

Syllabus

Spring 2020 - April 7 – May 7, 2020

Instructor: Carmen S. Menoni

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tel: (970) 491-8659

Class Times: TR, 9:30am - 10:50am - ONLINE CLASS – PARTICIPATION IS MANDATORY

Office: Engineering C 101E

Office Hours: By appointment. Send an email to Prof. Menoni to Carmen.Menoni@colostate.edu to set up an appointment

Text: "Semiconductor Physics and Devices"
Donald A. Neamen, Fourth Edition (Chapters 8-14)

Course description: Quantitative analysis of electric field, carrier and current distributions in MOSFETs and bipolar junction transistors; scaling, non-idealities.

Course Credits: 1

Prerequisites: ECE 331 with a C or better; ECE 471B or concurrent registration

Grading and Exams:

Quizzes	40%
Class presentations	30%
In class homework discussion	30%

Homework will be assigned once a week. It will not be graded. There will be discussion of the homework in class. Each student will discuss her/his solution to one problem.

Quizzes and Final Exam: Open book, will take place via CANVAS. Prof. Menoni will provide a formula sheet.

Material for the class will be stored in CANVAS

Class Presentations: parts of the chapters to be discussed will be assigned to individual students that will put together a power point presentation to discuss the assigned topic.