

TEXT: Jaeger and Blalock, *Microelectronic Circuit Design*, 3rd Edition, McGraw Hill, 2008

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HELP / STUDY ROOM FOR ECE 255 – MSEE 180

COURSE WEBSITE: <http://shay.ecn.purdue.edu/~ee255/>

GRADING:

Homework		NO LATE HOMEWORK				
Spice Designs		100 pts.	Spice Designs are Required & have a Firm Deadline			
Class Quizzes						
Exam 1		100 pts.	Tue.,	Sept. 22	8:00 – 9:00 pm	EE 170
Exam 2		100 pts.	Mon.,	Oct. 26	6:30 – 7:30 pm	PHYS 112
Exam 3		100 pts.	Thurs.,	Nov. 19	6:30 – 7:30 pm	PHYS 112
Final		150 pts.	Fri.,	Dec. 18	7:00 – 9:00 pm	STEW 130

NO written make-up exams will be given. Course grading will be A, B, C, D, E, F, I

Course Outline

Lecture	Date	Topic	Minimum Reading Sections
1	08/24	Introduction to Modeling and Semiconductors	2.0 – 2.6
2	08/26	D.C. diode model and operating point	3.3, 3.4, 3.9, 3.10
3	08/28	Low- frequency diode model and applications	3.10, 3.11
4	08/31	Introduction to Spice	—
5	09/02	Diode applications and High frequency diode model	3.6–3.8, 13.3, 13.4
6	09/04	Diode circuits (rectifiers and regulators)	3.12 – 3.16
7	09/07	University Holiday – No Class	—
8	09/09	Other diodes and Review	3.12, 3.18
9	09/11	Introduction to Bipolar transistors	5.0 – 5.5
10	09/14	D.C. Bipolar transistor models	5.6, 5.7, 5.8.6–5.8.8
11	09/16	Designing for a stable operating point	5.11 – 5.12
12	09/18	Low frequency A.C. Bipolar transistor models	13.5
13	09/21	Review for Exam 1 (Exam 1 is on Tue., Sept. 22)	—
14	09/23	No Class – recover from trauma of Exam 1	
15	09/25	Hybrid- π model and 2-port parameters (<i>h-parameters</i>)	10.5