**Textbook**: CALCULUS, GRAPHICAL, NUMERICAL, ALGERBRAIC; Finney, Demana, Waits, Kennedy; Prentice Hall, 2003

**Supplementary Material**:

1. If applicable – textbook, CD, software, study guide, etc.

2. CALCULUS; Larson, Hosteler, Edwards; Houghton Mifflin Company, 2002.

**Goals**:

* Work and understand the connections among functions represented graphically, numerically, analytically, and/or verbally(C3)
* Understand the meaning of the derivative in terms of a rate of change and local linear approximation(C3)
* Use graphs of 1st and 2nd Derivatives to approximate the graph of f(x) and likewise use the graph of f(x) to approximate the graphs of the corresponding derivatives(C3)
* Understand the meaning of the definite integral both as a limit of Riemann sums and as the net accumulation of a rate of change(C3)
* Understand the relationship between the derivative and the definite integral as expressed in both parts of the fundamental Theorem of Calculus(C2)
* Communicate mathematics both orally and in well-written sentences and should be able to explain solutions to problems, specifically optimization and related rate problems(C4)
* Model a written description of a physical situation with a function, a differential equation, or an integral and if applicable graphs and tables (C3)
* Use graphing calculators to help solve problems, interpret results, and verify conclusions(C5)
* Determine the reasonableness of solutions, including sign, size, relative accuracy. Units of measure and be able to explain solutions orally with adequate mathematical terminology(C4)
* Emphasize that students explain and justify their verbal and written responses and therefore demonstrate an understanding of the subject matter(C4)
* Students are encourage to voice their concerns and problems with peers or previous calculus students familiar with the topics, either in study groups or on a one to one basis(C4)
* Develop an appreciation of calculus as a coherent body of knowledge and as a human accomplishment(C2)

**Grading Policy**:

Grades are determined by:

Tests 50%

Quizzes 30%

Class work/ Homework 20%

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| Tentative  | Assignments (2015-2016) |  |  |
| Chapters/Section | Exercises  | Pages | Date |
| Chapter1/Section1 | 1-33 odds,37,39,44,48 | Pages 7-8 | 8/31/15 |
| Chapter1/Section2 | 1-18 all,26, 30, 34 | Pages 17-18 | 9/02/15 |
| Chapter1/Section2 | 19-33 odds, 41-53 odds,64 | Pages 17-18 | 9/04/15 |
| Chapter1/Section3 | 1-6 all, 7-33 odds, 37 | Pages 24-25 | 9/09/15 |
| Chapter1/Section4 | 1-4 all, 7-25 Odds | Pages 30-31 | 9/11/15 |
| Chapter1/Section4 | 27-32 all | Pages 30-31 | 9/16/15 |
| Chapter1/Section5 | 1-12 all, 13-41 odds, 48, 49 | Pages 39-40 | 9/18/15 |
| Chapter1/Section6 | 1-4 all, 7-10 all, 11-15 odds, 18, 20, 21-31 odds | Pages 48-49 | 9/22/15 |
| Chapter2/Section1 | 1-16 all, 21-31 all, 37-43 odds, 45, 47 | Pages 62-63 | 9/25/15 |
| Chapter2/Section2 | 1-20 all, 25, 27 | Pages 71-72 | 9/29/15 |
| Chapter2/Section3 | 1-10 all, 15, 16, 19-23 all | Pages 80-81 | 10/01/15 |
| Chapter2/Section4 | 1-4 all, 9-12 all | Page 89 | 10/05/15 |
| **Chapter 2/ Review** | 1-28 all, 29-37 odds, 43, 45, 46, 47, 48 | Pages 91-92 | 10/07/15 |
| Chapter3/Section1 | 4-12 all | Page 101 | 10/09/15 |
| Chapter3/Section2 | 16, 17, 18 | Page 102 | 10/13/15 |
| Chapter3/Section3 | 3, 4, 5, 6, 1-11, 12-19 all | Page 120 | 10/15/15 |
| Chapter3/Section3 | 23, 25, 27-30 all | Page 120 | 10/19/15 |
| Chapter3/Hand Out | 1-19 All (Product and Quotient Rule) | Check | 10/21/15 |
| Chapter3/Section4 | 5-13 Odds | Page 129 | 10/23/15 |
| Chapter3/Section5 | 1-13 all, 19, 20 | Page 140 | 10/27/15 |
| Review/Exercises | 1, 2, 3, 4 | Page 172 | 10/29/15 |
| Chapter3/Section5 Ex | 23-24 | Page 140 | 11/03/15 |
| Chapter3/Section6 | 1-23 Odds | Page 146-147 | 11/05/15 |
| Chapter3/Section6 | 2-24 even, 27, 30, 36, 39, 42, 45, 48 | Page 146-147 | 11/09/15 |
| Chapter3/Section6 | 33-38 all, 41-48 all, 57 | Page 146-147 | 11/12/15 |
| Chapter3/Section7 | 27-31 all | Page 155 | 11/16/15 |
| Chapter3/Section7 | 1-20 all, 27-36 all | Page 155 | 11/18/15 |
| Chapter3/Section8 | 1-18 all | Page 162 | 11/20/15 |
| Chapter3/Section9 | 1-40 all | Page 170 | 11/24/15 |
| Chapter3/Review | 1-52 All you can do | Page 172-173 | 12/01/15 |
| Chapter4/Section1 | 1-10 all, 19-25 all, 28 | Page 184 | 12/03/15 |
| Chapter4/Section1 | 11-14 all | Page 184 | 12/07/15 |
| Chapter4/Section3 | 1-11 all | Page 204 | 12/09/15 |
| Mid-Term Review | Exercises 1-23  | Handout | 12/11/15 |
| Chapter4/Section2 | 1, 2, 5, 11, 15-24 All | Page 192 | 12/15/15 |
| Chapter4/Section2 | 25-34 all, 35, 36 | Page 192 | 12/17/15 |
| Chapter4/Section4 | 4-9 all | Page 214 | 01/04/16 |
| Handout | 10 Exercises | Handout | 01/06/16 |
| Chapter4/Section5 | 1-8 all, 11-14 all, 19-30 all | Page 229 | 01/08/16 |