

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
30	11/02	Non inverting Amplifiers – Analysis (<i>mid-frequency</i>)	14.4
31	11/04	Amplifier Transfer Functions, dB, Bode Plots	10.2, 10.7
32	11/06	Amplifier Transfer Functions, dB, Phase Plots	10.2, 10.7
33	11/09	Amplifier Frequency Response	16.0 – 16.2
34	11/11	Approximation of ω_L and ω_H	16.3 – 16.5
35	11/13	Approximation of ω_H for CE/CS Amplifiers	16.6
36	11/16	The Miller Effect	16.6
37	11/18	Optional Meeting – Review for Exam 3 (Nov. 19)	—
38	11/20	Approximation of ω_H for non-inverting amplifiers	16.7 – 16.9
39	11/23	Multistage amplifiers	14.8, 16.10
	11/25	Thanksgiving Holiday	
	11/27	Thanksgiving Holiday	
40	11/30	Multistage amplifiers – Cascode analysis	14.8, 16.10
41	12/02	Current mirrors and current source biasing	15.6
42	12/04	Differential amplifiers	15.1
43	12/07	Power and Push-Pull Amplifiers	15.3
44	12/09	Op-Amp Innards and Applications	—
45	12/11	Op-Amps with semiconductors in the feedback loop	—