

Date	Week	Session	Day	Topic	Sections	More Ref Material	HW	SPICE CAD	
29 Shahrivar	1	1	Sun	Introduction - MOS Physics	1.2.1 & 1.2.2 Johns & Martin	Razavi - CMOS (Chapter 2) Razavi – Fundamentals (Chapter 6)		Introduction of SPICE and MOS - Modelling in SPICE	
31 Sharivar		2	Tue	Large-Signal Modelling	1.2.3 - 1.2.5 Johns & Martin				
5 Mehr	2	3	Sun	Small-Signal Modelling	1.2.6 - 1.2.9 Johns & Martin		#1- Circuit Characteristics	MOS Characteristics - Drawing Diagrams	
7 Mehr		4	Tue	Device Model Summary	1.3 Johns & Martin				
4-10 Mehr				Extra - Biasing of MOS Circuits	3.2 - 3.8 Johns & Martin	Razavi - CMOS (Chapter 3 & 4) Razavi - Fundamentals (Chapter 7 & 9 & 10)		Biasing of Single Stage Circuits	
12 Mehr	3	5	Sun	Frequency Response of Common-Source	4.2.1 - 4.2.3 & 4.2.5 Johns & Martin	Razavi - CMOS (Chapter 6) Razavi - Fundamentals (Chapter 11)	#2- Frequency Response of CS & CD	Frequency Response of CS & CD	
14 Mehr		6	Tue	Frequency Response of Common-Drain	4.4 Johns & Martin				
19 Mehr	4	7	Sun	Frequency Response of Common-Gate and Cascode	4.2.6 & 4.3 Johns & Martin		#3- Frequency Response of CG/Cascode/Diff.	Frequency Response of CG/Cascode/Diff.	
21 Mehr		8	Tue	Frequency Response of Differential Pair	4.5 Johns & Martin				
26 Mehr	5	9	Sun	Frequency Response of Two-Stage Circuits	6.1.1 & 6.1.2 Johns & Martin		#4- Multi-Stage Circuits & Zero Value Time Constant	Biasing and Frequency Response of Multi-Stage Circuits	
28 Mehr		10	Tue	Zero-Value Time-Constant Analysis	4.2.4 Johns & Martin				
25 Mehr - 1 Aban				Extra - Root Locus & Nyquist Diagram					

3 Aban	6	11	Sun	Dynamic Response of Feedback Amplifiers	5.2 Johns & Martin	Razavi - CMOS (Chapter 8) Razavi - Fundamentals (12.1 - 12.6)	#5- Feedback & Stability with ideal pole/zero	Biasing and Frequency Response of Feedback Amplifiers
5 Aban		12	Tue	Stability & Phase Margin				
10 Aban	7	13	Sun	Opamp Compensation	6.2 Johns & Martin	Razavi - CMOS (Chapter 10) Razavi - Fundamentals (12.8) Gray & Meyer (9.1 – 9.5)	#6- Opamp Compensation	Opamp Compensation
12 Aban		14	Tue					
17 Aban	8	15	Sun	Folded-Cascode Opamp	6.3 Johns & Martin	Razavi - CMOS (Chapter 9)	Opamp/Reg Analysis Project (1st)	Guidance for Project and Mid-Term Exam
19 Aban		16	Tue	Fully Differential Opamps	6.4 Johns & Martin			
24 Aban	9	17	Sun	Analog Integrated Circuit Biasing	7.1 & 7.2 Johns & Martin		#7- Biasing & References	Biasing & References
26 Aban		18	Tue	Voltage Regulation	7.3 & 7.4 Johns & Martin			
27 Aban			Wed	Mid-Term Exam				
1 Azar	10	19	Sun	Advanced Opamp	6.7 Johns & Martin			Debugging SPICE Problems of Students
3 Azar		20	Tue					
8 Azar	11	21	Sun	Bipolar Device Model	Chapter 1 - Gray & Meyer	8.1 & 8.2 Johns & Martin	Advanced Opamp Design Project (2nd)	Device Modelling of BJT and Biasing of BJT Circuits
10 Azar		22	Tue					
15 Azar	12	23	Sun	Frequency Response of BJT Opamps	7.1 – 7.3 Gray & Meyer		#8- Freq. Response/ Noise : BJT	Frequency Response of BJT Circuits and Noise Modelling
17 Azar		24	Tue					
22 Azar	13	25	Sun	Rail to Rail Opamp analysis			#9- Rail to Rail Opamp analysis	Rail to Rail Opamp analysis
24 Azar		26	Tue					

29 Azar	14	27	Sun	Noise : Time-Domain Analysis	9.1 Johns & Martin	Razavi - CMOS (Chapter 7)		Project Guidance
1 Dey		28	Tue	Noise : Frequency Domain Analysis	9.2 Johns & Martin			
6 Dey	15	29	Sun	Noise Models for Circuit Elements	9.3 Johns & Martin		#10- Noise	Modelling Noise in SPICE
8 Dey (Holiday)		30	Tue	Noise Analysis Examples	9.4 Johns & Martin			