Mrs. Medlen
AP Calculus AB
Lesson Plans

CARROLL HIGH SCHOOL

	Monday 10/09	Tuesday 10/10	Wednesday 10/11	Thursday 10/12	Friday 10/13
College Board Curriculum Framework Objectives:	*The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration (2.3C1)* First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downwards concavity, and points of inflection. (2.2A1) Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations. (2.2A2)				
Before:		AP Calculus Note Cards	*Check NC 1-14	*Lesson: 1st and 2nd Derivatives (Graphically)	*Homework Questions
During:			*Lesson: Defn of Derivative	*Lesson: 1st and 2nd Derivatives (Algebraically)	*Lesson: F, F', F" and NLA
After:			*Finish PVA Examples	*Group Collaboration Set/HW Set	*Group Collaboration Set/HW Set
Desired Outcome:		Students will work on AP Note Cards 1-14	Students will be able to find derivatives using the limit definition of the derivative.	Students will be able to discuss how the 1st and 2nd derivatives are related to the original function (and each other).	Students will be able to use number line analysis to discuss how the 1st and 2nd derivatives are related to a function.
Formative/ Summative:		n/a	Student questioning during lesson/collaboration	Student questioning during lesson/ collaboration	Student questioning during lesson/collaboration
Critical Questions:			*Explain how to find the velocity and acceleration of an object in straight line motion. How do you know whether the object is moving left/right? How to do you know whether or not the speed of the object is increasing/ decreasing?*	*Explain how to determine whether a graph is increasing or decreasing based on the derivative? Explain how to determine whether a graph is concave up/down based on its second derivative?*	*Explain how to use a number line analysis to determine whether a graph is increasing/ decreasing?*