

<b>Instructor: Mike Gay</b>	<b>Department: Engineering</b>
<b>Course: Foundations of Engineering</b>	<b>School: CACC</b>
<b>Credential:</b>	
<b>Lesson Length: 1 day/ 90 minutes</b>	<b>Date:</b>

**Topic: Measurement Systems**

<b>RESOURCES:</b> Micrometer Caliper Scale Dial indicator Measurement Systems presentation	<b>PRIOR KNOWLEDGE:</b> None <b>ALABAMA COURSE OF STUDY STANDARDS &amp; OBJECTIVES:</b> FOE 4 – Demonstrate the use of analog and digital precision measuring instruments utilized in engineering.  <b>ESSENTIAL QUESTIONS:</b>  What is a thousandth, a micron, and a millimeter?
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**STRATEGIES:**

Discuss measurement systems; US customary/standard system, metric system  
 Working with thousandths and microns  
 Demonstrate using actual precision measurement instruments  
 Show the measurement system presentation  
 Demonstrate common conversions  
 Students will measure items in the lab to complete assignment and demonstrate understanding.

**CTSO ACTIVITY:**

**NOTES: Use recommendation from the cell coordinator at ACYT to teach students measurement math.**

Methods			Assessment			
x	Lecture	x	Multi-media		Homework	On-task Ability
x	Demonstration		Group Problem		Class work	Project
x	Class Discussion	x	Individual Work		Test	Presentation
	Review		Other	x	Teacher Observation	
				x	Performance	

**Provisions For Individual Differences**

	Check work in progress		Review Sessions	x	Study Partner	Extended Time on task
	Monitor Assignments		Modified Content	x	Oral Reminders	Language Translation
x	Multi-sensory Approach		Pre-teach Content		Provide Lecture Notes	
x	Immediate Feedback	x	Review Directions		Personalized Examples	

**Integrated Academics**

Integrated Academics			Skill Sets				
x	Reading/Language Arts	x	Math Skills		Problem Solving	x	Technology Skills
	Writing			x	Critical Thinking		Employability Skills
	Social Studies				Decision Making		Teamwork
	Science				Interpersonal Skills		Leadership

