SECTIONS ASSIGNMENTS DATE LECTURES\* grouped by topic INTRODUCTION Sep-03 12.1 Three-Dimensional Coordinate Systems Sep-05 Vectors Sep-08 12.2 Assignment 1 due The Dot Product 12.3 Sep-10 12.4 The Cross Product Sep-12 Equations of Lines and Planes 12.5 Assignment 2 due Sep-15 Cylinders and Quadric Surfaces Sep-17 12.6 Vector Functions and Space Curves Sep-19 13.1 Derivatives and Integrals of Vector Functions Sep-22 13.2 Assignment 3 due Arc Length and Curvature Sep-24 13.3 Sep-26 13.4 Motion in Space 14.1 Functions of Several Variables Assignment 4 due Sep-29 Review Oct-01 Oct-03 MIDTERM I Limits and Continuity Oct-06 14.2 Partial Derivatives Oct-08 14.3 Tangent Planes and Linear Approximations 14.4 Oct-10 Oct-13 Thanksgiving Day - Holiday The Chain Rule Oct-15 14.5 Assignment 5 due Directional Derivatives and the Gradient Vector Oct-17 14.6 Maximum and Minimum Values Oct-20 14.7 Assignment 6 due Lagrange Multipliers 14.8 Oct-22 Double Integrals over Rectangles Oct-24 15.1 Iterated Integrals Oct-27 15.2 Assignment 7 due Double Intervals over General Regions 15.3 Oct-29 Double Integrals in Polar Coordinates Oct-31 15.4 Applications of Double Integrals Nov-03 15.5 Assignment 8 due Nov-05 Review MIDTERM II Nov-07 Surface Area Nov-10 15.6 15.7 Triple Integrals in Cylindrical Coordinates Nov-12 Integration in Spherical Coordinates Nov-14 15.8 Change of Variables in Multiple Integrals Assignment 9 due Nov-17 15.9 Vector Fields Nov-19 16.1 Nov-21 16.2 Line Integrals The Fundamental Theorem for Line Integrals 16.3 Assignment 10 due Nov-24 Green's Theorem Nov-26 16.4 Nov-28 Review Dec-01 Review Assignment 11 due Dec-10 FINAL EXAM

MATH 251 FALL 2008 Schedule of Lectures and Exams\*

\* TENTATIVE, SUBJECT TO CHANGE