

Planned Course: Calculus I Unit: Applications of Integration Estimated Time: 2 weeks		Course Number: M311 Grade Level: 10-12 Level/Track: college		Department: Math Date Approved: 7/15/08	
PA Academic Standards	Core Concepts (in question format) • Skills/Knowledge	Activities/Strategies/Study Skills (identify some activities as remedial or enrichment activities)	Assessments (include types and topics)		
2.11.11.E Estimate areas under curves using sequences of areas.	<p>Can the students apply the integration concepts to real world problems?</p> <ul style="list-style-type: none"> • SWBAT find the area of a region bounded by the graphs of given functions. • SWBAT find the volume of the solid generated by revolving the region bounded by the graphs of the given equations about an indicated axis using the disc method. • SWBAT find the volume of the solid generated by revolving the region bounded by the graphs of the given equations about an indicated axis using the shell method. 	<ul style="list-style-type: none"> • Collaborative Activity: Students will design a square floor tile of two colors with no more than three simple regions of color. Students must report the relative amount of the two colors and at least two functions used to model their design . 	<ul style="list-style-type: none"> • Quizzes • Tests • Homework • Graded assignments • Classroom participation • Questioning • Observation 		