

ENGR 40M Schedule spring 2017

				Topics	Lecturer	Assignments	Lab	Reader	Reading (Agarwal & Lang)
Week 1	1	Monday	Apr 03	1. Course Overview and Introduction	RTH			1. E40M introduction	
	2	Wednesday	Apr 05	2. Charge, Current, Voltage, and Electrical Circuits	JDP			2. Charge, current, Voltage	1.6, 1.7
	3	Friday	Apr 07	3. KCL, KVL, and Energy Flow	JDP	Introductory survey due HW 1 released		3. More Devices (Voltage and Current source, Diodes, Motors, Switches)	2.1, 2.2; 16.1-16.3
Week 2	4	Monday	Apr 10	4. Device Models, Resistors V & I Sources, and Diodes	JDP				3.1, 3.2
	5	Wednesday	Apr 12	5. Solving Circuits: Nodal Analysis and EveryCircuit	RTH	Lab 1 released HW 1 due	Learning to solder	4. Solving Circuits: Nodal Analysis	2.4, 3.3, 3.4
	6	Friday	Apr 14	Prelab 1. Building a solar charger	CZL	HW 2 released			3.6
Week 3	7	Monday	Apr 17	6. More Circuits: superposition	RTH				3.5
	8	Wednesday	Apr 19	7. Boolean Logic and the Useless Box	JDP	Lab 2a released	Building a solar-powered charger	5. Digital Systems, MOS and CMOS Logic, FSM	6.1 - 6.3
	9	Friday	Apr 21	Prelab 2a. The Useless Box	CZL	HW 2 due HW 3 released		http://arduino.cc/en/Reference/HomePage	
Week 4	10	Monday	Apr 24	8. MOS Devices and CMOS Circuits	RTH				
	11	Wednesday	Apr 26	9. Binary Numbers and Codes	RTH	Lab 2b released	Useless box	6. Codes, number representation (In the diode section for the light, and in the coding)	
	12	Friday	Apr 28	Prelab 2b. The Useless Box, Enhanced	CZL	HW 3 due HW 4 released			
Week 5	13	Monday	May 01	10. Light and Multiplexing	JDP				
	14	Wednesday	May 03	11. Sound and Music	JDP	Lab 3a released	Useless box enhanced	7. Sound and Transforms	
	15	Friday	May 05	Prelab 3a. Building an LED display	CZL	HW 4 due			
Week 6	16	Monday	May 08	12. Capacitors	JDP				
	17	Wednesday	May 10	Midterm		Lab 3b released	Building an LED display	8. Capacitors and RC circuits	9.1.1, 9.2.1, 10.3
	18	Friday	May 12	Prelab 3b. Programming the LED display	CZL	HW 5 released		9. Impedance and filters	13.3
Week 7	19	Monday	May 15	13. RC Circuits and Impedance	RTH				13.4-13.5
	20	Wednesday	May 17	14. RC Filters	RTH	Lab 3c released HW 5 due	Programming the LED display		
	21	Friday	May 19	Prelab 3c. Displaying cool stuff on your LED	CZL	HW 6 released		10. Op-Amp Circuits	15.1 - 15.3
Week 8	22	Monday	May 22	15. Bode Plots and dB	JDP				15.6
	23	Wednesday	May 24	16. Op Amps	RTH	Lab 4 released	Doing cool stuff with your LED display		
	24	Friday	May 26	Prelab 4. Building an Electrocardiogram (ECG)	CZL	HW 6 due HW 7 released		11. Inductance	9.1.2.9.2.2
Week 9		Monday	May 29	Memorial Day					
		Wednesday	May 31	17. Instrumentation Amplifiers and Noise	RTH		Electrocardiogram		
		Friday	Jun 02	18. Inductors and Fun Inductor circuits	JDP	HW 7 due			
Week 10	24	Monday	Jun 05	Review	JDP				
	25	Wednesday	Jun 07	Review	RTH				
	26	Friday	Jun 09	Final Exam, 3:30-6:30					