

Week	Date	Lecture	Topics	Quiz	Chapter
1	1/12	1	Amplifiers		1
	1/14	2	Amplifier models		1
	1/16	3	Frequency response		1
2	1/19		<b>No classes</b>		
	1/21	4	Operational Amplifiers: Ideal op. amps.	<b>1 (1)</b>	2
	1/23	5	Operational Amplifiers: applications		2
3	1/26	6	Operational Amplifiers : Frequency response		2
	1/28	7	Operational Amplifiers: Frequency response		2
	1/30	8	Operational Amplifiers: DC imperfections	<b>2</b>	2
4	2/2	9	Diodes: Device Physics		3
	2/4	10	Diodes: DC characteristics		3
	2/6	11	Diodes : small signal model		3
5	2/9	12	Diodes : applications		3
	2/11	13	<b>Midterm Exam. 1 (Chaps. 1 &amp; 2)</b>		3
	2/13	14	Diodes : applications		3
6	2/16		<b>No Classes</b>		
	2/18	15	BJTs : Device Physics	<b>3</b>	4
	2/20	16	BJTs : DC Characteristics		4
7	2/23	17	BJTs : small signal model		4
	2/25	18	BJTs : small signal model		4
	2/27	19	BJTs : small signal model		4
8	3/1	20	BJTs : Basic Single Stage Amplifiers		4
	3/3	21	BJTs : Basic Single Stage Amplifiers	<b>4</b>	4
	3/5	22	BJTs : Basic Single Stage Amplifiers		4
9	3/8	23	Differential & Multistage amplifiers: Differential pair		6
	3/10	24	Differential and Multistage amplifiers: Non-ideal characteristics		6
	3/12	25	<b>Midterm Exam. 2 (Chaps. 3 &amp; 4)</b>		
10	3/15		<b>Spring Break (No classes)</b>		
	3/17				
	3/19				
11	3/22	26	Differential and Multistage amplifiers: current mirrors		6
	3/24	27	Differential and Multistage amplifiers: current mirrors		6
	3/26	28	Differential and Multistage amplifiers: active loads		6
12	3/29	29	Differential and Multistage amplifiers: Multistage Amplifiers	<b>5</b>	6
	3/31	30	Differential and Multistage amplifiers: Multistage Amplifiers		6
	4/2	31	Differential and Multistage amplifiers: Multistage Amplifiers		6
13	4/5	32	Field Effect Transistors: Device Physics		5
	4/7	33	Field Effect Transistors: Dc characteristics		5
	4/9	34	Field Effect Transistors: small signal model		5
14	4/12	35	Field Effect Transistors: FET amplifiers		5
	4/14	36	<b>Midterm Exam. 3 (Chap. 6)</b>	<b>6</b>	5
	4/16	37	Field Effect Transistors: FET amplifiers		5
15	4/19	38	Frequency Response: amplifiers		7
	4/21	39	Frequency Response: amplifiers		7
	4/23	40	Frequency Response: amplifiers	<b>7</b>	7
16	4/26	41	Review		
	4/28	42	Review		
	4/30	43	Review		
17	5/7		<b>Final Exam: 3:10 –5:10 a.m.</b>		

# EE311

# Electronics

Spring 2004

**Location:** Lectures: Thompson 201 MWF @ 1:10 p.m

**Instructor:**

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**Credits:** 3

**Pre-requisites:**

By course: EE214, 261 with grade of C or better.

By topic: KCL, CVL, basic circuit analysis including DC, AC, and transient analysis.

**Text Book:**

1. A. Sedra and .C. Smith, “*Microelectronics*,” Oxford University Press, 4<sup>th</sup> edition, 1998.

**Reference books:**

1. G.W. Roberts and A. Sedra, “*SPICE for Microelectronic Circuits*,” Oxford University Press, 2<sup>nd</sup> edition, 1997. ISBN 0-19-510842-6

**Grading:**

Homework	10%
Quizes ( 7 )	25%
Three midterms (45%) + final (20%)	65%

**Exam. Policies:** The following restrictions will apply to all exams.

1. Closed notes and books.
2. Two pages of notes allowed
3. No headphones, cell phones, or pagers
4. No hats
5. No guests or visitors during exams.
6. Make-up exams will be given only if the instructor provides verbal approval before the regular exam is administered. Leaving the instructor voice messages or sending e-mails does not constitute approval for make-up exam. It is very important that you make note of this policy.
7. Upon return of graded exams, you are given time to review the grading of the exams. Any discussion of the graded exams. will be done at a later time in my office provided you return your exam. Please do not place any additional notations or marks on the exam. To avoid such event, you will be asked to clear your desks when exams are returned. This procedure for returning the exams is considered an integral part of administering the exam. Consistent with other instructors, I reserve the right to reduce an exam score if it becomes apparent during your office visit that too much partial credit was given on the student’s exam.
8. Cheating in any form will result in automatic failure of the course and further actions by the School of EECS and WSU.

**Quizzes:** Open notes and book lasting for 20 minutes. For the dates see outline.

**Homework Policies:** “No late homework accepted”

Homework assignments are designed to prepare you for the exams and applying the concepts discussed in lectures. Turn in your own work for homework assignments. Do not copy your colleague’s homework solutions. The TA will be instructed to give students zero points for any problem that has been copied (regardless of “who did the work”). This policy is not meant to discourage studying together, but to ensure that the homework score provides a measure of the effort the student expends on the homework assignment.

Reasonable accommodations are available for students who have a documented disability. Please notify instructor during the first week of class of any accommodations needed for the course. Late notifications may not guarantee the accommodations due to unavailability. All accommodations must be approved through the Disability Resource Center in Administration Annex room 205, 335-1566, e-mail: [drc@mail.wsu.edu](mailto:drc@mail.wsu.edu) in Pullman.