REGULAR COURSE SYLLABUS

School of Professional Studies

Department: Engineering Technology Studies

Semester(s) Offered: Fall/Spring

Prefix & Course Number: MET 1310  Crosslisted With*: ___

Course Title: Principles of Quality Assurance

Credit Hours: 3 (3+0)

Contact Hours: Lecture 45  Lab 0  Internship  Practicum ___

Schedule Type(s): L  Grading Mode(s): L

Repeat* (Variable topics): ___

*(Pertinent only if the course can be repeated; enter maximum number of hours that can be earned by taking this course.)

Restrictions (Variable Topics Course): NONE

Prerequisite(s): Intermediate algebra or equivalent with a grade of "C" or better

Corequisite(s): NONE

Prerequisite(s) or Corequisite(s): NONE

Banner Enforced:

Prerequisite(s): Intermediate algebra or equivalent with a grade of "C" or better.

Corequisite(s): NONE

Prerequisite(s) or Corequisite(s): NONE

Catalog Course Description:

The course introduces the scope and function of quality assurance, including basic definitions, statistics, quality policy and objectives, manuals and procedures, concept of variation, inspection and sampling techniques, metrology process control, methods and the elements of reliability. Current (TQM) and ISO 9000 standards are reviewed.

Required Reading and Other Materials will be equivalent to (Title, Author, Publisher, Copyright Date):


APPROVED:

Department Chair/Institute Director

Kathy Healy  8/10/05

Dean

Amanda C. Lewin  9/28/05

Associate VP, Academic Affairs

Date

*If crosslisted, attach completed Course Crosslisting Agreement Form
Prefix and Course Number: MET 1310

**SPECIFIC (MEASURABLE) STUDENT BEHAVIORAL LEARNING OBJECTIVES:**

Upon completion of this course the student should be able to demonstrate:

1. Quality Control Statistical Techniques and Responsibilities, as well as, Become familiar with ISO 9000 Standards.

**OUTLINE OF COURSE CONTENT** (Major Topics and Subtopics):

1. Fundamental Statistics
   A. Central Tendency/Dispersion
   B. Population, Sample and Normal Curve
   C. Control Charts, Specs and Process Capability
   D. Probability fundamentals

II. Process Applications
   A. Attributes/Variables
   B. Non Conformity Control Charts
   C. Sampling Plan Concepts, Including MIL-STD-1050
   D. Reliability

III. Quality Management Techniques
   A. Quality Costs
   B. Improvement Techniques
   C. Total Quality Management
   D. ISO 9000 Manual,

**EVALUATION OF STUDENT PERFORMANCE:**

25% Quizzes
30% Exam
20% Final Exam; and
25% Quality Manual Project.