

MATH 1680 CALCULUS WITH BUSINESS APPLICATIONS I

TEXT: Calculus with Business Applications I (Custom Edition) by S. T. Tan

Section	Number of days
2.4 Limits	2
2.5 One-Sided Limits and Continuity	2
2.6 The Derivative	2
3.1 Basic Rules of Differentiation	1
3.2 The Product and Quotient Rule	2
3.3 The Chain Rule	2
3.4 Marginal Functions in Economics	1
3.5 Higher-Order Derivatives	1
3.6 Implicit Differentiation and Related Rates	2
4.1 Applications of the First Derivative	2
4.2 Applications of the Second Derivative	2
4.3 Curve Sketching	2
4.4 Optimization I	1
4.5 Optimization II	2
5.1 Exponential Functions	1
5.2 Logarithmic Functions	1
5.3 Compound Interest	2
5.4 Differentiation of Exponential Functions	2
5.5 Differentiation of Logarithmic Functions *	2
6.1 Antiderivatives and the Rules of Integration	2
6.2 Integration by Substitution	2
6.3 Area and the Definite Integral	2
6.4 The Fundamental Theorem of Calculus	2
6.5 Evaluating Definite Integrals	2
6.6 Area Between Two Curves	2
8.1 Functions of Several Variables	2
8.2 Partial Derivatives	2
8.3 Maxima and Minima of Functions of Several Variables	2
8.5 Constrained Maxima and Minima and the Method of Lagrange Multipliers	2
8.7 Double Integrals	2
8.8 Applications of Double Integrals	2
Total Content Days	56

Note: Some additional material may be covered depending on the time available after the above sections have been covered. The material may be covered in not necessarily the same order as listed above and not necessarily in the same manner as presented in the textbook. Regular attendance is therefore necessary in order to obtain proper instruction and to remain informed about the course's progress.