MONROE COUNTY
COMMUNITY COLLEGE

QSTC 230 (Documentation and Audit Preparation)

Course Information
Division	ASET
Contact Hours	45
Theory	45
Lab Hours	0
Total Credits	3

Prerequisites   **QSTC 111**

Course Description

This course examines techniques for the development and implementation of quality systems. Participants explore internal auditing techniques and preparation for third-party audits. The focus is on understanding quality system requirements and effective documentation alternatives to meet those requirements. ISO9000, ISO 9001, ISO 9002, ISO 9003, QS9000 (including the TE supplement), TS16949, ISO IEC 17025, NCSL/ISO Z 540.3, ISO14000 and other assessment criteria are defined and applications are explored for service businesses and manufacturing.

This course is a required course for students pursuing an AAS in the Metrology/Quality program..

Program Outcomes Addressed by this Course:

Upon successful completion of this course, students should be able to meet the program outcomes listed below:

A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.
B. Develop, operate, and manage quality control systems, including management of resources and customer relations.
C. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000).

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Course Outcomes

In order to evidence success in this course, the students will be able to:

1. Identify/recognize quality standards, elements of ISO, IEC, NCSLI, QS, and other standards.
Program outcomes linked:
    A. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000).

2. Identify/recognize various types of audits
Program outcomes linked:
    A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.
    B. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000)

3. Demonstrate and practice preparation for a plan for an audit.
Program outcomes linked:
    A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.
    B. Develop, operate, and manage quality control systems, including management of resources and customer relations.
    C. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000).

4. Demonstrate/Practice/Explain assembly of audit documentation needed prior to performance of various types of audits.
Program outcomes linked:
    A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.
    B. Develop, operate, and manage quality control systems, including management of resources and customer relations.
    C. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000)

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5. Demonstrate/Practice understanding of the audit process by conducting a simulated quality or calibration laboratory audit.

Program outcomes linked:

    A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.

    B. Develop, operate, and manage quality control systems, including management of resources and customer relations.

    C. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000)

6. Demonstrate/Practice an understanding of the importance of the maintenance of proper documentation of quality related activities and the retention of data.

Program outcomes linked:

    A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.

    B. Develop, operate, and manage quality control systems, including management of resources and customer relations.

    C. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000)

7. Demonstrate/practice/explain the reasons why quality audits are important to the manufacture, and sale of quality products to customers; this should include public safety, maintenance of marketshare, customer satisfaction, and product reliability and functionality.

Program outcomes linked:

    A. Summarize calibration results, and quality concepts, then communicate these to engineering customers and others.

    B. Develop, operate, and manage quality control systems, including management of resources and customer relations..

    C. Review quality auditing and the principles for meeting domestic and international standards (e.g. ISO/IEC 17025, NCSLI/ISO Z540.3, TS 16949, ISO 9001, ISO 9002, ISO 9003, ISO 14000, QS 9000)

Date Updated: 4/16/2019
By: Michael L. Taylor