

Master Syllabus

OPT 1112 - World Class Quality Systems & Procedures

Division: Science, Mathematics and Engineering

Department: Operations Technology

Credit Hour Total: 3.0

Lecture Hrs: 2.0 **Lab Hrs:** 2.0

Date Revised: January 2017

Course Description:

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

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Written Communication Competency

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.

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

Continuous Improvement

Quality Costs

Statistical Process Control and Capability

Quality Audits