 12, 14, 18, 20, 24, 26
	10.1	Introduction to parametric equations	Q6, 8, 12, 14, 18
8	10.2	Calculus on parametric curves	Q4, 8, 12, 14, 16, 18, 28, 30
	10.3	Polar coordinates	Q2, 4, 8, 12, 16, 20, 32, 40, 44
9	10.4	Arc length using polar coordinates	Q4, 12, 20, 24, 28, 30, 32
		[additional material/catch-up day]	
10		Test 2 review	
		Test 2	
11	11.1	Sequences	Q14, 18, 24, 28, 36, 40, 44, 52, 56
	11.2	Series	Q18, 22, 26, 30, 34, 40, 48, 60
12	11.3	Integral test for series convergence	Q6, 8, 12, 16, 20, 22, 26
	11.4	Comparison tests for series convergence	Q4, 8, 12, 14, 20, 24, 26, 30, 32
13	11.5	Alternating series	Q4, 8, 12, 14, 18, 20, 26
	11.6	Absolute convergence/ratio and root tests	Q10, 14, 20, 24, 26, 30, 34, 38
14	11.7	General techniques for determining series convergence	Q4, 10, 12, 16, 20, 24, 26, 32, 38
	11.8	Power series	Q6, 8, 14, 18, 24, 26, 28
15	11.10	Taylor/Maclaurin series	Q12, 16, 22, 24, 26, 32, 34, 40, 42
		Final exam review	