

EE409 Material Science – Fall 10

Text: Electronic, Magnetic and Optical Materials

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Office hours: Mon 10am, Tues 3pm

Prerequisites:

EE317 Electronics

Ch 1 Introduction

Ch 2 Electrical Conduction in Metals and Alloys

Ch 3 Fundamentals of Semiconductors

Ch 4 Fermi Energy Levels in Semiconductors

Ch 5 Semiconductor PN Junctions

Ch 6 Semiconductor Devices

Ch 7 Linear Dielectric Devices

Ch 8 Ferroelectrics, Piezoelectrics and Pyroelectrics

Ch 9 Magnetic Materials

Homework	weekly	20%
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Midterms	2	40%
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Final	take home	20%
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Term Paper	~10 page	20%
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-Technical format

-Technology Review Paper: Review and report on current technology

-Must pass paper to pass course

Ideas for term papers must be preapproved by Sep 30th .