

SOUTHEASTERN LOUISIANA UNIVERSITY

Department of Computer Science and Industrial Technology

IT 322 (Section 01) - Material Science and Metallurgy Fall 2007

Instructor:	Dr. Junkun Ma
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Lecture Time:	10:00AM – 11:50AM MW
Office Hours:	03:00PM – 05:00PM MW 09:00AM – 11:00AM TuTh 04:00PM – 05:00PM TuTh Other times by appointment

Course Description:

This course will introduce various materials including metals, plastics and ceramics, their properties and applications in industrial production environment. Experiments designed to functionally exam the mechanical, physical, and chemical properties will also be presented. Three credits will be awarded upon successful completion of this course.

Course Objectives:

1. To develop a basic understanding of the structure and properties of various major materials used in industry production.
2. To provide students with knowledge of applications of materials in construction and manufacturing industries.
3. To provide students with an understanding of the physical laws and principles that governs the behaviors of materials.
4. To develop within each student a measurable degree of competence in testing and evaluating materials.

Course Materials:

Textbook: Helsel, Larry and Liu Peter, *Industrial Materials*, The Goodheart-Willcox Company, Inc, Tinley Park, Illinois (2001).

Lab Manual: Material testing experiments will be provided as the semester goes.

Grades:

1. Grades will be assigned according with the departmental scale.
93-100 = A, Superior
85-92 = B, Very Good
77-84 = C, Average

69-76 = D, Below Average

0-68 = F, Failure

Note: Students **MUST** score a "C" or above in all courses within their major. Otherwise, they must repeat the course.

2. Basis for assigning grades:

a.) Tests: 300 Points

Note: All students are to take tests on the specified date and time. Students with unexcused absences will Not be able to make-up tests, quizzes and lab assignments!
A grade of Zero (0) will be assigned!

b.) Quizzes: 60 points

c.) Laboratory grade: 100 points

Note: Ninety (90) points of the lab grade will be awarded for the written laboratory assignments. Ten additional points will be awarded at the discretion of the instructor for safe and efficient work habits, time management, the proper use of tools and equipment, and the ability of the student to work as an integral part of a team. If you have any problem with this grading system, please make an appointment to talk with me immediately!

d.) Article reviews: 40 points

Important Dates and Notes:

1. Students will NOT automatically be dropped from class. Students who choose to drop must do so by the semester deadline! Friday, Oct. 19, 2007 is the last day to withdraw from classes.
2. The final exam for this class will be on Wednesday, Dec. 5, 2007 10:15AM-12:15PM.
3. Monday, Nov. 12 to Friday, Nov. 16, 2007 is early registration period for the Spring 2008 semester.
4. If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to self-identify with the office of Disability Services, Room 203, Student Union. No accommodations will be granted without documentation from the Office of Disability Services.
5. Student behavior/Classroom decorum: "Free discussion, inquiry, and expression is encouraged in this class. Classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Examples may include routinely entering class late or departing early; use of beepers, cellular telephones' or other electronic devices; repeatedly talking in class without being recognized; talking while others are speaking; or arguing in a way that is crossing the civility line." In the event of a situation where a student legitimately needs to carry a beeper/cellular telephone to class, prior notice and approval by the instructor is required." Otherwise,

ALL PAGERS, BEEPERS, CELLULAR TELEPHONES AND OTHER ELECTRONIC DEVICES ARE TO BE TURNED OFF OR TURNED TO

SILENT MODE BEFORE YOU ENTER THE CLASSROOM.

Classroom behavior that is deemed inappropriate and cannot be resolved by the student and the faculty member may be referred to the Office of Judicial Affairs for administrative or disciplinary review as per the Code of Student Conduct which may be found at http://www.selu.edu/admin/stu_affairs/handbook/.

6. Academic Integrity: Students should note that repercussions of academic integrity are discussed in the university catalogue. "Cheating on examinations, plagiarism, improper acknowledgment of sources in essays and the use of a single essay or paper in more than one course without permission are considered very serious offenses and shall be grounds for disciplinary action".
7. The students Southeastern Louisiana University e-mail address **MUST** be used for all e-mail communication between students and faculty/administration/staff. Students are encouraged to check their Southeastern e-mail frequently for important communications from the university.
8. University policy states that the lab is not a place for children. Students are not to bring their children to the lab.

Course Requirements:

1. Adherence to departmental policies and procedures, which you were provided.
2. Regular and punctual class attendance. Students who have unexcused absences will receive the grade of zero (0) for all tests, quizzes, and/or lab experiments missed.
3. Students must provide their own safety glasses or goggles. Glasses or goggles **MUST** meet standard Z87 to be considered "Safety" glasses or goggles. Only those glasses or goggles with Z87 clearly imprinted on them are acceptable. Also, they **MUST** be equipped with side shields, **MUST** be clear and un-tinted, and **MUST** be in good condition. All forms of eye protection **MUST** be inspected and approved by the instructor prior to their initial use in the lab.
4. Sandals or other forms of "open" footwear are **NOT** permitted in the Materials lab.
5. Students who are not properly attired or do not possess approved eye protection will **NOT** be allowed in the lab and will receive a grade of zero (0) for the days' activity. Students must realize that their safety and that of their classmates is most important!
6. Students are to complete lab assignments in a timely fashion. Students are to turn in the study questions of each lab experiment completed by the beginning of the next class period. Students are to begin and end lab-work according to the class schedule. Students, who fail to utilize their time effectively, perform incomplete experiments, begin their work late, leave the lab early or submit their experiments late will have their lab grade penalized.