

Master Course Syllabus

Department: Engineering Technology **Course Prefix/Number:** MQL 524

Official Course Title: Statistics for Quality

Master Syllabus Approved by Department on: 10/26/2005

I. Catalog Description: Introduction to decision making for technologists using quantitative methods. The emphasis will be on identifying opportunities for process/product improvement in manufacturing using statistical applications. Besides exploratory data analysis, basic probability, distribution theory and statistical inference will be covered. Special topics will include experimental design, regression, control charts and acceptance sampling.

II. Prerequisites:

III. Expanded Course Description: This is a course in statistics for technologists with emphasis on modern product improvement techniques. Besides exploratory data analysis, basic probability, distribution theory and statistical inference, special topics include experimental design, regression, control charts and acceptance sampling.

IV. Knowledge Outcomes:

- Recognize the broad applicability of statistics to engineering.
- Learn methods of descriptive statistics.
- Learn the probability concepts underlying inferential statistics.
- Learn methods of inferential statistics.
- Learn methods of building statistical models.

V. Unless otherwise stipulated in this master syllabus by the department, the following items are subject to faculty discretion as described in each faculty member's individual course outline/syllabus:

- a) Course Requirements? (grading/evaluation procedures; class attendance policy; term papers, projects, field assignments; examinations; class participation, etc.)
- b) Required Text(s)?
- b) Bibliography?

Department Head Signature/Date:

Signature

_____/_____/_____
Date