Master Course Syllabus

Department: Engineering Technology **Course Prefix/Number**: MQL 546
Official Course Title: Manufacturing Systems Management
Master Syllabus Approved by Department on: 08 / 11 / 04
month date year

I. **Catalog Description**: A study of concepts and models used as a competitive advantage in the management of processes to produce and supply goods in the manufacturing/ service industries. Topics will include operations management & strategy, product design & learning curves, project management, Manufacturing/Service process selection and design. Applications of Operations Research science techniques enable the development of the Manufacturing Systems Management methodologies.

II. **Prerequisites:**

III. **Expanded Course Description:** Manufacturing Strategies, Logistics Management, Total Quality Management, The Internet and Manufacturing and Analysis of Manufacturing Systems focus on the development of state-of-the-art methodological skills, which will help the student in dealing with the variety of problems manufacturing managers encounter in industry. Students will have an opportunity to work on a term project, which improves their ability to implement their knowledge in solving real problems.

IV. **Knowledge Outcomes:** Students are expected to have a working knowledge of the importance of the following topics; operations management & strategy, product design & learning curves, project management, Manufacturing/Service process selection and design. Additionally, the role of technology in the type of process (project, batch, mass, or continuous) used by a particular manufacturer will be included. Metrics for managerial decision making will include; process analysis, job design & work measurement, waiting line measurement, quality measurement & six sigma, lean production

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