EET 131 Reading 5 – CE Amp DC & AC Eq. Ckts., Av & Waveform Anal. & Intro to the PNP CE Amp and to the Operational Amp.

Sec #	Topics	Pg # to Read	# of Pg
9-1	Introduction to Class A Small & Large signal Amps	428 Top ½	½
6-3	Phase Inv of CE Amp	277 last par	1/8
6-3	CE Amp **DC Eq Ckt** and **DC Anal Prob**. with Voltage Divider Bias & Full Bypass	268 bottom ½ , 269 top ¾	1 ¼
	Full Bypass <u>AC Eq Ckt (No Load)</u>		
10-3	The Emitter Full Bypass RC Eq. Ckt. (Skip R_E in || with X_{C2} below f_C	489 Next to last Par 490 Fig 10–16a and Fig 10-15	½
6-3	AC Eq. Ckt. Full Bypass (No Load)	269 bottom ¼ , 270 top ½	¾
	Full Bypass A_V <u>No Load</u>		
4-4	**Full Bypass A_V calc.** (No load) and V_B & V_C Waveforms	181 bottom 1/8 thru 184 top ¼	2 ¼
6-3	**AC Voltage gain** for **Full vs W/O Bypass No load**	274 bottom ½ , 275 top ¼	¾
	Full Bypass A_V <u>with Load</u>		
10-3	Output Equiv. RC Ckt	488 center par, skip Eq 10-8 (1^{st} 2 sentences only)	¼
6-3	**Full Bypass** AC Eq. Ckt **(w. Load)** & calc of A_V w Load.	275 bottom ¾ , 276 top ¼	1
10-4	Ex 10-10 **Full Bypass Bias & $A_{V\,(mid)}$** calc.	501 bottom ½ , 502 top 1/8 thru $A_{V\,(mid)}$ calc. (skip $R_{in\,(tot)}$) calc.	¾

Sec #	Topics	Pg # to Read	# of Pg
	CE Amp Waveform Analysis		
6-1	Transistor v & i waveforms	262, 263 top ½	1 ½
6-3	Waveform Anal of Ex 6-8	279 bottom starting @ V_C =,	¾
	(Note: We would use A_V for these	280 top ½	½
	Calculations giving 90.9 mV)		
	Ch 6 **Summary**	310 top, 311	1 ¼
	On pg 310 for V_B Middle Ckt. Eq., ignore the $\| B_{DC} R_E$ Terms		
	for bottom Ckt. read r_e' & A_V only for Now.		
	Up Side Down PNP CE Amp		
	Pg 167 Fig. 4-3 PNP Only Note: Normally a PNP Operates Off a Neg. Supply.		¼
	Pg 168 Last Par - Important Note: The IC (IE) flows into the Emitter & Out the Collector. This means an Up Side Down PNP can operate off a Pos Supply and Not violate the direction of I flow.		¼
	Pg 169 Fig 4-5 PNP Only		
	Pg 204 Review Top ¼ Note For AC Analysis the UP Side Down PNP CE amp is same as regular NPN CE amp except for the Emitter arrow.		¼
	Pg 445 Note: in Fig 9-20 the PNP transistor Q1 is operating as an Up Side Down PNP CE amp. This is somewhat common in Transistor Power amps.		¼
	Operational Amplifiers Introduction		
	OP Amp Intro	582 1st 2 Par	¼
	Symbols & Terminals	584 bottom **2/3**	½
	Op Amp Internal Representation	585 Fig 12-2 (b)	
	Non Inv Amp Av Calc.	598 Ex 12-3	
		618 Fig (a) $Av_{(CL)}$ only	½
	Summary	625 Non Inv Amp Volt Gain only	¼