Math 201 Syllabus Spring 2017

Text: Essential Calculus Second Edition by Stewart

Homework Management System: WebAssign

Calculator: TI-84

Chapter 9 9.1 Parametric Curves

9.2 Calculus with Parametric Curves

9.3 Polar coordinates

9.4 Areas and Lengths in Polar Coordinates

Chapter 10 10.1 3-Dimensional Coordinates

10.2 Vectors

10.3 Dot Product

10.4 Cross product

10.5 Equations of Lines and Planes

10.6 Cylinders and Quadric Surfaces

10.7 Vector functions and space curves

10.8 Arc length & curvature

10.9 Motion in Space

Chapter 11 11.1 Functions of Several variables

11.2 Limits & Continuity

11.3 Partial derivatives

11.4 Tangent Planes and Linear Approximation

11.5 Chain Rule

11.6 Directional Derivatives and the gradient vector

11.7 Max and Min Values

11.8 Lagrange Multipliers

Chapter 12 12.1 Double Integrals over rectangles

12.2 Double Integrals over general regions

12.3 Double Integrals in Polar Coordinates

12.4 Applications

12.5 Triple Integrals

12.6 Triple Integrals in Cylindrical Coordinates

12.7 Triple Integrals in Spherical Coordinates