

Master Course Syllabus

Department: Engineering Technology **Course Prefix/Number:** MET 216

Official Course Title: Introduction to Manufacturing Systems

Master Syllabus Approved by Department on: 01 / 30 / 09
month date year

I. **Catalog Description:**

A study of organizational and production techniques used in manufacturing. A thematic team approach will be used to design and produce a product using principles of mass production. Concepts of manufacturing that will be studied will include: principles of tooling, quality, plant layout, resource planning and scheduling. Lab fee \$10.

II. **Prerequisites:** None

III. **Expanded Course Description**

Manufacturing systems will provide an overview of the major areas of manufacturing including quality, tooling, workflow, safety, planning, human factors, systems and personal management involved in the manufacturing process.

IV. **Intended Student Learning Outcomes:** Upon completion of the course, students will be able to:

1. Demonstrate their knowledge of tooling design concepts by producing working drawings of jigs and fixtures to address production needs
2. Demonstrate their knowledge of human factors and work design by performing in-depth analysis of manufacturing processes and optimizing those processes to increase performance and reliability.
3. Understand and explain the concepts of project management and systems theory as they apply to a manufacturing system
4. Demonstrate processing planning by identifying and procedurelizing the production process to create defined parts and products
5. Demonstrate their understanding of quality as a system to control the production process and inspect
6. demonstrate skills necessary to function in a team environment while design and producing and using a manufacturing system.

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?

VI. Academic Honesty: Cheating, plagiarism (submitting another person's materials or ideas as one's own), or doing work for another person who will receive academic credit are all-impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were the student's own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

VII. Students With Disabilities Policy: It is the policy of Tarleton State University to comply with the Americans with Disabilities Act (ADA) and other federal, state, and local laws relative to the provision of disability services. Students with disabilities attending Tarleton State University may contact the Office of Disability Services at (254) 968-9478 to request appropriate accommodation. Furthermore, formal accommodation requests cannot be made until the student has been officially admitted to Tarleton State University.

Department Head Signature/Date:

Signature

_____/_____/_____
Date