Mrs. Medlen
AP Calculus AB
Lesson Plans

CARROLL HIGH SCHOOL

	Monday 1/8	Tuesday 1/9	Wednesday 1/10	Thursday 1/11	Friday 1/12
College Board Curriculum Framework Objectives:	1. An antiderivative of a function f is a function g whose derivative is f. (3.1A1) 2. Differentiation rules provide the foundation for finding antiderivatives. (3.1A2) 3. The notation $\int f(x)\,dx = F(x) + C$ means that $F'(x) = f(x)$, and $\int f(x)\,dx$ is called an indefinite integral of the function f. (3.3B3) 4. Techniques for finding antiderivatives include algebraic manipulation such as long division and completing square as well as substitution of variables. (3.3B5) 5. Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay. (3.5A1)				
Before:	*Warm-Up Set: Differentiation Problems	*Homework Discussion	*Homework Discussion	*Homework Discussion	*Homework Discussion *Wrap-Up "U-Sub" content
During:	*Lesson: Integration	*Particular Solutions to an Integral (Ex 25-29)	*Lesson: U-Sub, cont'd (Exp and Log Examples)	*U-sub (Mix-Review Problems and Discussion Set)—See U-sub Comparison Sheet	*Group Cumulative Review Problems
After:	*Group Collaboration Problems *HW Set	*Lesson: U-sub examples 1-14 *Group Collaboration Problems/HW Set	*Group Collaboration Problems/HW Set	*Lesson: Crazy U-Sub Examples *Group Collaboration/HW Set	*Homework: Quiz Review Problems
Desired Outcome:	Students will be able to find the anti-derivative of a function.	Students will be able to find the particular solution to an antiderivative problem.	Students will be able to use u-substitution to solve integration problems.	Students will be able to use u-substitution to solve integration problems.	Students will review techniques of integration.
Formative/ Summative:	-Student questioning throughout lesson/ Collaboration -Khan Academy Quizzes	-Student questioning throughout lesson/ collaboration	-Student questioning throughout lesson/ Collaboration -Khan Academy Quizzes	-Student questioning throughout lesson/ Collaboration -Khan Academy Quizzes	-Student questioning throughout lesson/ Collaboration -Quiz
Critical Questions:	*Explain the meaning of integration. Discuss the inverse process of the power rule and how this can be used in the anti-power rule.*	*Explain the process of u-substitution for integrating.*	*Explain what to look for when you are integrating a natural log function using u-sub.*	*Explain how you know when "crazy u-sub" techniques are required for integrating.*	*n/a*