Calendar for Math 121, Fall 2008

Author: Matthew Leingang <leingang@cims.nyu.edu>
Date: 2008-11-18

This is a week-by-week calendar of topics covered in Calculus I.

Week	Dates	Section	Topics
1	9/2–9/5	1.1	Functions and their Representations
		1.2	A catalog of essential functions
2	9/8–9/12	1.3	The limit of a function
		1.4	Calculating Limits
3	9/15–9/19	1.5	Continuity
		1.6	Limits involving Infinity
4	9/22–9/26	2.1	Derivatives and rates of change
		2.2	The derivative as a function
		2.3	Basic differentiation rules
5	9/29–10/3	2.4	The product and quotient rules
		2.5	The chain rule
		2.6	Implicit differentiation
6	10/6–10/10	2.8	Linear approximations and differentials
		3.1	Exponential functions
		3.2	Inverse functions and logarithms
7	10/15–10/17	Midterm	
8	10/20–10/24	3.3	Derivatives of Logarithmic and Exponential Functions
		3.4	Exponential growth and decay
		3.5	Inverse trigonometric functions
9	10/27–10/31	3.7	Indeterminate forms and L'Hôpital's Rule
		4.1	Maximum and minimum values
10	11/3–11/7	4.2	The Mean Value Theorem
		4.3	Derivatives and the shapes of curves
		4.4	Curve sketching
11	11/10–11/14	4.5	Optimization problems
		4.6	Newton's Method
		4.7	Antiderivatives

12	11/17–11/21	5.1	Areas and distances
		5.2	The definite integral
		5.3	Evaluating definite integrals
13	11/24–11/26	5.4	The Fundamental Theorem of Calculus
14	12/1–12/5	5.5	The Substitution Rule
		6.1	Integration by Parts
15	12/8–12/12	6.5	Approximate Integration