EE/CE/TE 3101
ELECTRICAL NETWORK ANALYSIS LAB
Summer 2014 Syllabus

Instructor: Prof. Kamran Kiasaleh
E-mail: kamran@utdallas.edu, 972-883-2990
Office: ECSN 4.302

Lab sessions:

Course objective: This course is designed to provide students with professional skills for lab experiences. Students will design, assemble and test linear electrical networks and systems. Students will learn how to troubleshoot in those procedures. Students will also use computers to control electrical equipment and acquire data using Labview. Students will simulate circuits with PSpice (MicroSim). Lab classes are designed to accompany the co-requisite EE/TE3301 Electrical Network Analysis class.

Web site: http://www.utdallas.edu/~kamran/EE3101

Check the website each week before preparing for lab. It will be updated and will include hints, tips, etc. to help you prepare.

Lab Procedures: The Lab procedures for experiments are available at the course website described above. Acrobat reader is required for the lab manual files.

PSpice: Download the Student copy of PSpice 9.1 or higher:

Experiment 1:
Download and print out the documents for experiment#1 from the web site. A description of the lab equipment is in the Appendix. The appendix also gives handy tips for using the equipment. Bring it with you to lab for reference.

Lab preparation:
1. Download the lab manual and bring it with you to lab,
2. Students should read the labs carefully and complete the prelab procedures before coming to class and submit their prelab reports to TAs (keep a photocopy to complete experiments).
3. Be prepared for the experimental procedures by understanding the relevant theory.

Lab procedure:
1. Arrive on time. Turn in your lab reports when you walk in the laboratory.
2. Ask for the component kit box (labeled with a number on the cover), then start the experiment. Use the same box for every experiment.
3. TA will assist students to complete the experiment. Ask for help when you are in trouble with circuits and equipments. However, TA is not responsible for completing the experiment for you!
4. For each step that is completed, ask your TA to verify your actual observations. TA must initial all of your observations for you to get credit for the lab.
5. Clean the workstation area and return all wires to their storage location. Turn off the power on any equipment used during the experiment.
**Lab reports:**
1. Read the descriptions of the informal lab report and the formal lab report in the preface of the lab manual. You must follow the designated formats.
2. Lab reports must be completed independently. You can share only the collected data sets with your lab partner. Copying any part of the report from others is strictly prohibited and is against the school’s scholastic integrity policy.
3. Lab reports are always due at the beginning of the next lab. The last lab report is due the week after at a time to be announced.
4. No late lab reports are allowed.
5. Students should generate lab reports in a professional manner. Lab reports should be typed (generated by a word processor).
6. Reports must be turned in when you walk into the laboratory.
7. Two copies for prelab reports are required (original copy for TAs and photocopy for students).
8. In your prelab report, you have to make a components list in the circuits for the experiment. In the lab manual, prelab report portion is given under the preparation section. You must complete the prelab work before the lab starts.

**Grading:** Grades are based on the lab reports.

Lab reports: 80%
Prelab reports: 20%

You need to score better than 40% (overall) to secure a passing grade (a grade of C- or better).

**Safety rules:** Read the safety rules that are presented in the preface of the lab manual and understand them for your safety.

**Note:** Students will work on experiments in two-person teams. Please have your teammate selected before Lab #1. If you cannot find a teammate, ask your TA for a partner assignment.

**Scholastic Integrity:** Scholastic dishonesty at The University of Texas at Dallas includes, but is not limited to, plagiarism and/or collusion. Scholastic dishonesty will not be tolerated. For details refer to the Scholastic dishonesty policy of University of Texas at Dallas at [http://www.utdallas.edu/deanofstudents/dishonesty](http://www.utdallas.edu/deanofstudents/dishonesty)

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Lab schedule: Lab schedule is subject to change.

This syllabus is subject to change without notice at the discretion of the lab instructor. Check the website [www.utdallas.edu/~kamran/EE3101](http://www.utdallas.edu/~kamran/EE3101) for updated syllabus on a weekly basis.