

Massachusetts Institute of Technology  
Department of Electrical Engineering and Computer Science

**6.002 – Electronic Circuits  
Spring 2002**

**Outline**

Date	Topic	Tutorial/Lab	Reading:
L 2/5	Introduction & KVL & KCL		1, 2.1–2.3
R 2/6	Parallel & Series Resistors & Dividers		2.3–2.5, 2.8
L 2/7	Node Analysis		3.1–3.3
R 2/8	Node Analysis Examples		3.1–3.3
2/11		Tutorial	
L 2/12	Linearity & Superposition	Tutorial	3.5–3.7
R 2/13	Thevenin & Norton Equivalence	Tutorial	3.5–3.7
L 2/14	Nonlinear Resistors & Small Signals		4
R 2/15	Nonlinear Resistors & Small Signals		4
2/18	Holiday	Tutorial	
L 2/19	No Class - Monday Schedule	Tutorial	
R 2/20	Digital Abstraction & Boolean Logic	Tutorial	5
L 2/21	MOS Switches & NMOS Digital Logic		6
R 2/22	MOS Switches & NMOS Digital Logic		6
2/25		Tutorial	
L 2/26	Dependent Sources & Amplifiers	Tutorial	2.6
R 2/27	Quiz #1	Tutorial	
L 2/28	MOS Amplifiers		7
R 3/1	MOS Amplifiers		7
3/4		Lab #1	
L 3/5	Biasing & Small-Signal Analysis	Lab #1	7.7, 8
R 3/6	Biasing & Small-Signal Analysis	Lab #1	7.7, 8
L 3/7	Small-Signal Circuit Models	Lab #1	8
R 3/8	Small-Signal Circuit Models	Lab #1	8
3/11		Tutorial	
L 3/12	RC Networks & Step Responses	Tutorial	9, 10
R 3/13	RL Networks & Step Responses	Tutorial	9,10
L 3/14	Pulse & Impulse Responses		10.6
R 3/15	Impulse Response Examples		10.6
3/18		Tutorial	

L 3/19	PWM D/A Converter	Tutorial	
R 3/20	Quiz #2	Tutorial	
L 3/21	Energy & Power In NMOS Logic & CMOS		12
R 3/22	CMOS Logic Examples		12
SPRING BREAK			
4/1		Lab #2	
L 4/2	LC Networks & Homogeneous Responses	Lab #2	13.1
R 4/3	RLC Networks & Homogeneous Responses	Lab #2	13.2–13.4
L 4/4	LC Networks & Step/Impulse Responses	Lab #2	13.5–13.12
R 4/5	RLC Networks & Step/Impulse Responses	Lab #2	13.5–13.12
4/8		Tutorial	
L 4/9	SSS & Frequency Response	Tutorial	14, B, C
R 4/10	SSS & Frequency Response	Tutorial	14, B, C
L 4/11	Impedance & Admittance		14, B, C
R 4/12	Impedance & Admittance		14, B, C
4/15	Holiday		
4/16	Holiday		
R 4/17	Quiz #3	Tutorial	
L 4/18	RLC Filters & Q		15
R 4/19	Time $\leftrightarrow$ Frequency Response		15
4/22		Lab #3	
L 4/23	Op-Amps & Amplifiers	Lab #3	16.1–16.4
R 4/24	Op-Amp Amplifiers	Lab #3	16.1–16.4
L 4/25	Add & Sub & Int & Diff	Lab #3	16.5–16.7, 16.10
R 4/26	Op-Amp Filters	Lab #3	16.5–16.7, 16.10
4/29		Tutorial	
L 4/30	MOS Differential Amplifiers	Tutorial	8.2
R 5/1	Special Op-Amp Circuits	Tutorial	
L 5/2	Positive Feedback & Oscillators		16.8
R 5/3	Quiz #4		
5/6		Lab #4	
L 5/7	Diodes	Lab #4	17
R 5/8	Diodes & RC Networks	Lab #4	17.4
L 5/9	Diodes & LC Networks	Lab #4	
R 5/10	Diodes & Op-Amps	Lab #4	
5/13		Tutorial	
L 5/14	AM Radio Example	Tutorial	
R 5/15	Power Electronics	Tutorial	
L 5/16	Guest Lecture		