Math 205, Fall 2016

| Monday | Wednesday | Friday |
| :---: | :---: | :---: |
| Aug 29th <br> Discussion of prerequisites | 31 st  <br> $2.1 / 2.3$, Functions $\mathbf{2}$ | Sep 2nd <br> 2.2/2.3, Algebra of functions |
| 5th <br> 2.4/2.5, Limits (graphical approach), One-sided limits | 7th <br> 2.4/2.5, Limits (analytic approach), Indeterminate forms | 9th <br> 2.4/2.5, Infinite limits |
| 12th <br> 2.5, Continuous functions | 14th <br> 2.5, Continuous functions, Intermediate Value Theorem | 16th 9 <br> 2.6, The derivative, definition |
| 19th 10 <br> 2.6, The derivative | 21st  <br> 2.6, Review for test $\mathbf{1 1}$ | $23 \mathrm{rd} \quad$ Test 1 |
| 26th 12 3.1, Basic rules of differentiation | 28th 13 3.2, Product and quotient rules | 30th $\mathbf{1 4}$ <br> No class  |
| Oct 3rd <br> 3.3, Chain rule | 3.3, Chain rule, 3.5 Higher derivatives | 7th 17 <br> 3.6, Implicit differentiation |
| 10th $\mathbf{1 8}$ <br> 3.6, Implicit differentiation,  <br> Related rates  | 12th 19 <br> 4.1, Applications of 1st derivative (increasing/decreasing, local extrema) | 14th  <br> 4.5, Optimization II 20 |
| 17th 4.4/4.5, More optimization | 19th 22 <br> Review for test | $\begin{array}{ll} \hline 21 \text { st } & \text { Test 2 } \\ \hline \end{array}$ |
| 24 th 4.2, Applications of 2nd derivative (concavity, inflection) | 26th $\mathbf{2 4}$ <br> 5.1, Exponential functions  | 28th 5.4, Differentiation of exponential functions |
| 31st 26 <br> Appendix A, Inverse functions | $\underbrace{\text { 5.2, Logarithmic functions }}_{\text {Nov 2nd }} \mathbf{2 7}$ | 4th 28 <br> 5.5, Differentiation of logarithmic functions |
| 7th <br> 5.5/5.6 <br> Logarithmic differentiation, <br> Modeling applications | 9th $\quad 30$ <br> Review for test |  |
| 14th 6.1, The indefinite integral | 16th $\mathbf{3 2}$ <br> $6.1 / 6.2$, More integration  | 33 th 6.3, Area and the definite integral |
| 21st | 23rd $\quad$ Thanksgiving | 25 th $\quad$ Thanksgiving |
| 28th <br> 6.3, Area and the definite integral | 30th <br> 6.4, The Fundamental Theorem of Calculus | Dec 2nd <br> 6.4, The Fundamental Theorem of Calculus |
| 5th  <br> Mop-up of course material $\mathbf{3 7}$ | 7th Mop-up of course material | 9th 39 <br> Review for Final Exam |
| 12th 40 | 14th  <br>  Final Exam <br>  1:00-3:00pm | 16th 41 |

