ME 477
MANUFACTURING PROCESSES
Spring 2007 SEMESTER
MW 4:10 – 5:30 PM, Room 2400 Engineering Building

Instructor: Alfred C. Loos
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Office Hours: MWF 1:30 – 2:30 PM, Other times by appointment

Prerequisites: ME 222 (Mechanics of Deformable Solids) and MSE 250 (Materials Science and Engineering)
Course Website: http://www.angel.msu.edu
http://www.egr.msu.edu/classes/me477/aloos

Course Description: Fundamentals of manufacturing processes such as casting, heat treating, particulate processing, forming, machining, joining, and surface processing. Selection of manufacturing processes based on design and materials.

COURSE RULES

CLASS PREPARATION
The student is expected to keep up with the daily reading assignments and to do all of the assigned homework problems. The reading assignments for each class period are given in the class schedule. A DVD entitled Fundamental of Manufacturing Processes is included with each text book. The videos should be viewed before the class lecture on that topic.

HOMEWORK
There will be one homework set assigned each week. The assignment and the due date will be discussed in class and posted on the course web site. The homework solutions will be discussed in class. Late homework will not be accepted except for a valid emergency. Failure to do the homework will have a significant impact on your final grade.

All homework assignments are to be done neatly, in pencil, on 8 ½” by 11” paper. Make sure that your name, the course number, the assignment number and the due date appear on the upper right-hand corner of your homework. Please staple all loose pages together.

If you have difficulties with the assigned homework, you may discuss the problem with your fellow classmates. Direct copying of homework from solutions of any kind is never acceptable. The Department of Mechanical Engineering Plagiarism Policy can be viewed at:

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PROJECT
Research the manufacturing of a product or an advanced manufacturing process. The product must require at least 3 distinct manufacturing processes covered in the course. At least 3 example products that can be manufactured by the process must be given. Prepare a formal report and a 10 minute presentation of your research. Each project team will have 4 to 5 students.

TESTS AND FINAL EXAMINATION
There will be two tests during the semester. The tentative test dates are shown on the schedule. Make-up tests for students with an excused absence must be arranged prior to the test date. The final examination is scheduled for Monday April 30, 5:45 – 7:45 PM. The tests and final exam will be open book, closed notes.

ACADEMIC HONESTY
Article 2.3.3 of the Academic Freedom Report states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the ME Department adheres to the policies on academic honesty as specified in Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. (See Spartan Life: Student Handbook and Resource Guide and/or the MSU Web site: www.msu.edu.) Students who plagiarize may receive a 0.0 on the assignment or fail the course or receive more severe sanctions.

DROPS AND ADDS
The last day to add this course is the end of the first week of classes. The last day to drop this course with a 100 percent refund and no grade reported is Friday, February 2, 2007. The last day to drop this course with no refund and no grade reported is Wednesday, February 28, 2007. You should immediately make a copy of your amended schedule to verify you have added or dropped this course.

GRADING POLICY
Homework 10%
Project 15%
Two Tests 50%
Final Exam 25%
100%

The final grades will be assigned are as follows:
90-100% = 4.0, 85-89% = 3.5, 80-84% = 3.0, 75-79% = 2.5, 70-74% = 2.0, 65-69% = 1.5, 60-64% = 1.0, 0-59% = 0.0

It is possible that there will be some adjustments to the final grades depending on the class average.

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