Curriculum Map for MA 1710
JCC Calculus I
Kris Ring
Revised Fall '06

Month	Content/Skills	Text Alignment	Assessment
Sept.	Intercepts, Symmetry, Slope, Equations of lines, Functions, Transformations, Inverses, Exponential and Log Functions	Prerequisites for Calculus (CH 1 sections 1.1-1.6)	Derive project #1 Ch 1 test Homework and Quizzes
	Finding limits graphically, numerically, and algebraically, Squeeze Theorem, Continuity and One-Sided Limits, Intermediate Value Theorem, limits involving infinity	Limits and continuity (CH 2 sections 2.1-2.5)	Derive project #2 Ch 2 test Homework and Quizzes
Oct.	Slope and Tangent lines, limit definition of derivatives, differentiation and continuity relationship, Basic differentiation rules, Product and Quotient rules, Chain rule, Implicit Differentiation, derivatives of Inverse functions. Related Rates	Derivatives (CH 3 sections 3.1-3.7)	Derive project #3 Ch 3 Test Homework and Quizzes
Nov.	Extrema, Critical Numbers, Rolle's theorem and the Mean Value theorem, First derivative test, Concavity and the second derivative test, limits at infinity and horizontal asymptotes, Curve sketching, optimization	Applications of differentiation (CH 4 sections 4.1-4.7)	Derive project #4, 5 CH 4 test Homework and quizzes
Dec.	General solution of differential equations, integral notation and antiderivatives, basic integration rules, Area under a curve, Riemann sums and definite integrals, Fundamental Theorem of Calculus, Integration by substitution	Integration (Ch 5 sections 5.1-5.5)	Derive project #6 Homework and Quizzes
Jan.	Integration of logs and trig. Functions, integration of inverse trig. Functions, indeterminant forms and L'Hopital's Rule	Integration (Ch 5 sections 5.7, 5.8 and Ch 8 section 8.7)	Derive project #7 CH 5 test Homework and Quizzes Final Exam for MA 1710

		Review for exam	