MATH 128 **CALCULUS 2** **WINTER 2024**

Course Schedule

Week	Dates	Content	Course Notes Sections
1	Jan 8 - 12	1. Review of Math 127	
		2. Sequences	1.1.1 - 1.1.2
		3. Limits of Sequences, Series	1.1.3, 1.2
2	Jan 15 - 19	4. Geometric Series	1.3
		5. Integral Test	1.4
		6. Limit Comparison Test	1.5
3	Jan 22 - 26	7. Alternating Series, Ratio Test	1.6, 1.7
		8. Power Series and Convergence	2.1.1
		9. Finding Power Series	2.1.2
4	Jan 29 - Feb 2	10. Working with Power Series	2.1.3
		11. Taylor Series	2.2.1
		12. Binomial Series	2.2.2
5	Feb 5 - 9	13. Taylor Polynomials and Taylor's Theorem	2.3.1, 2.3.2
		14. Trigonometric Integrals	3.1
		15. Trigonometric Substitutions	3.2
6	Feb 12 - 16	16. Partial Fraction Decomposition	3.3.1
		17. Integration by Partial Fractions	3.3.2
		18. Integration by Parts	3.4
7	Feb 17 - 25	READING WEEK	
8	Feb 26 - Mar 1	19. Infinite Improper Integrals	3.5.1
		20. Discontinuous Improper Integrals	3.5.2
		21. Volumes	4.1
9	Mar 4 - 8	22. Volumes of Revolution (discs and washers)	4.2.1, 4.2.2
		23. Volumes of Revolution (cylindrical shells)	4.2.3
		24. Arc Length	4.3
10	Mar 11 - 15	25. Direction Fields and Euler's Method	5.1
		26. Separation of Variables	5.2
		27. Linear Differential Equations	5.3
11	Mar 18 - 22	28. Applications of Differential Equations	5.4
		29. Parametric Curves	6.1.1
		30. Parametrization of a Curve	6.1.2, 6.1.3
12	Mar 25 - 27	31. Derivatives of Parametric Curves	6.2.1
		32. Area and Arc Length of Parametric Curves	6.2.2, 6.2.3
13	Apr 1 - 5	33. Polar Coordinates	7.1
		34. Graphs in Polar Coordinates	7.2
		35. Area in Polar Coordinates	7.3
14	Apr 8	36. Review	