

**SYLLABUS Fall 2009**  
**Southern Illinois University**  
**Barksdale AFB, Louisiana**

**COURSE:** IT-208, Fundamentals of Manufacturing Processes; 3 credit hours.

**COURSE DESCRIPTION:** This course introduces the basic processes, equipment, and material used in industry. It covers various processes done in manufacturing with materials such as metals, plastics, and composites. The equipment used to transform these materials is also examined.

**COURSE INTRODUCTION AND STUDY TECHNIQUES:** This course covers a large range of topics in various types of manufacturing. It gives a broad outline to the subject matter without delving too deeply into any one topic however the text is large and can be overwhelming if you allow it to be so. Reading the assigned chapters, videos, classroom exercises, and lectures will assist the student in making this a good learning experience. The instructor will draw on his past experience in manufacturing, and ask for the students' input to assure that the material is better understood. The student needs to prepare by reading the assignments and doing the assigned homework before coming to class. Know the terminology, as **this is a survey course.** We will not be covering complicated technical data. As you are reading, keep this in mind.

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**CLASS MEETINGS:** November 7 & 8, 21 & 22, December 5 & 6.

**REQUIRED TEXT:** Manufacturing Engineering & Technology, 6th Edition, by Kalpakjian & Schmid, ISBN# 0-13-148968-5,

**EVALUATION OF STUDENT PERFORMANCE:**

Grading:      A-----90-100%  
                  B-----80-89.9%  
                  C-----70-79.9%  
                  D-----60-69.9%  
                  F-----Below 60%

Grades will be calculated using the following formula:

Test #1: 25 %

Test #2: 25%

Test # 3: 25%

Quizzes & Homework (combined): 10%

Class Project: 15%

**ATTENDANCE:** Students are required to attend all classes. Those absent with a valid excuse will be required to turn in a homework assignment covering the missed material. If more than two classes are missed, the student will be dropped from the course. Up to two days of the course can only be missed with the approval of the instructor with as much advance notice as possible.

**COURSEWORK:** All work must be completed by the due date as assigned in the attached homework schedule. Quizzes or tests may occur at the start of a class day, so having done the assigned material is necessary for good classroom performance.

**INCOMPLETE GRADES:** Students should read and understand the University policy as described in the “Undergraduate Catalog”.

**EXAMS AND QUIZZES:** Will be multiple choice and T/F, with possibly an occasional essay question. The tests will cover assigned reading and lectures. No comprehensive final exam is given.

**CLASS PROJECT:** An oral and written presentation of a topic covered in lectures or the text will be due at the beginning of the final class day: December 6. The project may be done as a group (up to three per team), or as an individual project. Projects will be graded according to skills in oral presentation, research of the subject, analysis, and college level writing ability. More details on this project will be covered on the first day of the course.

## **HOMEWORK SCHEDULE, IT-208, Fall 2009**

### **WEEKEND 1**

Read the Intro, and Parts I & II covering chapters 1-12 (through pg.309).

Answer the following review questions:

1.18	Page 54
2.1, 2.3	Page 84
3.3, 3.6	Page 98
4.8, 4.14	Page 127
5.10, 5.11	Page 148
6.1, 6.5, 6.11, 6.13	Page 169
9.3	Page 232
10.1	Page 254
11.1	Page 291
12.10	Page 309

There will be a quiz on Sunday morning, covering Part I. Test #1 will be on Sunday P.M. covering Parts I & II. Homework is due prior to the test.

### **WEEKEND 2**

Read Parts III, & IV. covering chapters 13-17 & 19-27 (through pg. 785).

Answer the following review questions:

13.1	Page 333
14.1, 14.10	Page 358
15.2	Page 379
16.5, 16.16	Page 434
17.1	Page 463
19.2, 19.3	Page 523
21.13	Page 588
22.1	Page 613
23.2	Page 656
24.1	Page 690
25.1	Page 717
26.3	Page 756
27.4, 27.8	Page 785

There will be a quiz on Saturday, covering Part III, and Test #2 on Sunday, covering material in Parts III & IV. Homework is due prior to the test.

### **WEEKEND 3**

Read Parts VI through IX, covering Chapters 30-40 (through pg. 1162)

Complete these problems:

30.8	Page 898
31.4	Page 919
33.2	Page 971
34.10	Page 994
35.8, 35.9	Page 1018
36.1	Page 1046
37.3	Page 1091
38.2	Page 1116
39.7	Page 1134
40.10	Page 1162

Test #3 will be on Sunday, covering all the Weekend 3 Chapters. Homework is due prior to the test. The Class Project written report is due at the beginning of the last day.