MONROE COUNTY COMMUNITY COLLEGE
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# Outline of Instruction

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| **Division:** | Industrial Technology | **Area:** | Quality Systems Technology |
| **Course Number:** | QSTC 120 | **Course Name:** | Introduction to Quality Systems |
| **Prerequisite:** | None | | |
| **Corequisite:** | None | | |
| **Hours Required:** | **Class:** 45 **Lab:** 0 | **Credits:** | 3 |

## Course Description/Purpose

This course is designed to provide students with a working knowledge of the major systems of a modern industrial quality assurance program. Students will examine opportunities for quality improvement through the implementation of lean systems and mistake/error proofing. Emphasis will be placed on quality engineering elements dealing with quality planning, corrective and preventive action, measurement and continual improvement. Techniques used are relevant in manufacturing and service organizations.

## Major Units

- Basic Concepts
- Quality Costs
- Mathematics for Quality Control
- Quality Control Improvement - Management Controllable Defects
- Quality Control Improvement - Operator Controllable Defects
- Vendor Relations
- Production and Process Control

## Educational/Course Outcomes

Student learning will be assessed by a variety of methods, including, but not limited to, quizzes and tests, journals, essays, papers, projects, laboratory/clinical exercises and examinations, presentations, simulations, portfolios, homework assignments, and instructor observations.

**Cognitive** Each student will be expected to *Identify/Recognize* . . .
- a list of characteristics of successful quality control system in an organization
- list major elements for new product quality planning
- explain criteria and importance of selecting the supplier of production materials

**Performance** Each student will be expected to *Demonstrate/Practice* . . .
- analyze and determine appropriate use of control charts
- computer control limits, standard deviation, and capability factors for control charts
- capability to select between screening, sampling, and SPC to achieve the most effective product qualification method

**Attitudinal** Each student will be expected to *Demonstrate/Practice* . . .
- the importance of teamwork in a quality system
- the need to "sell" management on adopting quality improvement projects

QSTC 120-5/99:PJN:cs
Updated to 2006 Catalog 6/06