

<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: 2 days/ 180 minutes</b>	<b>Date:</b>

**Topic: Precision Measurement**

**RESOURCES:**  
**Micrometer**  
**Caliper**  
**Scale**  
**Dial indicator**  
**Precision Measurement presentation**

**PRIOR KNOWLEDGE:**  
**Measurement systems and terminology**  
**ALABAMA COURSE OF STUDY STANDARDS & OBJECTIVES:**  
**FOE 4 – Demonstrate the use of analog and digital precision measuring instruments utilized in engineering.**

**ESSENTIAL QUESTIONS:**  
**How do you know its right?**

**STRATEGIES:**

Show presentation and video clips demonstrating precision measurement instruments.  
 Discuss when each instrument would be used.  
 Discuss uses in industry (from job shadowing at ACYT)

Demonstrate how to use each instrument in class.

Students demonstrate during lab time.

**CTSO ACTIVITY:**

**NOTES: Use notes from ACYT on how cell operators used measurements to insure a quality product.**

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

