

**Assessment, Improvement, Measurement (AIM) Report: 12/20/2013****Plan Year:** 2013-2014**Unit:** Electrical Technology**Coordinator(s):** Bobby Royalty Jr, Karman Wheeler, Paul Turner**Reviewer:** Paul Turner

Objective or Outcome	Measure(s)		
	Measure Text	Achievement Target	Assess Month
Students will be able to evaluate optimal solar installation sites, and install simulated solar photovoltaic systems, both stand alone storage battery, and grid tie solar systems .	Use a lab rubric to assess students' ability to choose solar photovoltaic system site locations, including azimuth, inclination, and latitude; for optimum system performance.	All students performing a shading and solar irradiation study , using a solar (true south) evaluation tool will successfully evaluate various locations for solar arrays at a 90% success rate.	
	Comprehensive evaluation of simulator trainer project produced by students using a lab evaluation. Graded lab worksheet, and performance rubric used by the instructor.	The acceptable level of lab performance must be 90% or the lab will be repeated until 100% is achieved. To be performed and evaluated in the last part of April 2014 Spring semester.	April
SLO 1 - Students will demonstrate the competencies and ability to wire a workshop including organizational skills and improved efficiency.	Project Assessment - Students will demonstrate the competencies and ability to wire a workshop including organizational skills and improved efficiency.	This year's assessment of the project will focus on their organizational skills and improved efficiency in addition to developing a floor plan, take off (Materials list), install electrical metallic tubing and pull in associating wiring, high intensity lighting system, and overhead door motor system). A ten point rubric will be used with students scoring at least 80% on their project.	
SLO 3 (New) - Students will be able to convert relay logic to ladder logic, and programming PLCs.	Lab Assessments - from simple elementary: two line control, Low difficulty: three line control, moderate difficulty: AND,OR, NOR, XOR control; then students will program PLCs using three assessed labs with narratives describing conditions of control: moderate to high difficulty: timer, counter, program control. High difficulty: comparison, move, math functions, Complex advanced: shift registers, sequential output, integer files , data manipulation.	The first three assessed labs will be converting relay logic to ladder logic, ranging from simple elementary, low difficulty, and moderate difficulty. Students will program at an accuracy rate of 90% without supervision. The second group of labs using narratives describing conditions of control, ranging from moderate to high difficulty, high difficulty, and complex advanced control, will be programmed by students at a rate of 50% accuracy with limited supervision.	