

Department of Mathematics - North Dakota State University
MATH 265 Calculus III - Spring 2008
Instructor: Cristina Popovici

COURSE SCHEDULE

WEEK 1 (January 7-11, 2008)

- 12.1 Three-Dimensional Coordinate Systems
- 12.2 Vectors

WEEK 2 (January 14-18, 2008)

- 12.3 The Dot Product
- 12.4 The Cross Product
- 12.5 Equations of Lines and Planes

WEEK 3 (January 21-25, 2008)

- No Class on Monday, January 21 - Holiday: Martin Luther King, Jr. Day**
- 12.5 Equations of Lines and Planes
- 12.6 Cylinders and Quadric Surfaces

WEEK 4 (January 28-February 1, 2008)

- 12.7 Cylindrical and Spherical Coordinates
- 13.1 Vector Functions and Space Curves
- 13.2 Derivatives and Integrals of Vector Functions

WEEK 5 (February 4-8, 2008)

- 13.3 Arc Length and Curvature
- EXAM # 1 - WEDNESDAY, FEBRUARY 6**
- 13.4 Motion in Space: Velocity and Acceleration

WEEK 6 (February 11-15, 2008)

- 14.1 Functions of Several Variables
- 14.2 Limits and Continuity
- 14.3 Partial Derivatives

WEEK 7 (February 18-22, 2008)

- No Class on Monday, February 18 - Holiday: Presidents Day**
- 14.4 Tangent Planes and Linear Approximations
- 14.5 The Chain Rule

WEEK 8 (February 25-29, 2008)

- 14.6 Directional Derivatives and the Gradient Vector
- 14.7 Maximum and Minimum Values
- 14.8 Lagrange Multipliers

WEEK 9 (March 3-7, 2008) - No Classes: SPRING BREAK

WEEK 10 (March 10-14, 2008)

- 15.1 Double Integrals over Rectangles
- 15.2 Iterated Integrals
- 15.3 Double Integrals over General Regions

WEEK 11 (March 17-21, 2008)

- 15.4 Double Integrals in Polar Coordinates
- EXAM # 2 - WEDNESDAY, MARCH 19**
No Class on Friday, March 21 - Holiday: Good Friday

WEEK 12 (March 24-28, 2008)

- No Class on Monday, March 24 - Holiday: Easter Monday**
- 15.5 Applications of Double Integrals
 - 15.6 Surface Area

WEEK 13 (March 31- April 4, 2008)

- 15.7 Triple Integrals
- 15.8 Triple Integrals in Cylindrical and Spherical Coordinates
- 15.9 Change of Variables in Multiple Integrals

WEEK 14 (April 7-11, 2008)

- 16.1 Vector Fields
- 16.2 Line Integrals
- 16.3 The Fundamental Theorem for Line Integrals

WEEK 15 (April 14-18, 2007)

- 16.4 Green's Theorem
- EXAM # 3 - WEDNESDAY, APRIL 16**
- 16.5 Curl and Divergence

WEEK 16 (April 21-25, 2008)

- 16.6 Parametric Surfaces and Their Areas
- 16.7 Surface Integrals

WEEK 17 (April 28-May 2, 2008)

- 16.8 Stokes' Theorem
- 16.9 The Divergence Theorem