Calendar for Ma 113: Calculus - Spring 2010

| Lecture Recitation | In-Class Activities | Due Dates | Optional Textbook Problems |
| :---: | :---: | :---: | :---: |
| 13-Jan | 1.1-1.4: Domain, Range; Linear and Quadratic Functions |  | p.74: 1,3,5,6,10,11,19; p. A15: 1,7,17,18,21,37; p. A23: 11,14,29,33 |
| 14-Jan | Pretest, Worksheet 1 |  |  |
| 15-Jan | 1.6: Inverse Functions (w/o Log and Inverse Trig) |  | 1.6: 1-13 odd,21,27,29,33,35 |
| 18-Jan | Martin-Luther-King Day: Academic Holiday |  |  |
| 19-Jan | Worksheet 2 (\#1-6), Assignment 1 handed out |  |  |
| 20-Jan | 1.5, 1.6: Exp. and Log. Functions (w/o e and In) | A1, Last day to add a class | 1.5: 1-11 odd; 1.6: $33,35,37$ |
| 21-Jan | Worksheet 2 (\#7-10), Quiz 1 |  |  |
| 22-Jan | 2.1 The Tangent and Velocity Problem |  | 2.1: 1,3,5,7 |
| 25-Jan | 2.2 The Limit of a Function |  | 2.2: 1,5,7,9,13,15,25,27,33 |
| 26-Jan | Worksheets 3, 4 | A2 |  |
| 27-Jan | 2.3 Limit Laws | A3, Assgn1 due in class | 2.3: 1-15 odd,21,25,29 |
| 28-Jan | Worksheet 5, Quiz 2, Assignment 2 handed out |  |  |
| 29-Jan | 2.5 Continuity | A4 | 2.5: 3-13 odd, 16,19,21,23,35,37,41,47 |
| 1-Feb | 2.7 Derivatives and Rates of Change |  | 2.7: 1-9 odd, 13,17,19,25,27,31 |
| 2-Feb | Worksheet 6 | A5 |  |
| 3-Feb | 2.8 The Derivative as a Function | A6, Last day to drop | 2.8: 1, 3, 5,9,19,23,25,35 |
| 4-Feb | Worksheet 7, Quiz 3 |  |  |
| 5-Feb | Review | A7, Assgn2 due in class |  |
| 8-Feb | Review |  |  |
| 9-Feb | Worksheet 8 |  |  |
| 9-Feb | Exam 1, 7:30-9:30 PM, room TBA |  |  |
| 10-Feb | 3.1 Derivatives of Poly. and Exp. Fct's (introduce e and In) | Last day to withdraw for 50\% refund | 3.1: 1,3,5,7,15,17,21,23,31,33,39,47 |
| 11-Feb | Worksheet 9, Assignment 3 handed out |  |  |
| 12-Feb | 3.2 The Product and Quotient Rules | B1 | 3.2: 1,3,7,11,15,23,27 |
| 15-Feb | Appendix D and 1.6: Trig and Inverse Trig Functions |  | App D: 1,7,13,19,20,29,31,33,35,43,51,59,65; 1.6: 59,61,63,65 |
| 16-Feb | Worksheet 10 |  |  |
| 17-Feb | 3.3 Derivatives of Trig Functions | B2 | 3.3: 1,5,9,15,17,21,33,39 |
| 18 -Feb | Worksheet 11, Quiz 4 |  |  |
| 19-Feb | 3.4 Chain Rule | B3, Assgn3 due in class | 3.4: 1,5,9,19,23,35,47 |
| 22-Feb | 3.5 Implicit Differentiation and Derivatives of Inverse Trig | B4 | 3.5: 1,5,11,19,21,27,33 |
| 23-Feb | Worksheet 12, Assignment 4 handed out |  |  |
| 24-Feb | 3.6 Derivatives of Logarithms (w/o Logarithmic Diff'n) | B5 | 3.6: 3,7,13,19,33,37,43 |
| $25-\mathrm{Feb}$ | Worksheet 13, Quiz 5 |  |  |
| 26-Feb | 3.7 Rates of Change | B6 | 3.7: 1,5,9,15,21,23 |
| 1-Mar | 3.8 Exponential Growth and Decay | B7 | 3.8: 3,5,7,11,13 |
| 2-Mar | Worksheet 14 |  |  |
| 3-Mar | 3.9 Related Rates | B8 | 3.9: 3,7,13,15,25,31,37,43 |
| 4-Mar | Worksheet 15, Quiz 6 |  |  |
| 5-Mar | Review | B9, Assgn4 due in class |  |


| 8-Mar | Review |  |  |
| :---: | :---: | :---: | :---: |
| 9-Mar | Worksheet 16 |  |  |
| 9-Mar | Exam 2, 7:30-9:30 PM, room TBA |  |  |
| 10-Mar | 4.1 Maximum and Minimum Values |  | 4.1: 5,9,11,13,17,21,25,29,33,34,41,49,51,57,61 |
| 11-Mar | Worksheet 17, Assignment 5 handed out |  |  |
| 12-Mar | 4.2 The Mean Value Theorem | C1 | 4.2: 3,5,7,11,15,19,23,25 |
| 15-Mar | Spring Break |  |  |
| 16-Mar | Spring Break |  |  |
| 17-Mar | Spring Break |  |  |
| 18-Mar | Spring Break |  |  |
| 19-Mar | Spring Break |  |  |
| 22-Mar | 4.3 How Derivatives Affect the Shape of a Graph |  | 4.3: 3,5,7,11,17,19,25,31 |
| 23-Mar | Worksheet 18 |  |  |
| 24-Mar | 2.6 Limits at Infinity, Horizontal Asymptotes | C2 | 2.6: $3,5,7,13,19,25,33,41,49,53(a)$ |
| 25-Mar | Worksheet 19, Quiz 7 |  |  |
| 26-Mar | 4.4 L'Hopital's Rule (w/o Differences and Powers) | C3, Assgn5 due in class | 4.4: 1,3,5,9,17,21,29,43,55 |
| 29-Mar | 4.5 Summary of Curve Sketching (w/o Slant Asymptotes) |  | 4.5: 5,9,17,19,33,41 |
| 30-Mar | Worksheet 20, Assignment 6 handed out |  |  |
| 31-Mar | 4.7 Optimization Problems | C4 | 4.7: $3,5,11,13,17$ |
| 1-Apr | Worksheet 21, Quiz 8 |  |  |
| 2-Apr | 4.7 Optimization Problems | C5, Last Day to withdraw | 4.7: 19,33,55 |
| 5-Apr | 3.10 Linear Appr. (w/o Differentials) |  | 3.10:1,3,9,23,29; 4.8: 3,5,11,17,21,31,33 |
| 6-Apr | Worksheet 22 | C6 |  |
| 7-Apr | 4.9 Anti-Derivatives |  | 4.9: 3,7,15,21,23,31,39 |
| 8-Apr | Worksheet 23, Quiz 9 | C7 |  |
| 9-Apr | Review | C8, Assgn6 due in class |  |
| 12-Apr | Review |  |  |
| 13-Apr | Worksheet 24 |  |  |
| 13-Apr | Exam 3, 7:30-9:30 pm, room TBA |  |  |
| 14-Apr | 5.1 Areas and Distances |  | 5.1: 3,11,15,17,21 |
| 15-Apr | Worksheet 25 |  |  |
| 16-Apr | 5.2 The Definite Integral | D1 | 5.2: 1,5,9,19,21,23,33,37,49,53,55 |
| 19-Apr | 5.3 The Fundamental Theorem of Calculus |  | 5.3: 3,5,9,13,17,19,27,31,39,51,53 |
| 20-Apr | Worksheet 26 |  |  |
| 21-Apr | 5.4 Indefinite Integrals and Net Change | D2 | 5.4: 3,5,9,15,23,31,37,43 |
| 22-Apr | Worksheets 27, 28 (\#1-4), Quiz 10 |  |  |
| 23-Apr | 5.5 Substitution Rule | D3 | 5.5: 3,7,13,19,21,25,33,43,59,67,75 |
| 26-Apr | Review |  |  |
| 27-Apr | Worksheets 28 (\#5-7), 29 |  |  |
| 28-Apr | Review | D4 |  |
| 29-Apr | Worksheet 30 |  |  |
| 30-Apr | Review |  |  |
| 5-May | Final exam, 6:00-8:00 PM, room TBF |  |  |

