

SAN JOSE STATE UNIVERSITY
Department of Aviation & Technology

Tech 62 Labs @ IS117
 Fall 2016
 Section 13. W 1800 – 2045
 Section 12. F 1200 – 1445

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 Office Hour: By Appointment

Date	Lab Experiments
Aug 31, Sep 2	Multisim Introduction and Hands On, Lab Safety and Rules
Sep 7, 9	#11. Bipolar Transistor characteristics (Multisim)
Sep 14, 16	#16. Collector-feedback bias (Multisim)
Sep 21, 23	Hardwired lab Experiment #1 Collector-feedback bias
Sep 28, 30	#13. Voltage Divider Biased NPN Transistor (Multisim)
Oct 5, 7	Hardwired Lab Experiment #2 Voltage Divider Biased NPN Transistor
Oct 12-14,	#17. Small-signal common-emitter amplifier (Multisim)
Oct 19, 21	Hardwired Lab Experiment #3 Small-signal common-emitter amplifier.
Oct 26, 28	#27. JFET Small-signal common-source amplifier (Multisim)
Nov 2, 4	#32. Inverting voltage amplifier (Multisim) #31. Non Inverting voltage amplifier (Multisim)
Nov 9, 11	Nov. 9, catch up - 11/11/2016 Veterans Day – Campus Closed
Nov 16, 18	Hardwired Lab Experiment #4 Inverting Voltage Amplifier
Nov 23, 25	Thanksgiving Holidays – Campus Closed
Nov 30. Dec 2	#35. Op-amp Integrator and Differentiator
Dec 7, 9	Catch up

Notes:

1. Each student will perform all lab experiments using Multisim software.
2. Each student will submit a lab report a week after the lab is completed.
3. Students working in groups of 2-3 members will hardwire four lab experiments. The measurements obtained in these hardwired lab experiments will be compared with the ones obtained using Multisim.
4. Each group will submit a report of each hardwired lab a week after the lab is completed.

**GENERAL SAFETY RULES
SAN JOSE STATE UNIVERSITY
DEPARTMENT OF AVIATION AND TECHNOLOGY
CENT**

For All Classes in IS and ENG Labs

GENERAL GUIDELINES

Protecting Yourself and Classmates:

1. Please, no running or horseplay.
2. Coats, bags and other items should be placed under your desks or on the coat rack. It's easy to trip!
3. Periodically glance away from the screen. Staring into a computer monitor too long will strain your eyes
4. Let an instructor know if the color scheme, font size, or other settings of your computer are causing strain on your eyes. There are many built-in ways to adjust these settings for comfort.
5. Avoid long sessions of typing as they may cause repetitive stress injuries to your hands.
6. Maintain good posture to ease your back.
7. Keep the noise level to a minimum.
8. Be aware of the fire exits and the location of the room's fire extinguishers.
9. Don't open the computer's power supply or monitor. There is nothing inside either that can be repaired except by a professional, but there are many things that can injure you.
10. Your feet must be protected by sturdy shoes. Open-toe or sandals are not permitted.
11. All personal belongings should be locked up in your locker. See the Central Services technicians for a locker assignment.
12. Protect your workmen around you from possible injury from the carelessness on your part
13. Never attempt to make electrical repairs. Ask your instructor for approval.
14. Report any unsafe or hazardous conditions to your instructor.
15. Students must observe safety precautions governing laboratory activities as outlined by the instructor. Safety hazards should be reported to the instructor as soon as possible. Students should not run around in the laboratories nor act in a disorderly manner during lab periods.

Protecting the Equipment and Rooms:

1. Please, no food or drink near the computers and electronic instruments!
2. Always shut down the computer via Windows' Start button
3. Use a surge protector to keep excess electric power from damaging your computer

4. Always have at least three copies of all your important files, in case the worse happens! Save in your hard drive, flash or USB drive, and home computer.
5. Turn off the computer when not in use. Like a car engine, parts wear out after a certain 'mileage'!
6. Keep dust away from the computers. This can cause short circuits
7. If any computer or instrument is found to be in repair, report it to the instructor immediately. Do not attempt to use the equipment or repair it.
8. Students must clean the benches and area used during lab periods. Equipment must be returned at the close of the lab period. Students must sign out for any instrument, tool, or material they check out.
9. NO ONE IS PERMITTED TO LEAVE THE LABORATORY UNTIL EVERYTHING IS CLEANED UP AND PUT AWAY. ANYONE LEAVING WILL RECEIVE A REDUCTION IN HIS OR HER FINAL GRADE.
10. Smoking, eating food, drinking beverages, running or acting in a manner that might produce unsafe conditions, are prohibited in all laboratory and classroom areas.
11. Do not alter or modify any computer configuration unless you contact the instructor and obtain permission.

I CERTIFY THAT I HAVE READ AND THOROUGHLY UNDERSTAND THE PROVISIONS OF THIS SAFETY HANDOUT.

(PRINTED NAME)

(SIGNATURE)

(DATE)