|   | Date | Topic                           | Homework                                                |  |
|---|------|---------------------------------|---------------------------------------------------------|--|
|   | 1/12 | Functions                       | [1.1] 1, 5-21, 27-31, 51-57, 61-69 $[1.3]$ 1-11, 17, 21 |  |
|   | 14   | Linear Functions/Equations      | worksheet $\#1$                                         |  |
|   | 17   | -==- MLK DAY -=-=-              |                                                         |  |
|   | 18   | Linear Applications             | worksheet $\#2$                                         |  |
|   | 19   | Quadratic Functions             | worksheet $#3$                                          |  |
|   | 21   | Quadratic Equations             | worksheet $#4$                                          |  |
|   | 24   | Quadratic Applications          | worksheet $\#5$                                         |  |
|   | 25   | Quiz #1 on Linear and Qua       | dratic Functions                                        |  |
|   | 26   | Average Rates of Change         | worksheet $\#6$                                         |  |
|   | 28   | Instantaneous Rates of Change   | [2.1] 1-7                                               |  |
|   | 31   | Limits                          | [2.2] 1-23, 37                                          |  |
|   | 2/1  | Limit Laws                      | [2.3] 1-11, 15-25, 31, 49, 51, 55, 59                   |  |
|   | 2    | Derivatives at Points           | [2.7] 1-31, 37-49                                       |  |
|   | 4    | Derivatives as Functions        | [2.8] 1-13, 17-29, 33, 41, 43, 51, 55                   |  |
|   | 7    | Review                          |                                                         |  |
|   | 8    | Test $\#1$ on Derivatives       |                                                         |  |
| • | 9    | Positive Integer Exponents      | worksheet $\#7$                                         |  |
|   | 11   | Negative/Fractional Exponents   | worksheet $\#8$                                         |  |
|   | 14   | Simplifying and Factoring       | worksheet $\#9$                                         |  |
|   | 15   | Powers, Roots, Polynomials      | worksheet $\#10$                                        |  |
|   | 16   | Quiz $#2$ on Polynomial Algebra |                                                         |  |
|   | 18   | Easy Derivative Rules           | [3.1] 3-15, 19-29, 33, 37, 41, 45, 49-55, 59-65, 77     |  |
|   | 21   | Product Rule                    | [3.2] 1, 9, 11, 19, 43a, 47a, 49a, 53                   |  |
|   | 22   | Composition                     | [1.3] 31-53, 59, 61, 65                                 |  |
|   | 23   | Chain Rule                      | [3.4] 3, 7-11, 17-21, 47, 51, 57, 61-65, 69, 71         |  |
|   | 25   | Implicit Differentiation        | [3.5] 1ab, 3ab, 5-9, 17, 21, 25-29, 39-43               |  |
|   | 28   | Quiz #3 on Derivative Rule      | s                                                       |  |
|   | 3/1  | Related Rates                   | [3.9] 1-15                                              |  |
|   | 2    | Related Rates                   | [3.9] 17-27, 31, 33                                     |  |
|   | 4    | Max/Min Problems                | [4.7] 3, 5, 9-25                                        |  |
|   |      | -= SPRING BREAK -=              | -=-                                                     |  |
|   | 14   | Max/Min Problems                | [4.7] 27-39, 47-57                                      |  |
|   | 15   | Review                          |                                                         |  |
|   | 16   | Test $#2$ on Derivative Rules   | and Applications                                        |  |

Calculus With Review Syllabus

MATH 130

Spring 2011

|   | Date | Topic                      | Homework                                                                    |
|---|------|----------------------------|-----------------------------------------------------------------------------|
|   | 18   | Rational Expressions       | worksheet $#11$                                                             |
|   | 21   | Limits of and at $\infty$  | $[2.3]\ 13\ [2.6]\ 3\text{-}9,\ 15\text{-}25,\ 29,\ 31,\ 39\text{-}43,\ 55$ |
|   | 22   | Quotient Rule              | [3.2] 7, 13, 15, 21, 25, 29, 31, 41, 43bc, 47b, 49bc, 51                    |
|   | 23   | Linear Approximation       | [3.10] 1, 5-9, 23, 25, 33, 35, 39, 43                                       |
|   | 25   | Quiz #4 on Rational Functi | ons                                                                         |
|   | 28   | Extrema                    | [4.1] 1-13, 29-39, 47-55, 63-69                                             |
| ١ | 29   | First Derivative Test      | [4.3] 1ab, 5, 9ab, 11ab, 31abe, 33-41ab, 53, 67                             |
|   | 30   | Second Derivative Test     | [4.3] 1cde, 7, 9c, 11c, 19-29, 31cd, 33-41c, 45, 47, 61, 63, 69,            |
| , | 4/1  | Graphing                   | [4.5] 1-29                                                                  |
|   | 4    | Review                     |                                                                             |
|   | 5    | ons and Extrema            |                                                                             |
|   | 6    | Area                       | [5.1] 1, 5, 11-15                                                           |
|   | 8    | $\Sigma$ Notation          | [Appendix E] 1-35                                                           |
|   | 11   | $\int$ Notation            | [5.2] 5, 7, 19, 29, 33-39, 43, 47-55, 63, 65, 69                            |
|   | 12   | Riemann Sums               | worksheet $\#12$                                                            |
| _ | 13   | Quiz #5 on Riemann Sums    |                                                                             |
|   | 15   | Antiderivatives            | [4.9] 1-13, 21-25, 29, 31, 37, 41, 47-53, 59                                |
|   | 18   | Fundamental Theorem        | [5.3] 19-29, 33, 43, 65                                                     |
|   | 19   | -= SURCAS -=               |                                                                             |
|   | 20   | Net Change                 | [5.4] 1, 5-11, 21, 25-33, 39, 49-61                                         |
|   | 22   | -= GOOD FRIDAY -=          | =-                                                                          |
|   | 25   | Substitution               | [5.5] 3, 9, 17, 27, 45, 51, 53, 61, 63, 71, 73, 81-85                       |
|   | 26   | Review                     |                                                                             |
|   | 27   | Test $#4$ on Integrals     |                                                                             |
|   | 29   | Review                     |                                                                             |
|   | 5/4  |                            |                                                                             |