

## Course Outcomes Guide

**Course/Program Title: ELE 205 Repair and Maint. For Instrumentation    Date: 8/23/2012**

**Course/Program Team: Robert Fergesen & TCS**

### **Expected Learning Outcomes**

- Demonstrate knowledge of Instrumentation troubleshooting, repair and maintenance
  - Apply correct practice to installation, calibration and maintenance of instruments
  - Calibrate electronic transmitters and controllers
  - Configure instruments correctly to vendor instruction sheets
  - Apply Intrinsic safety techniques to instrumentation installation
  - Maintain instruments correctly
  - Troubleshoot, isolate and fix electronic instrumentation problems
  - Specify instrument and loop documentation requirements and standards to vendors
  - Apply ISO 9000 to maintenance practices
  - Carry out simple repair procedures for the correction of faults on instrument systems
  
- Exhibit professional/occupational behavior and work habits

**Assessment** (How do or will students demonstrate achievement of each outcome?)

- Exams
- Exercises and Assignments

**Validation** (What methods have you used or will you use to validate your assessment?)

The assessments will be validated by review from the following sources:

1. Faculty Peer validation
2. Industry validation through the Advisory Committee.

**Results** (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

The assessment will be planned at the end of the first semester this course will be offered: Spring 2013.

**Follow-up** (How have you used or how will you use the data to improve student learning?)

Assessment data will be gathered to be sure students are retaining key knowledge as required by future jobs in the industry. Additional course material or time will be added if scores do not show retention.

**Budget Justification** (What resources are necessary to improve student learning?)

None at this time.