

Del Mar College
Math 2316
Calculus IV

The textbook for 2000-2001 is Calculus, Swokowski, PWS, Fifth Edition, 1991. The following topics are to be covered in Calculus IV.

- 16.1 Functions of Several Variables
- 16.2 Limits and Continuity
- 16.3 Partial Derivatives
- 16.4 Increments and Differentials
- 16.5 Chain Rules
- 16.6 Directional Derivatives
- 16.7 Tangent Planes and Normal Lines
- 16.8 Extrema of Functions of Several Variables
- 16.9 Lagrange Multipliers
- 17.1 Double Integrals
- 17.2 Area and Volume
- 17.3 Double Integrals in Polar Coordinates
- 17.4 Surface Area
- 17.5 Triple Integrals
- 17.6 Moments and Center of Mass
- 17.7 Cylindrical Coordinates
- 17.8 Spherical Coordinates
- 18.1 Vector Fields
- 18.2 Line Integrals
- 18.3 Independence of Path
- 18.4 Green's Theorem
- 18.5 Surface Integrals
- 18.6 The Divergence Theorem
- 18.7 Stokes' Theorem