

# Student Learning Outcomes Assessment Summary

## *Instrumentation Technology, Certificate*

CTC/CRCO

AY 2011-2012

Submitted by: Brian Ellingson  
Contact Information: 479-2436  
Date: September 20, 2012

### **1. Assessment information collected**

Prior to the SLOA revision made this year by the Instrumentation Technology program, student and employer surveys were utilized. The surveys were determined to be an inadequate assessment measure. Currently, new assessment measures have been established and are being collected for AY 2012-2013. These measures are included in the current SLOA. The creation of these new measures resulted from several meetings in which the instrumentation technology faculty discussed the students' performance on tests and skill demonstrations. Methods to improve the student learning and practice of key knowledge and skill areas were discussed. 2012-2013 will be the first year these new SLOA measures are collected and evaluated.

### **2. Conclusions drawn from the information summarized above**

The INST faculty met several times over the last year to discuss improvements needed to measure and document student assessment. The faculty identified key areas of the program that must be assessed to determine student comprehension and skill levels. These areas and measures were detailed in the recent student learning outcomes assessment. Documentation has been established to collect and evaluate the new assessment criteria.

### **3. Curricular changes resulting from conclusions drawn above**

The INST faculty review of the students' performance on tests and skill demonstrations resulted in suggestions that may improve student comprehension. These changes include;

1. Covering key Instrumentation Technology fundamentals (such as interpreting process and electrical drawings, and common safety practices) in all Instrumentation Technology program courses. It was determined that these important skills should be repeated in all of the Instrumentation Technology major courses to reinforce the learning.
2. Student's written work should be professional and reflect the industry standard of accurate and organized documentation. Students will be

responsible for maintaining this standard in all of their instrumentation technology courses.

3. Exercises will be performed to determine the student's comprehension and performance with instrumentation and control systems. Exercises on the full scale shop process unit will be evaluated and overall results documented. These results will be evaluated annually to determine student learning improvement opportunities.
4. Exercises will be performed to determine the student's comprehension and performance with instrumentation meters and test equipment. Exercises will be evaluated and overall results documented. These results will be evaluated annually to determine student learning improvement opportunities.
5. Establish instrumentation and control loop projects that students construct and discuss with the instructors to demonstrate knowledge and skills with instrumentation and control equipment.
6. Provide mock interview sessions and career services to help students prepare better for future employment opportunities.
7. New student learning assessments to be shared with the students to help them understand the importance of these key measures. Early feedback on the students' level of understanding to help them determine their progress towards the assessment goals.

**4. Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting**

Brian Ellington    Assistant Professor Process Technology

Teresa Lantz        Assistant Professor Process Technology

Robert Hook        Assistant Professor Process Technology

Dayne Ellana        INST Adjunct Professor