## ENS 203 CIRCUITS I Meriç Özcan SEPTEMBER 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Optics & Photonics, Mic even you can go to a grader is the aim of this course continue with transient and	rowaves, Quantum Electric d school to work on Particle to teach you the basics of	leads to Electronics Enginee onics, Robotics, Biomedical ele Physics if you likeThere of electronic circuit design. Wasis, power relations, resonan-	Engineering, Signal Procese is no other engineering the	ssing, Computer Design bot at provides such a broad pa vel, basic circuit analysis m	th Hardware and Software p th after the bachelor's degree methods, introduce differenti	olus more. ee al equations. Then we
ansistors.  abs are involved, at the	e end you are going to buil	d a simple working radio!				
problems, if you ask que one way or another.	estions whenever you don'	y properly it is not rocket sci t understand something, if yo rg in this course. Hopefully y	ou work hard in the lab, I cl	laim, you will learn great a		
LECTURES: DEFICE HRS: TBD ASSISTANTS: TBD	<b>Tue</b> 10:40-12:30	FASS G062 T	hu 11:40-12:30 FENS (	G077		
	al Engineering Principles of the available at Canon p	& Applications, Allan R. Harrinting office.	mbley, 4th Ed.			
N	Missing one lab results wit	25 % Quizzes = 5 % Final = th one letter grade down, misthy for the laziness. Serious	ssing two labs is an automa			
?1	22	CHAPTER 1 1.1, 1.2 Intro., current, voltage, power, energy definitions	Get the LAB INTRO handout from Canon	CHAPTER 1 1.2—1.7 Kirchhoff's Voltage and Current Law, Circuit elements	26	27

LAB sessions will be at FENS 1033 and they will start right after the holiday.

LAB A: Mon 16:40-19:30 LAB B: Fri 08:40-11:30 LAB C: Fri 11:40-14:30 LAB D: Mon 08:40-11:30 LAB E: Wed 08:40-11:30

Recitations are all on Wed 17:40-19:30 and they will start right after the holiday. There will be one every week, exceptions will be announced.

Rec A: FENS L035 Rec B:FENS L048 Rec C:FENS L047 Rec D:FENS L030 Rec E:FENS L055

### ENS 203 CIRCUITS I Meriç Özcan OCTOBER 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		Н	1 OLIDAY	2	3	4
PREPARE FOR THE LAB INTRO	6 LAB INTRO	7 CHAPTER 2 2.1—2.3 Resistive circuits, parallel and series networks	8	CHAPTER 2 2.4—2.5 Node Voltage Analysis, Mesh Current Analysis	10	11
PREPARE FOR THE LAB 1 THIS WEEK	LAB 1 Instruments	CHAPTER 2 2.5—2.6 Mesh Current Analysis continued	15	CHAPTER 2 2.6—2.8 Thevenin & Norton Circuits, Superposition	17	18
19	20	CHAPTER 3 3.1—3.4 Capacitance and Inductance	22	CHAPTER 4 3.5 — 4.1 Introduction to first order RC circuits	24	25
PREPARE FOR THE LAB 2 THIS WEEK	27 LAB 2 Thevenin Equivalence	CHAPTER 4 4.1—4.2 Transient Ciruits First order RC, RL circuits	HOLIDAY	CHAPTER 4 4.3—4.5 RC, RL circuits with sources, 2nd order circuits	31	
		S M T W Th  1 2 3 4  7 8 9 10 11 1  14 15 16 17 18 1	1     2     3     4     5     6       7     8     9     10     11     12     13     2     3       14     15     16     17     18     19     20     9     10       21     22     23     24     25     26     27     16     17		Notes:  Wed section of the Lab for Oct 29th will be done next week.	

# ENS 203 CIRCUITS I Meriç Özcan NOVEMBER 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	CHAPTER 5 5.1—5.2 Steady State Sinusoidal Analysis, Phasors	5 LAB 2 for Wednesday section	6 CHAPTER 5 5.3—5.5 Complex Impedances, Circuit analysis, power in AC circuits	7	8
PREPARE FOR THE LAB 3 THIS WEEK	LAB 3 RC and RL	CHAPTER 5 5.6 Thevenin and Norton Equivalent Circuits	12	13 CHAPTER 6 6.1 — 6.4 Frequency Response, First order filters, Bode Plots	14	15
16	17	CHAPTER 6 6.4 — 6.5 Bode Plots, High Pass Filters	19	CHAPTER 6 6.6 — 6.7 Series Resonance Parallel Resonance	21	22
23	24	25 REVIEW	26	27 CHAPTER 11 11.1 — 11.3 Basic Amplifier Concepts, Cascade Amplifiers	<b>28</b>	29 MIDTERM
30		October 2008       S     M     T     W     Th       I     I     1     2       I     I     I     I     I       I     I     I     I     I     I       I	F Sa S M 1 10 11 7 8 17 18 14 11 24 25 21 21	. 2 3 4 5 6	Notes:	ļ

# ENS 203 CIRCUITS I Meriç Özcan DECEMBER 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
PREPARE FOR THE LAB 4 THIS WEEK	LAB 4 Resonance	CHAPTER 11 & 14 11.11 Differential Amplifiers, 14.1-14.4 Operational Amplifiers	3	CHAPTER 14 Op-Amps continued	5	6
7	8	9 HOLIDAY	SEMESTER	11 BREAK	12	13
PREPARE FOR THE LAB 5 THIS WEEK	LAB 5 Amplifiers	CHAPTER 14 Op-Amps continued Example circuits	17	CHAPTER 14 14.5—14.6 Op-Amps continued	19	20
PREPARE FOR THE LAB 6 THIS WEEK	LAB 6 Radio	CHAPTER 10 10.1—10.3 Basic Diode, Load Line Analysis, Zener Diode	24	CHAPTER 10 10.4—10.5 Diode Models	26	27
28	29	CHAPTER 10 10.6—10.8 Rectifiers, Wave Shaping, Small Signal Circuits	31 HOLII	DAY		
		November 200 S M T W Th  2 3 4 5 6 9 10 11 12 13 1 16 17 18 19 20 2 23 24 25 26 27 2 30	F Sa S M S M 7 8 4 5 11 12 12 18 19	anuary 2009  T W Th F Sa  1 2 3  6 7 8 9 10  2 13 14 15 16 17  9 20 21 22 23 24  5 27 28 29 30 31	Notes:	·

### ENS 203 CIRCUITS I Meriç Özcan JANUARY 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				HOLIDAY	2	3
LAB FINAL THIS WEEK	5 LAB FINAL	6 CHAPTER 13 13.1—13.2 Bipolar Junction Transistors, Common Emitter Characteristics	7	8 CHAPTER 13 13.4—13.6 NPN transistor, large signal models, DC analysis	9	10
11	12	13	14	15	16	17
18	19	20	<sup>2</sup> IFINALS	22	23	24
25	26	27	28	29	30	31
		December 200           S         M         T         W         Th           1         2         3         4           7         8         9         10         11         1           14         15         16         17         18         1           21         22         23         24         25         2           28         29         30         31	F Sa S M 5 6 1 2 .2 13 8 9 .9 20 15 16	Bebruary 2009  T W Th F Sa 3 4 5 6 7 10 11 12 13 14 5 17 18 19 20 21 3 24 25 26 27 28	Notes:	