Course Schedule – Fall 2008 (Course work 25 Aug to 10 Dec – Final Exam 8, 9, 10 Dec in campus testing center, or by other arrangement)

Assignment #	Date Week of:	Book Section	Topic	HW Problems (not to be turned in)	Journey Through Calculus Module # Assignment
1	25 August	2.1, 2.2, 2.3	Tangent and Velocity Problems; Limits of a Function, Calculating Limits using Limit Laws	P65 1,2,4a P74 1 to 5 P85 11 to 30	Module 1: Tangents, Alien Invasion. What is a Tangent? Introduction, The Weight Lifter Problem— Module 2: Definition of a Limit, Sound of a Limit, Limits that are infinite, Examples, Limit Laws— Module 3: Derivative of a Polynomial, Falling Robot
2	2 September	2.4, 2.5, 4.4	Precise definition of a limit;Continuity Limits at Infinity; Horizontal Asymptotes	P95 1,2,3 P105 4, 7, 10, 11, 13, 15, 19 P241 9 to 30, 33 to 38	Module 2: Definition of a Limit, Continuity
***	**8 Sep**	**HW#1 Due by 4 p.m.**	**Monday**	**By fax, e-mail (pdf, gif) or drop off**	
3	9 Sep	3.1, 3.2, 3.3, 3.5	Derivatives and rates of change, The Derivative as a Function, Differentiation Formulas,Chain Rule	P119 1,3,7,9,25,26,31 P131 1,2,4,8,13,14 P144 1,4,5,6,7,22,57 to 60 P161 7 to 11,17 to 21,47,50 ,51,54 P181 7 to 11,24,25 P195 1,2,56	Module 3: Derivatives as Functions; Mars Rover (fun to do); How to Calculate; Essential Examples; slope-a-scope;Higher Derivatives (Beginning Screen) Module 4:

					Rules
4	16 Sep	4.3,4.5,3.9	How Derivatives Affect the Shape of a Graph,Summary of Curve Sketching, Linear Approximations	P227 1,5,6,11 P248 1,3,7,10 P1931,2,4	Module 3: Increasing and Decreasing Functions; Local Maxima and Minema, Concavity, Linear Approximations
***	**22 Sep**	**HW # 2 Due by 4 p.m.**	**Monday**	**By fax, e-mail (pdf, gif) or drop off**	
***	***23, 24 Sep***	***Performance Opportunity #1 (on line)***	***Must be completed and submitted by e-mail by 4 p.m. 24 Sep***		
5	24 Sep	3.3	Differentiation Formulas Revisited	P145 6,13,14,15,31 to 35,53,55,65	Module 4: Basic Rules, Review Products and Quotient Rules
6	1 Oct	3.4	Trig Derivatives	P154 1 to 6, 11,12,13	Module 4: Derivative of sin(x); Derivatives of trig functions
7	8 Oct	3.5, 3.6	Chain Rule, Implicit Differentiation	P161 4,6,13,22,23,32,34,48,49 P169 5 to 11	Module 4: Chain Rule—See text page 164 to 168 for implicit differentiation explanation
***	**14 Oct**	**HW # 3 Due by 4 p.m.**	**Tuesday**	**By fax, e-mail (pdf, gif) or drop off**	
8	14 Oct	3.8	Related Rates	P186 1 to 8, 11,16	Module 5: Balloon Problem, Related Rate Strategies
9	21 Oct	4.1, 4.2	Maximum/Minimum Values, Mean Value Theorem	P211 3,15 to 22,31,45,46,51 P219 1,2,11,12,15	Module 5: Max and Min, Text on Mean Value Theorem
10	28 Oct	4.5, 4.6, 4.7, 4.8	Summary of Curve Sketching, Graphing with Calculus and	P248 1,3,5,9 P255 1 using graphing calculator P262 7,11,13,33,34	Module 5: Max and Min (again), Lifeguard,

			Calculators, Optimization Problems, Newton's Method	P272 5,13,14	Newton's Method Alien Transit
***	**3 Nov**	**HW # 4 Due by 4 p.m.**	**Monday**	**By fax, e-mail (pdf, gif) or drop off**	
***	***4, 5 Nov***	***Performance Opportunity #2 (on line)***	***Must be completed and submitted by e-mail by 4 p.m. 5 Nov***		
11	5 Nov	5.1, 5.2, 4.9	Areas and Distance, The Definite Integral, Anti-Derivatives	P298 3,5,11,15 P298 1,7 P279 1,4,9,17,19,39,40	Module 6: What is Area?, Estimating Area under a Parabola, Problems and Test, Riemann Sum, Antiderivatives
12	3 to 7 July	5.3, 5.4, 5.5	Fundamental Theorem of Calculus, Indefinite Integrals, The Substitution Rule	P321 19 to 30 P329 5 to 13 P338 1,2,3,7,33	Module 6: Area as a Function, Fundamental Theorem, Indefinite Integrals
***	**18 Nov**	**HW # 5 Due by 4 p.m.**	**Tuesday**	**By fax, e-mail (pdf, gif) or drop off**	
13	25 Nov	6.1, 6.2, 6.3	Net Change, Area Between Curves, Volumes, Volumes by shell, Velocity and Acceleration	P331 55,56 P352 1 to 8 P362 1 to 5,11 P368 3,5,9,11	Module 7: Areas, Volumes of Revolution
***	**2 Dec**	**HW # 6 Due by 4 p.m.**	**Tuesday**	**By fax, e-mail (pdf, gif) or drop off**	
***	***3, 4 Dec***	***Performance Opportunity #3 (on line)***	***Must be completed and submitted by e-mail by 4 p.m. 4 Dec***		
14	5 Dec	Review and Practice Final Exam	See practice final exam under the course content	The final exam is not multiple choice but follows the format of the practice final exam	
Final Exam 2.5 Hours duration	***8, 9, 10 Dec***	***Final Exam in testing center on campus or Arundel Mills***	***Must be completed by 8 p.m. on Wednesday 10 Dec***	***You may bring an 8.5" by 11" sheet of notes to use on the exam.***	***You may also bring and use a calculator on the exam***