EE 310 Electronic Circuit Design I
Spring 2009 Course Schedule

Rev - 1/9/2009

Week	Monday Lecture	Wednesday Lecture	Friday Lecture	Lab
Week 1 Jan 12 - 16	Introduction The Diode 1.1 - 1.2 **1**	Piecewise Linear Models Diode AC Model 1.3 - 1.5 **2**	Diode Rectifier Circuits 2.1 - 2.1.2 **3**	Introduction to Lab Test Equipment, Circuits Assessment **1**
Week 2 Jan 19 - 23	Martin Luther King Day 	Filters, Ripple Voltage, and Diode Current 2.1.3 **4**	Zener Diodes Voltage Regulators 2.2 **5** 1 📖	Semiconductor Diode Characteristics **2**
Week 3 Jan 26 - 30	Clipping and Limiting Circuits 2.3 - 2.3.1 **6**	Clamping Circuits Multiple-Diode Circuits 2.3.2 - 2.4 **7**	The MOSFET Device - Terminology, Operation 3.1 **8** 2 📖	Diode Circuit Design Project **3**
Week 4 Feb 2 - 6	MOSFET DC Analysis The Load Line 3.2 - 3.2.2 **9**	Common MOSFET Configurations at DC 3.2.3 **10**	Common MOSFET Configurations (cont.) 3.2.3 **11** 3 📖	
Week 5 Feb 9 - 13	MOSFET Switch, Logic Gate, and Amplifier 3.3 **12**	Constant-Current Bias 3.4 **13**	The MOSFET Amplifier Amplifier Configurations 4.1 - 4.2 **14** 4 📖	MOSFET Device Parameters **4**
Week 6 Feb 16 - 20	The Common-Source Amplifier 4.3 **15** Exam 1→	The Common-Drain Amplifier 4.4 **16**	The Common-Gate Amplifier; Summary 4.5 - 4.6 **17**	MOSFET Current Source and Biasing the Common-Source Amplifier **5**
Week 7 Feb 23 - 27	Integrated Circuit MOSFET Amplifiers 4.7 **18**	Common-Source Amp. with Active Load 4.7.4 and Handout **19**	Common-Drain Amplifier w/Active Load 4.7.4 **20** 5 📖	
Week 8 Mar 2 - 6	Common-Gate Amplifier w/Active Load 4.7.4 **21**	The Bipolar Junction Transistor (BJT) 5.1 **22**	BJT DC Analysis Modes of Operation 5.2 - 5.2.2 **23** 6 📖	MOSFET Amplifier Design Using an Active Load **6**
Mar 9 - 13	 Spring Break 			
Week 9 Mar 16 - 20	DC Analysis, Biasing 5.2.3 - 5.4 **24**	Basic BJT Amplifiers Hybrid-π Model 6.1 - 6.2 **25**	BJT Common-Emitter Amplifier 6.4 **26** 7 📖	(continued)
Week 10 Mar 23 - 27	Common-Collector/Base Amplifiers, Summary 6.6 - 6.8 **27**	Ideal Op Amp Circuits - The Inverting Amplifier 9.1 - 9.2 **28**	Summing and Noninverting Amplifiers 9.3 - 9.4 **29** 8 📖	BJT AC Operation **7**
Week 11 Mar 30 - Apr 3	Op Amp Applications – I-V, V-I, Diff Amp 9.5 - 9.5.3 **30** Exam 2→	Instrumentation Amp Integrators 9.5.4 - 9.5.5 **31**	Differentiators Scaling and Offsetting 9.5.5 **32**	Op-amp Circuit Design Project **8**
Week 12 Apr 6 - 10	Practical Op Amps – Finite Gain Effects 14.1 - 14.2.2 **33**	Frequency Response 14.3 - 14.3.2 **34**	Frequency Response Slew Rate 14.3.2 - 14.3.3 **35** 9 📖	
Week 13 Apr 13 - 17	Input Bias Current, Input Offset Current & Volt. 14.4 - 14.5 **36**	Temperature and CMRR Effects 14.6 **37**	Digital Logic MOSFET Switches 3.3.1 - 3.3.2 **38** 10 📖	Op-Amp Nonideal Characteristics **9**
Week 14 Apr 20 - 24	NMOS Inverters 16.1 **39**	CMOS Inverter DC Analysis 16.3.1 - 16.3.2 **40**	Power Dissipation 16.3.3 **41** 11 📖	MOSFET Digital Logic Design **10**
Week 15 Apr 27-May 1	Noise Margin 16.3.4 **42**	Propagation Delay 16.4.4 **43**	CMOS Logic Gates 16.4 **44**	
Exams	Exam 1 - Tuesday, February 17 8:15 - 10:15 PM *Location TBD*	Exam 2 - Tuesday, March 31 8:15 - 10:15 PM *Location TBD*	Final Exam - *TBD*	

Key: Exam 1 topic → | Exam 2 topic → | Final Exam topic → | Lab # → 0

Lecture # → 00 | Homework due → 📖 | No class →