Assessment: Course Four Column

Courses (CTE) - Electrical Systems Technology

ELM 128:Transfrmrs & Ind Lighting

Course Outcomes	*Assessment Measures*	*Results*	*Actions*
Different types of transformers and their uses - Identify different types of transformers and their uses. **Course Outcome Status:** Active **Next Assessment:** 2023-2024	**Exam -** Students will visually identify various transformers and state their uses. **Criterion:** PPT visual exam 80%+ completion	**Reporting Period:** 2018-2019 **Criterion Met:** Yes 95% of students passed with 80% or above. (09/09/2019)	**Action:** Have students spend more time identifying transformers, online ID assignment. In class description exercise. (09/09/2019)
Calculate voltage and current values for single and three phase transformers - Calculate voltage and current values for single and three phase transformers. **Course Outcome Status:** Active **Next Assessment:** 2023-2024	**Exam -** Student will demonstrate competency with written test. **Criterion:** 80% accuracy	**Reporting Period:** 2018-2019 **Criterion Met:** Yes 85% of the student passed assessment. (09/09/2019)	**Action:** Spend additional time in class covering calculations. Introduce ElectriCalc. App for reinforcement. (09/09/2019)
Calculate transformer ratios - Calculate transformer ratios and excitation current with correct polarity indications. **Course Outcome Status:** Active **Next Assessment:** 2023-2024	**Exam -** Student will demonstrate competency with written test. **Criterion:** 80% accuracy	**Reporting Period:** 2018-2019 **Criterion Met:** Yes 87% of students passed assessment (09/09/2019)	
Connect a transformer with proper polarity of windings - Connect a transformer with proper polarity of windings. **Course Outcome Status:** Active **Next Assessment:** 2023-2024	**Demonstrate -** Student will physically and schematically connect transformer windings **Criterion:** 80% accuracy	**Reporting Period:** 2018-2019 **Criterion Met:** Yes 90% of students achieved schematically, 77% achieved physically (09/09/2019)	**Action:** More time needed on physical lab equipment, lab volt and actual transformers (09/09/2019)
Determine the voltage regulation of	**Exam -** Students will mathematically		

Course Outcomes	Assessment Measures	Results	Actions
a transformer - Determine the voltage regulation of a transformer **Course Outcome Status:** Active **Next Assessment:** 2023-2024	(written test) and wire physically connect Taps **Criterion:** 80% Accuracy	**Reporting Period:** 2018-2019 **Criterion Met:** Yes 90% of students passed with 80% or above. (09/09/2019)	**Action:** This course has been significantly impacted by the reduction in credits from 4 to 3, this reduction was implemented to reduce the overall degree credit requirements. This reduction poses concern related to student safety upon graduation. The credit reduction does not allow enough time to cover the necessary safety topics related to the course required competencies. (09/09/2019)