Sinclair Community College
444 E. Third St.
Dayton, OH 45402

Master Syllabus

OPT 1112 - World Class Quality Systems & Procedures

Division: Science, Mathematics and Engineering

Department: Operations Technology

Credit Hour Total: 4.0 **Lecture Hrs:** 3.0 **Lab Hrs:** 2.0

Date Revised: December 2012

Course Description:

Improve customer relations, measure products and processes, analyze current process control and capability and define and audit the quality management system. Three classroom, two lab hours per week.

General Education Outcomes:

- Oral Communication
- Written Communication
- Critical Thinking/Problem Solving
- Values/Citizenship/Community
- Computer Literacy
- Information Literacy

Course Outcomes:

Statistical Process Control and Capability
Develop and interpret basic control charts, evaluate process capability, and recommend changes to achieve continuous improvement.

Assessment Method: Locally developed exams
Performance Criteria: At least 70% of students achieve a score of 70% or better on questions related to these topics

Basic Tools of Quality
Describe and utilize the 7 basic tools of quality such as pareto, fishbone, histogram, run charts, etc. as they apply to product and process improvements.

Assessment Method: Locally developed exams
Performance Criteria: At least 70% of students achieve a score of 70% or better on questions related to these topics

Basic Metrology
Describe and utilize basic hand-held, bench, and process measuring equipment along with more advanced measurements using Coordinate Measuring Machines.

Assessment Method: Locally developed exams
Performance Criteria: At least 70% of students achieve a score of 70% or better on questions related to these topics

Outline:

Customer Relations
Quality Systems
Basic Tools of Quality
Basic Metrology
Coordinate Measuring Machines
Continuous Improvement
Quality Costs
Statistical Process Control and Capability
Quality Audits