EECS170A Fall 2005 Section B (Burke)
Distribution of topics and HW due dates might change.

Week	Tuesday	Thursday	Discussion to cover (W/F)	Lab to cover (M/T/W)	HW to cover
1	Introduction pp. 3-6	Resistance pp. 75-89	I for 100 e/s A/cm^2	Equipment Input/output impedance	
2	Crystal structure pp. 6-19 (Substitute Professor Lee)	Energy bands pp. 23-34	ρ from R vice versa log plots (HW #2.1 '03 R_{AB}=10kΩ,10Ω)	Soldering, RC circuits	HW#1: current sizes
3	Doping pp. 35-40,57-61	Doping pp. 41-57,61-67 diode I-V intro	μ from N_D, N_A ρ from N_D, N_A R from N_D, N_A	Resistivity measurement	
4	Doping continued	Band bending, pp. 89-93	E_F from N_D ('03 midterm #1)	Diode I-V	HW#2: ρ from R R from ρ n,p from N_A, N_D
5	Diffusion, equilibrium, Einstein relationship pp. 94-104	Diffusion equation 120-132 BJT intro. pp. 371-372	Band bending examples p.144	Diode transient response	
6	p-n intro. pp. 195-208	p-n I-V pp. 215-221, 235-240	3.17,3.19,3.20,3.21,3.22,3.24 (diff. eq. solns)	Transistor	HW#3 Band bending E_F from N_D
7	MIDTERM	Transistors and diode circuits pp. 371-379	p-n pp.209-214 Ex. calcs. of x_p,x_n,V_{bi} (F Holiday)	No lab this week	
8	Transistors circuits, biasing	Transistor amplifiers	Example circuit biasing	Transistor switches	HW# 4: Drift/Diff. examples x_p,x_n,V_{bi}
9	MOSFET pp. 563-571	HOLIDAY (Thanksgiving)	npn vs pnp transistor biasing	Amplifiers	
10	LAB QUIZ	MOSFET pp. 611-617	CMOS	Amplifiers	HW#5: Circuits (diode, BJT)
Finals	COURSE FINAL EXAM				

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