Name:			Grading Quarter:		Week Beginning:
Mrs. Woods		1	9/23/24		
School Year: 24-25			Subject: AP Calculu	us AB	
Monday	Notes:	Objective: Students will be able to use the chain rule to differentiate a composite function. Lesson Overview: Notes – how do our derivative rules change when we have a composite function? Identify composite functions (using examples from summer packet). Use different notation to help students understand the process.			Academic Standards: 3.1 The Chain Rule 1.C Identify an appropriate mathematical rule or procedure based on the classification of a given expression (e.g., Use the chain rule to find the derivative of a composite function).
Tuesday	Notes:	Objective: Students will be able to use the chain rule to differentiate a composite function. Lesson Overview: <i>This is a continuation of yesterday's lesson.</i> Notes – add the rule for differentiating exponential functions with a base other than e. Also include examples of both the product and chin rule together. Piecewise functions – where are they continuous and differentiable?			Academic Standards: 3.1 The Chain Rule 1.C Identify an appropriate mathematical rule or procedure based on the classification of a given expression (e.g., Use the chain rule to find the derivative of a composite function).
Wednesday	Notes:	Objective: Students will be able to identify when implicit differentiation is needed on an equation. Lesson Overview: Notes – what is implicit differentiation and how is it like the chain rule? Use Leibniz notation to help students understand the layers of the composite functions.			Academic Standards: 3.2 Implicit Differentiation 1.E Apply appropriate mathematical rules or procedures, with and without technology.
Thursday	Notes:	Objective: Students will be able to use the chain rule to differentiate a composite function. Lesson Overview: Students will practice using the chain rule independently using the "circuit" activity.		Academic Standards: 3.2 Implicit Differentiation 1.E Apply appropriate mathematical rules or procedures, with and without technology.	
Friday	Notes:	Objective: Students will be able to use the AP website. Lesson Overview: AP Classroom – practice assignment, change "undecided" to "taking" or "not taking" Bluebook PowerPoint		Academic Standards: 3.1 The Chain Rule 1.C Identify an appropriate mathematical rule or procedure based on the classification of a given expression (e.g., Use the chain rule to find the derivative of a composite function).	