

Semester II: January 18 – June 18, 2026

MATH 203: Differential and Integral Calculus

Textbook: Calculus by E. R. Swokowski, M. Olinic, and D. Pence, PWS Publishing Company, Boston.

Chapter 8: Infinite Series

8.1 Sequences

8.2 Convergent and Divergent Series

8.3 Positive-term Series

8.4 Ratio Test and Root Test

8.5 Alternating Series and Absolute Convergence

8.6 Power Series

8.7 Power Series Representation of Functions

8.8 Maclaurin and Taylor Series

Chapter 13: Multiple Integrals

13.1 Double Integrals

13.2 Area and Volume

13.3 Double Integrals in Polar Coordinates

13.4 Surface Area

13.5 Triple Integrals

13.6 Moments and Center of Mass

13.7 Cylindrical Coordinates

13.8 Spherical Coordinates

Chapter 14: Vector Calculus

14.1 Vector fields

14.2 Line Integrals

14.3 Independence of Path

14.4 Green's Theorem

14.5 Surface Integrals

14.6 The Divergence Theorem

14.7 Stockes' Theorem