



THE UNIVERSITY OF TEXAS AT DALLAS
ERIK JONSSON SCHOOL OF ENGINEERING & COMPUTER SCIENCE

EEMF6322/MSEN6322/MECH6348

Semiconductor Processing Technology (3 semester hours)

Class Info: Monday & Wednesday: 5:30pm-6:45pm ECSN 2.126

Instructor: Professor Wenchuang (Walter) Hu

Telephone: (972) 883-6329

Email: walter.hu@utdallas.edu

Website: e-learning center

Office Hours: By appointment at NSERL 2.710

Textbook: "Silicon VLSI Technology" Plummer, J., M. Deal, P. Griffin. Prentice Hall, 2000.

ISBN: 0-13-085037-3, available in on-campus bookstore

Reference book: "Introduction to Microelectronic Fabrication", Richard C. Jaeger, Prentice Hall, 2002.
ISBN: 0-201-44494-1

Course Outline:

Modern techniques for the manufacture of semiconductor devices and circuits. Techniques for both silicon and compound semiconductor processing are studied as well as an introduction to the design of experiments. Topics include: wafer growth, oxidation, diffusion, ion implantation, lithography, etch and deposition.

Course grading:

20% Regularly Assigned Homework

35% Midterm Exam

45% Comprehensive Final Exam

Course rules and regulation:

1. NO eating, drinking, or smoking in classroom. NO laptop computer use in classroom.
2. Students who miss the Midterm Exam or Final Exam without a valid excuse will receive a score of zero. Students with a valid excuse for missing the Test or Final Exam MUST make arrangements beforehand or receive a score of zero.

Homework:

Homework will be assigned on Fridays after the class and is due in the week. Each student must turn in individual work. All assigned work will be collected at the beginning of the class. Late homework assignments will not be accepted, unless arrangements were made beforehand.