Mrs. Medlen AP Calculus AB Lesson Plans



	Monday 11/27	Tuesday 11/28	Wednesday 11/29	Thursday 11/30	Friday 12/1
College Board Curriculum Framework Objectives:	Continuity is an essential condition for the IVT, EVT, and MVT (1.2B1) If a function is continuous on an interval, the Mean Value Thoerem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval. (2.4A1) The derivative can be used to solve optimization problems. (2.3C3) The chain rule is the basis for implicit differentiation (2.1C5)				
Before:	*Lesson: Extreme Value Theorem (Examples 1, 3, 5, 7)	*Homework Review p10 *Finish Mean Value Theorem Examples 4-5	*Homework Review	*Quiz (Tangent Line Approx, IVT, MVT, EVT)	*Review Quiz *Review HW Set
During:	*Group Collaboration Problems (Ex 2, 4, 8)	*Stamp Activity Problems (Tangent Line Approx, IVT, MVT, EVT)	*Lesson: Optimization	*Discuss Optimization Problems	*Lesson: Implicit Differentiation
After:	*Mean Value Theorem (Examples 1-3) *Homework Set p10	*Homework Set: Cumulative Review Problems	*Discuss Optimization Problems	*Collaboration/ HW Set (Optimization)	*Collaboration /HW Set *Homework: Notecards
Desired Outcome:	Students will be able to use MVT to solve problems in Calculus. Students will be able to use the EVT to find absolute extrema for a function.	Students will be able to solve problems involving tangent lines, IVT, EVT and MVT.	Students will be able to use derivatives and max/min concepts to solve real world optimization problems.	Students will demonstrate their understanding of tangent lines and the three existence theorems. Students will be able to solve optimization problems.	Students will be able to find derivatives implicitly.
Formative/ Summative:	Student questioning during lesson	Stamp Activity	Student questioning during lesson	Quiz	Student questioning during lesson.
Critical Questions:	Explain EVT and MVT and how they are used in Calculus		Explain how derivatives can be used to solve optimization problems.		Explain what implicit differentiation is and why it is useful.