

Course Syllabus
Southeast Missouri State University

Department of Industrial Technology

Course Number: MN - 416

Title of Course: Manufacturing Seminar

Revision: Fall 1999

Instructor:

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I. Catalog Description and Credit Hours of Course:

An advanced level course consisting of a structured review of manufacturing engineering principles, including mathematics, physics, engineering science, drafting and design, engineering economy, safety and human factors, quality, and others. The course will prepare the student for the national certifying examination in manufacturing technology.
(3)

II. Prerequisites:

Students must have senior class status with 16 hours remaining before graduation and have a cumulative grade point of C or better.

III. Purposes of the Course:

The overall goal of this course is to prepare the student to successfully complete the Certified Manufacturing Technologist (CMfgT) examination. Develop an efficient strategy for taking the SME certification examination, organize the course materials into a useful reference document, become proficient in the use of industry standard handbooks, improve the ability to locate, access, filter and apply technical information, develop effective techniques for the analysis of problems and the synthesis of correct or appropriate solutions to those problems.

IV. Expectations of students:

- A. Homework Assignments - Homework consists of text readings and selected problems drawn from the course texts and the body of manufacturing knowledge the student is expected to master at the technologist level.
- B. Exams - Twelve unit examinations and one practice examination will be administered. All examination questions and problems will be taken from the SME text or Machinery's Handbook. The examinations will closely parallel the actual SME Certification Examination in both content and administration. Students will be permitted to use

course texts and reference materials on all examinations.

- C. Reference Binder - You are required to develop and maintain a course reference binder. An appropriately organized reference binder will help in keeping course materials organized.

V Course Content	Weeks
Course Overview, Orientation & Syllabus	1
Test 1 - Mathematics, Vectors & Units	2
Test 2 - Light and Sound	3
Test 3 - Heat and Electricity	4
Test 4 - Statics, Dynamics and Strength of Materials	5
Test 5 - Fluid Mechanics	6
Test 6 - Engineering Drawing & Tolerances	7
Test 7 - Statistics and Quality	8
Test 8 - Engineering Economy & Human Factors	9
Test 9 Engineering Materials & Manufacturing Processes	10
Test 10 - Management, Economics & Strategic Issues	11
Test 11 - Computer Applications & Automation	12
Test 12: Practice SME Certification Examination	13
SME Certification Examination	14
SME Examination	15-16

VI. Textbook:

Green, R.E. (Ed.). (1992). Machinery's handbook (24th ed.). New York: Industrial Press.

Society of Manufacturing Engineers. (1993). Fundamentals of Manufacturing. Dearborn, MI: Author.

VII. Basis For Student Evaluation:

Students will be evaluated based on the following basis.

Activity	
1. Reference Binder (1)	100 Points
2. Unit Examinations (12 @ 50 points each)	600 Points
3. Practice Examination	150 Points
4. Instructor Evaluation	50 Points
	900 Points
Total Possible	

Letter grades will be based on your demonstrated performance in all aspects of the course. The standard University grading scale will be used .

90 - 100 = A
 80 - 89 = B
 70 - 79 = C
 60 - 69 = D
 Below 60 % = F.

VIII. Disabilities Statement:

If you have special needs addressed by the Americans with Disabilities Act and need course materials in alternative format, notify your course instructor immediately. Reasonable efforts will be made to accommodate your special needs.