

## **A.P. Calculus (All dates and assignments tentative at my discretion.)**

### **Chapter 2 – Differentiation**

- September 19, 2005: Definition of Derivative  
p. 101 1, 2, 15, 17, 21, 23, 25a, 31a, 35, 61, 63, 71, 85 (13)
- September 20, 2005: Rules for  $x^n$  and  $f \pm g$ , sine and cosine  
p. 101 18  
p. 113 1, 3, 12, 15, 23, 25, 29, 31, 33, 35, 39, 45, 48, 53a (15)
- September 21, 2005: Velocity, Rates of Change Applications  
Handout 17, 18 all  
p. 113 57, 61, 63, 74, 101, 102, 103, 107 (10)
- September 22, 2005: Product, Quotient, Trigonometric, Higher order derivatives  
p. 101 33, 47  
p. 153 1  
Handout 19  
p. 124 1,5,9,11,13,15,19,23,25,41,49,53,61,65a,69,83,87,90 (22)
- September 23, 2005: Chain Rule and General Power Rule  
p. 133 7,11,15,16,21,25,27,35,47,59,63,65,75a,105 (14)
- September 26, 2005: Chapter 2 Quiz 1  
Study the following problems for this quiz:  
p. 102 17, 21, 33  
p. 113 48, 53a, 57, 101, 103  
Handout 17  
p. 124 all problems assigned
- September 27, 2005: Chain Rule Cont. (Write rules using  $u, v, u', v'$ )  
p. 133 9, 17, 19, 23, 28, 29, 31, 36, 39, 48, 49, 50, 69, 76a, 77a, 92, 98, 106 (18)
- September 28, 2005: Implicit Derivatives ( $1^{\text{st}}$  and  $2^{\text{nd}}$ ), Normal line  
p. 142 1,3,5,11,15,21,25,29,35,39,43  
p. 153 65,68,71,77,105 (16)
- September 29, 2005: Related Rates  
p. 142 6,37,40,47  
p. 149 1, 3, 15b, 19a, 20b, 23, 35 (11)
- September 30, 2005: Related Rates cont.  
p. 142 4, 9, 44, 48  
p. 149 5, 18a, 22a, 27a, 43, 45a  
p. 153 8, 69, 74, 106 (14)
- October 3, 2005: Chapter 2 Quiz 2  
Study the following problems for this quiz:  
p. 133 7, 11, 21, 25, 37, 48, 59, 75, 106  
p. 142 1, 5, 11, 39, 43, 47  
p. 149 15b, 20b, 23, 27a, 43, 45a
- October 4, 2005: Review for Chapter 2  
Study for the following problems for Chapter 2 exam:  
p. 101 72, 73, 84  
Handout 19bc, 20  
p. 142 40, 48  
p. 149 20b, 22a, 33, 43  
p. 153 2, 26, 49, 68, 88, 91, 97c, 99, 105,  $y = (x+3)^3$  at  $x = -2$  tangent and normal line,  
 $f(x) = \frac{1}{3}x^3 + x^2 - x - 1$  find points where  $m = -1$
- October 5, 2005: Chapter 2 Test