

EEL 3394: Electronic Materials; Spring 2006

Instructor: Dr. Rudy Schlaf

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Office Hours: M:4-6pm/W:2-4pm. Check lab (ENB 351) if I am not in the office.

Teaching Assistant: TBA

Office hours: TBA

Location: TBA

COURSE OBJECTIVE:

This course is designed to extend basic concepts learned in general chemistry and physics to students in electrical and computer science and engineering. This will lay the foundation to understand electronic properties of materials used in today's and future electronic devices. The basic principles of materials will be studied in order to form a theoretical foundation needed for subsequent electronics and device courses.

Pre-requisites for this course:

Physics I, Chemistry I and Calculus I&II

COURSE STRUCTURE:

One lecture per week on Mondays.

Location: CHE 111

Time: 6:00 – 8:50 pm

BOOK:

S.O. Kasap: "Principles of Electrical Engineering Materials and Devices", McGraw-Hill/Irwin, 3rd Edition. The 1st and 2nd editions can be used, but students need to be aware that some chapter and example/problem numbers were changed between editions. It is the student's obligation to keep track of such and other changes if old editions are used.

STUDENTS' OBLIGATIONS:

Read appropriate sections in the book before each lecture.

Understand all examples given in the text. Do the problems. THE QUIZZES AND EXAMS WILL BE BASED ON THE PROBLEMS!! Study the old quizzes and exams posted on MyUSF/Blackboard to get an idea.

Students are responsible for supplementary material presented in class that may not appear in the book.

COMMUNICATION POLICY:

The instructor will use MyUSF/Blackboard (URL: <https://my.usf.edu>) as main communication channel for announcements and course materials. All students are expected to check MyUSF/Blackboard at least once every 48 hours for course announcements. Also, it is the student's responsibility to make sure that emails through blackboard are received (i.e. make sure your accounts are not overflowing etc..., or have your email forwarded to your off-campus accounts).

GRADING/GRADING POLICY:

Final Grade:	2 Exams; No final exam.	~80%
	Approximately 6 quizzes	~20%

Grades will be assigned according to the following approximate scale:

A	>90%
B	80-89%

C	70-79%
D	60-69%
F	<60%

-There will be two non-comprehensive exams. Dates and details will be announced one week prior to each test. Please, study the previous exams posted on MyUSF/Blackboard. This semester's exams will be similar in style and difficulty.

-Make-up exams will be given only under very special circumstances. Appropriate documentation in writing (doctor's certificate, police report etc...) will have to be provided by the students. The documents are to be given to the TA who will archive them until the end of the semester.

-Quizzes will be given on approximately every second Monday. Tentative dates are given below. Study the old quizzes and exams posted on MyUSF/Blackboard to get an idea.

TENTATIVE SCHEDULE:

Week	Dates	Book Sections
1	Jan 9	1.1, 1.2, 1.3, 1.4
2	Jan 16	Martin Luther King Jr Day
3	Jan 23	1.5, 1.6, 1.7 Quiz#1
4	Jan 30	1.8, 1.10, 1.11
5	Feb.6	2.1, 2.2, 2.3, 2.5 Quiz#2
6	Feb 13	2.6, 2.7
7	Feb 20	3.1, 3.2, 3.3 Quiz#3
8	Feb 27	3.4, 3.5, 3.6, 3.7, 3.8, 3.9
9	Mar 6	Exam I
10	Spring Break	
11	Mar 20	4.1, 4.2
12	Mar 27	4.3, 4.4, 4.5, 4.6, 4.7 Quiz#4
13	Apr 3	4.8, 4.9, 5.1, 5.2,
14	Apr 10	5.3, 5.3, 5.4, 5.5, Quiz#5
15	Apr 17	5.6, 5.7, 5.8 5.9, 5.10, Quiz#6
16	Apr 24	EXAM II