**Schedule and Homework Assignments**
**Math 2443–003/004, Spring 2005**

## Approximate Schedule

| Week | Topics | Week | Topics |
|---|---|---|---|
| Jan 18 – Jan 20 | 15.1 – 15.2 | Mar 15 – Mar 17 | Spring Break |
| Jan 25 – Jan 27 | 15.3 – 15.4 | Mar 22 – Mar 24 | 17.1 – 17.2 |
| Feb 1 – Feb 2 | 15.4 – 15.6 | Mar 29 – Mar 31 | 17.3 – 17.4 |
| Feb 8 – Feb 10 | Exam 1, 15.6 – 16.1 | Apr 1 **Last day to drop without Dean's permission** | |
| Feb 15 – Feb 17 | 16.1 – 16.4 | Apr 5 – Apr 7 | 17.5 – 17.6 |
| Feb 22 – Feb 24 | 16.4 – 16.6 | Apr 12 – Apr 14 | Exam 3, 17.6 |
| Feb 25 **Last day to drop with auto. W** | | Apr 19 – Apr 21 | 17.7 – 17.8 |
| Mar 1 – Mar 3 | 16.6 – 16.7 | Apr 26 – Apr 28 | 17.8 – 17.9 |
| Mar 8 – Mar 10 | Exam 2, 16.7 – 16.8 | May 3 – May 5 | 15.7 |

## Homework by Section

| Section | Topic | Homework |
|---|---|---|
| 15.1 | Functions of Several Variables | 5, 6, 7, 14-16, 30-32, 34, 53-58 |
| 15.2 | Limits and Continuity | 1, 2, 5, 6, 8, 10, 27, 28 |
| 15.3 | Partial Derivatives | 1, 6, 20-24, 31, 38, 42, 56, 60, 66, 68(b)(d)(f) |
| 15.4 | Tangent Planes and Linear Approximations | 5, 12, 24, 27, 30, 34, 37 |
| 15.5 | The Chain Rule | 5, 9, 14, 20, 22, 29, 39, 43, 50 |
| 15.6 | Directional Derivatives and the Gradient Vector | 4, 9, 14, 17, 22, 27, 34, 41, 44, 48 |
| 16.1 | Double Integrals over Rectangles | 5, 8, 9, 11-14 |
| 16.2 | Iterated Integrals | 9, 12, 16, 19, 27, 29 |
| 16.3 | Double Integrals over General Regions | 6, 12, 13, 15, 20, 24, 38, 41, 44 |
| 16.4 | Double Integrals in Polar Coordinates | 9, 12, 17, 22, 30, 31 |
| 16.5 | Applications of Double Integrals | 6, 7, 11, 12 |
| 16.6 | Surface Area | 3, 7, 10 |
| 16.7 | Triple Integrals | 5, 7, 15, 17, 22(a), 25, 27, 30, 38 |
| 16.8 | Triple Integrals in Cylindrical and Spherical Coordinates | 3, 4, 6, 9, 13(a), 16, 18, 21, 35, 36 |
| 17.1 | Vector Fields | 1, 5, 6, 11-14, 23, 24, 26, 29-32 |
| 17.2 | Line Integrals | 2, 3, 6, 7, 17-19, 21, 31, 32 |
| 17.3 | The Fundamental Theorem for Line Integrals | 1, 2, 5, 6, 12, 18, 19, 23, 27 |
| 17.4 | Green's Theorem | 2, 3, 9, 11, 12, 15, 27 |
| 17.5 | Curl and Divergence | 1, 4, 7, 9-12, 15, 16, 21, 22 |
| 17.6 | Parametric Surfaces and their Areas | 1-4, 17-22, 32, 33, 35, 38 |
| 17.7 | Surface Integrals | 5-7, 11, 13, 14, 19, 21-24, 26 |
| 17.8 | Stokes' Theorem | 4, 5, 8-10, 14, 15 |
| 17.9 | The Divergence Theorem | 1-3, 5, 6, 8, 9, 13, 15 |
| 15.7 | Maximum and Minimum Values | 3-6, 30-32, 48, 49 |