Course Outline
MATH 245…Fall 2014

Required Text: *Differential Equations*, 2nd Ed., Brannan & Boyce
Class web site: [http://dcwindustries.com/245](http://dcwindustries.com/245)

1. CHAPTER 1: INTRODUCTION (Week 1)
   - Sections 1.1-1.2 and 1.4
2. CHAPTER 2: FIRST ORDER ODEs (Weeks 2-3)
   - Sections 2.1-2.5
3. CHAPTER 4: SECOND ORDER ODEs (Weeks 3-5)
   - Sections 4.1-4.7
4. CHAPTER 5: LAPLACE TRANSFORM (Weeks 6-8)
   - Sections 5.1-5.8
5. APPENDIX A: MATRICES AND LINEAR ALGEBRA (Weeks 9-10)
   - Sections A.1-A.4
6. CHAPTER 3: SYSTEMS OF TWO FIRST ORDER ODEs (Weeks 10-12)
   - Sections 3.1-3.6
7. CHAPTER 7: NONLINEAR ODEs AND STABILITY (Weeks 12-15)
   - Sections 7.1-7.5