

MSE 2001F: Principles and Applications of Engineering Materials
Spring, 2008
Tu & Th 12:05-1:25 PM
Room 185, Love Building

Instructor: Dr. Valeria Tohver Milam

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OFFICE HOURS: Tu & Th 1:30-2:30

COURSE DESCRIPTION: This course will address the fundamentals of structure-property-processing relationships in engineering materials and relate these fundamentals to the performance of the materials.

Prerequisites: CHEM 1310 or CHEM 1102 or CHEM 1112

TEXTBOOK: James P. Schaffer, Ashok Saxena, Stephen D. Antolovich, Thomas H. Sanders, Jr. and Steven B. Warner, *The Science and Design of Engineering Materials*, Second Edition, Irwin, Chicago, IL, 1999.

LECTURES: The lectures will follow the material presented in the text and will be supplemented with additional concepts, examples and demonstrations for clarification. Students are strongly encouraged to read textbook material prior to class. **Please turn off cell phones, pagers, etc. before entering the classroom.**

POP-QUIZZES: To encourage regular class attendance and review of lecture material, pop quizzes will be given during class. Quizzes will cover any lecture material presented since the previous quiz. Quizzes will not cover problem sets and will not require a calculator. At the end of the semester the lowest two quiz grades will be dropped. There will be NO makeup quizzes.

SUGGESTED PROBLEM SETS: Suggested problem sets from the textbook will be given at the beginning of each class. It is the responsibility of each student to keep up with all assignments, however, these problem sets will NOT be collected or graded. Select problems and examples will be covered in class. Examinations will be based on lecture material, the suggested problem sets, textbook reading assignments and example problems provided in the assigned chapters. A review session will be scheduled prior to each examination to accommodate the maximum number of students. In fairness to all students I will not answer ANY questions regarding material for an examination on the day of the exam.

REVIEW SESSIONS: If there is sufficient interest, an optional review session (Q&A) will be scheduled approximately every three weeks to answer questions regarding lecture material, textbook material, or assigned problems. A vote for suitable days and times will be taken in class on Thursday, January 10th.

MAKEUP CLASS: It is likely that class on April 1st will be cancelled. A vote for make-up class options will be taken on Thursday, January 10th.

EXAMINATIONS: There will be three in-class, closed book and notes examinations during the semester and a comprehensive final exam. If a student has a legitimate conflict, a makeup exam must be rescheduled by that student at least one week prior to the examination day. Calculators will be provided by the instructor. Personal calculators can not be used.

SPRING 2007 EXAM SCHEDULE AND TENTATIVE CHAPTERS COVERED:

Exam 1: Tuesday, February 12th (Chpts 1-3)

Exam 2: Thursday, March 13th (Chpts 4-6)

Exam 3: Thursday, April 17th (Chpts 7 & 9)

The final exam is tentatively scheduled for May 1st, 8:00-10:50am.

GRADE: Your final grade will be computed based upon your performance and scaled according to the following scheme:

Pop Quizzes – 10%

Exam 1 - 20%

Exam 2 - 20%

Exam 3 - 20%

Final Exam (Comprehensive) - 30%

The following is my “minimum grade” guarantee for the course:

90-100% No less than an “A”

80-89% No less than a “B”

70-79% No less than a “C”

60-69% No less than a “D”

Less than 60% No less than a “F”

For example, if your course average is 89%, then your course grade will not be less than a “B”. A class curve is NOT guaranteed and CANNOT be predicted.

Note: Students who are taking this course on a P/F (pass/fail) basis, a passing grade is C. If your average is below C you will receive a F in the course.

ACADEMIC INTEGRITY

In this course students are encouraged to study together. This policy includes working together on the assigned problem sets.

Students are to neither receive nor provide help to others during exams.

The use of programmable calculators is not allowed during exams.

Any student suspected of academic misconduct will be referred to the Office of Student Integrity at the Georgia Institute of Technology.