ET 341/341L
Solid State II

This class is a continuation of ET 260, Solid State I. We study diodes, Zener diodes, transistors, field effect transistors, op-amps and applications of these devices. In ET-341 we concentrate on op-amps and op-amp configurations and applications such as amplification, oscillation and filters. There will be experiments every week, sometimes two experiments per week. As in other ET classes, the students is expected to supply some tools and supplies. There will be readings from the text book, tests and lab reports. Electronic software such as CircuitMaker and MathLab will be introduced. This is a hands-on class and there will a constant use of meters, signal generators, power supplies and oscilloscope.

Cheating and plagiarism will not be tolerated in this course. Any individual caught cheating on quizzes, homework, lab projects, or the final exam will be punished to the full extent allowed under University regulations. Plagiarism on papers or assignments is not acceptable and work that is plagiarized will not receive credit. Plagiarism is considered cheating. Note: Any time another person's work is used without giving them proper credit, it is considered plagiarism and cheating. At a minimum, any student caught cheating will receive no credit for the work concerned, and will receive a reduction of one letter grade from their final course grade. The official CSULB Policy on Cheating and Plagiarism can be found here:
http://web.csulb.edu/divisions/aa/catalog/current/academic_information/cheating_plagiarism.htm

The following page contains more details on grading policy, homework assignments and list of experiments.

ET- 341 Solid State II

Textbook: Electronic Principles 7th Edition
Albert Malvino, David J. Bates
ISBN: 978-0-07-297527-7
978-0-07-297527-X (paper back)

Grades are based on tests, homework and attendance as follows:

(2) Tests	33%
Homework	33%
Attendance	33%

Letter grades are as follows:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
00-59%	F

Homework assignments

Ch. 11 JFETS
pg. 462 prob. 1, 3, 7, 9, 13, 14, 25, 28, 30
Ch. 12 MOSFETs
pg. 519 prob. 24, 26, 37, 38
Ch. 13 Thyristors
Ch. 14 Frequency Effects
pg. 618 prob. 1, 4, 5, 9, 13, 17, 33, 34, 35, 36
Ch. 15 Differential Amplifiers
pg. 661 prob. 1, 3, 5, 10
Ch. 16 Operational Amplifiers
pg. 705 prob. 1, 7, 10, 12, 13
Ch. 17 Negative Feedback
pg. 734 prob. 5, 7, 9, 11, 15, 17, 19, 21
Ch. 18 Linear Op-Amp Circuits
pg. 782 prob. 1, 2, 5, 15, 29
Ch. 19 Active Filters
pg. 846 prob. 1, 4 ,5, 7, 9, 13
Ch. 20 Non-Linear Op-Amp Circuits
pg. 895 prob. 1, 3, 7, 9, 13, 25
Ch. 21 Oscillators
pg. 954 prob. 8, 9, 11, 12

ET-341L Solid State Electronics II Lab

Grades are based on tests, completed labs and attendance as follows:

(2) Tests	33%
(9) Labs	33%
Attendance	33%

Lab 12	Class C Amplifiers
Lab 1	Field Effect Transistors (Part 1)
Lab 1	Field Effect Transistors (Part 2)
Lab 2	Field Effect Transistor Applications
Lab 3	Power Field Effect Transistors
Lab 4	Frequency Effects
Lab 5	Op-Amp Open Loop Comparators
Lab 6	Op-Amp Closed Loop Configurations
Lab 7 (Rev. 1)	Differential Amplifier, Op-Amp Null
Lab 8	Summing Amplifier
Lab 9 (Rev.1)	Active Filters
Lab 10	Positive Feedback Schmitt Trigger Oscillator
Lab 11	Sine Wave Oscillators