

Assessment, Improvement, Measurement (AIM) Report: 01/28/2015

Plan Year: 2014-2015

Unit: Electrical Technology

Coordinator(s): Karman Wheeler, Paul Turner

Reviewer: Paul Turner

Objective or Outcome	Measure(s)		
	Measure Text	Achievement Target	Assess Month
Students will be able to choose solar photovoltaic system site locations, including azimuth, inclination, and latitude; for optimum system performance.	Rubric assessing the students' ability to perform a shading and solar irradiation study using a solar (true south) evaluation tool.	Students will successfully evaluate various locations for solar arrays at a 90% success rate.	May
Students will be able to convert relay logic to ladder logic, and programming PLCs.	Lab Assessments: 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. 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.	The first lab assessments - Students will program at an accuracy rate of 90% without supervision. The second group of labs - Students will program at a rate of 50% accuracy with limited supervision.	May
Students will be able to demonstrate all of the necessary competencies, organizational skills and ability to wire all types of structures per the National Electrical Code improving on techniques and efficiency.	Project Rubric - This year's assessment of the project will focus on the student's organizational skills, technique, safety and improved efficiency in addition to developing a floor plan, take off (Materials list), installing the appropriate wiring system(s) necessary to complete the job, locating and installing the appropriate lighting equipment and mechanical drive systems such as motors.	A ten point rubric will be used with students scoring at least 80% on their project and 100% on safety.	May