

ELEG 4203
Semiconductor Devices

Text Book: Semiconductor Physics and Devices
Streetman and Banerjee, 6th Edition, Pearson Prentice Hall 2006

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Office Hours:1:00 - 3:00 pm T Th.....(Spring 2007)

Homework assignments are to be solved individually by the student. They are due in one week from the time of assignment.

There will be unannounced (pop) quizzes almost every week. They will cover the material taught during the previous two or three lectures. These 5 to 10 minute closed book quizzes are given at the beginning of the class. Make sure you get to the classroom in time and bring your textbook, calculator, pen/pencil, and paper to every class.

Attendance is required.

There will be a Project in the form of a Symposium on Semiconductor Devices in which students will make presentations on the working of various semiconductor devices.

There will be three exams during the semester at an interval of approximately 5 weeks. In these exams you will be responsible for the subject matter taught during that 5-week period. These exams will be open-book exams.

Grading Policy:

A: 91-100; B: 81-90; C: 71-80; D: 61-70; F: 60 and below

Grade Breakdown:

Attendance:	5%
Quizzes:	5%
Homework:	10%
Project:	20%
Exam I	20%
Exam II	20%
Exam III	20%

Week#1	Chapter 1	Crystal Properties
Week#2	Chapter 2	Atoms and Electrons
Week#3	Chapter 3	Energy Bands
Week#4	Chapter 3	Energy Bands
Week#5	Chapter 4	Excess Carriers

EXAM I

Week#6	Chapter 4	Excess Carriers
Week#7	Chapter 5	Junctions/Diodes
Week#8	Chapter 5	Junctions/Diodes
Week#9	Chapter 5	Junctions/Diodes
Week#10	Chapter 6	Field Effect Transistors

EXAM II

Week#11	Chapter 6	Field Effect Transistors
Week#12	Chapter 6	Field Effect Transistors
Week#13	Chapter 7	Bipolar Junction Transistors
Week#14	Chapter 7	Bipolar Junction Transistors
Week#15	Chapter 7	Bipolar Junction Transistors

EXAM III (Final Exam)