

**Certified Quality Technician and Mechanical Inspector
Refresher Class Syllabus
QCTC 1008 [formerly QCTC 2033]**

Instructors: Phil Flories and Tim Streiner

Phone: 303-3686 (Phil Flories, Lead Instructor)

Place: Highland Business Center

Room: TBD

Length of Course: 48 Hours

Course Description:

This course is a refresher study of the Body of Knowledge for the Certified Quality Technician and the Certified Mechanical Inspector. Topics include certification overview, quality concepts, quality tools, metrology, sampling, inspection & test, control charts, auditing, prevention and improvement techniques, and quality statistics. The student will focus on the theory and application of these quality skills by studying the assigned materials, participating in class room discussions, and practicing with questions similar to those on the actual CQT and CMI exams. Sample exam questions and their answers will be reviewed in class and/or as homework to increase the student's ability to understand and correctly answer exam questions.

Objective: This course prepares students for the American Society for Quality (ASQ) "Quality Technician or Mechanical Inspector" certification. Passing the examination will grant certification. Since the course is intended to be a refresher course, students are expected to have some familiarity with most elements of the body of knowledge through work and/or educational experience.

Rationale:

The CQT & CMI refresher course is offered to equip the quality professional to successfully pass the ASQ CQT & CMI exam. By obtaining the certification, the quality professional will improve quality in the Austin area.

Evaluation:

The evaluation criteria is passing grade on the CQT & CMI exam practice exams.

Texts:

Certified Quality Technician Primer or *Certified Mechanical Inspector Primer* with *Solution Text* from Quality Council of Indiana (812-533-4215)

Lexicon of Quality Terms for CQE, CQT, CMI by Brenden Duffy (409-722-6241)

Optional, and recommended: Cliff's *Math Review for Standardized Tests* (at most book stores)

Prerequisites for CQT/CMI Refresher Class

- Be sure you are qualified to take the exam. This will be covered the first day of class and is contained in the Certified Quality Technician brochure or Certified Mechanical Inspector brochure from ASQ. ASQ will provide a copy free of charge by calling their toll free number 800-248-1946. Also available on the ASQ website www.asq.org
- Obtain written course materials: *CQT and CMI Primers* are available from Quality Council of Indiana . If the class wishes to combine orders, we may e able to obtain some discount on these primers. Another book, *Math Review for Standardized Tests*, is optional, but is highly recommended.
- Fill out the exam application and enclose payment to sit for the exam. See the exam application, contained in the ASQ brochures, or obtainable at ASQ's web site (<http://www.asq.org/standcert/cert.html>) for costs. The deadline for applying for the exam is also on the web site or available by calling ASQ.

Class Recommendations

- Attend class: Since this is a Continuing Education course, there is a requirement for you to meet the contact hours (48) for the class. Role will be taken at each class and must be submitted to ACC. If you must be absent, please notify the instructor so that you will receive all materials and have all questions answered.
- Develop and use good study habits. It is recommended that you spend at least the same amount of time studying and reading outside class as in class.
- Take practice exams at home. Go through all questions in the blue pages of the primer and try to select the right answer. It is OK to use the other pages for reference, as in the real exam, but time yourself. You have to answer an average of one question every 1.5 minutes.
- Read material before the class in which they are covered. The course schedule shows what parts of the Primer are to be covered in class.

Session No.	Instructor	Topic	Primer Section	
			Section	Pages
1	Phil Flories	Introduction to CQE and CMI & Math Concepts	I	All
2	Tim Streiner	Quality Concepts	II	All
3	Phil Flories	Quality Tools	III	All
4	Phil Flories	Metrology & Sampling	IV & V	All
5	Tim Streiner	Inspection and Test & Blueprint Reading	VI & VII	All
6	Tim Streiner	Quality Audits	X	All
7	Phil Flories	Basic Statistics	VIII	1-20
8	Phil Flories	Basic Statistics	VIII	21-43
9	Phil Flories	Hypothesis Testing	VIII	All
10	Phil Flories	Control Charts	IX	All
11	Phil Flories	Prevention and Correction	XI	All
12	Phil Flories	Final Review	All	All