Prerequisites or Corequisites: ELEC 202 or ELEC 308, ELEC206

Course Description: An introduction to the experimental method. Laboratory exercises are designed to supplement the material presented in ELEC 201 and ELEC 202.

Instructor: Professor Siripong Potisuk
Office: Grimsley Hall Rm. 312
Phone: (843) 953-4895
E-mail: siripong.potisuk@citadel.edu
Office hours: 1300 – 1400 & 1600 – 1700 Monday
0900 – 1000 & 1500 – 1700 Wednesday
1300 – 1500 Tuesday & Friday
Others by appointment

Class schedule: One Credit Hour (Two Contact Hours)
1400 – 1550 hrs, Monday (Section 01)
1300 – 1450 hrs, Wednesday (Section 02)
Room: GRIMS 311

Required Text: None. Laboratory handouts will be provided by the instructor.


Course Objective: To familiarize students with the use of laboratory equipments in electrical engineering through experimental exercises involving voltage, current, impedance, frequency and waveform measurements. Students who successfully complete the course requirements should:
1) be able to competently operate basic laboratory equipments;
2) be able to make voltage, current, impedance, transient, and frequency response measurements;
3) be able to design from a set of specifications, wire, troubleshoot, and make measurements of op-amp circuits; and
4) be able to keep a laboratory notebook and prepare a formal laboratory report.
Grading Policy:

Pre-lab assignments: 20%
Laboratory Notebook: 10%
Laboratory Reports: 60%
Laboratory Practical Examination: 10%

The following grading system will be adopted as a guideline for assigning a letter grade. This guideline is subject to change depending upon the overall class performance as well.

A : 90 – 100%  B : 80 – 89.9%  C : 70 – 79.9%
D : 60 – 69.9%  F : 0 – 59.9%

Course Policies:

1) Laboratory handouts will be uploaded to the course webpage (http://faculty.citadel.edu/potisuk) one week prior to the actual lab session. It is imperative that student periodically check the course web page for updates and important news pertaining to the class.

2) During the lab session, students are to work in a group of two members. A group of three members is only allowed if an odd number of students enrolls in the class. Each lab member is expected to willfully participate in each experiment. All group members are responsible for the lab work and lab notebook.

3) Since you will work in groups of two in the laboratory, all submissions (pre-labs, lab reports, and lab notebook) will be carried out on a per-group basis, unless specified otherwise. The pre-lab assignment must be turned in at the beginning of class on the date of the actual lab session. Only neat and legible work will be accepted. Late assignments will not be accepted under any circumstances. The lab report is due at the beginning of the next class one week after the actual lab session and should follow the prescribed format. Late lab reports will incur a 50% penalty and be accepted no later than one week from the due date. The handwritten lab notebook will be inspected by the instructor at the end of each lab session. It is recommended that students within the same group alternate between keeping the lab notebook and preparing the lab report; however, they should collaborate on carrying out the pre-lab assignments. While it is permissible and recommended to rely on fellow classmates for assistance, it is not permissible to copy any portion of another student's work and pass it off as your own. CHEATING AND/OR PLAGIARISM IN ANY FORM WILL BE FULLY PROSECUTED UNDER THE CITADEL HONOR CODE.

4) At the end of the course, each student will be given a lab practical examination in place of a final examination.

5) While working in the laboratory, students must observe and follow all safety instructions. No food and drink are allowed in the laboratories at all times. Also, horseplay is strictly prohibited and
will be seriously dealt with (a failing grade for the course). Some experiments involve hazardous voltages. Students are to inform the instructor of all potentially hazardous situations. At the end of lab session, students must restore their lab bench to its original state by properly stowing all wires, turning off all equipments, and cleaning the work area.

**Attendance:** Class attendance is mandatory. Students are required to notify the instructor, if possible, in advance should it be necessary to miss a lab for any reason. Absences in excess of 20% of the lab meetings will result in a failing grade for the course. Students missing a lab must make up the lab to receive credit for the lab report. Excused absence will be granted under extreme circumstances only (guard duty is not considered an extreme circumstance).

**Special Accommodations:** Any students requiring special accommodations for learning disabilities should provide the instructor with verifiable written documentation of their needs as early in the semester as possible (i.e., within the first two weeks of the semester). This will ensure that the students have ample opportunity to succeed in their academic pursuits.

**Lesson Plan:**

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**Important Dates**

- Monday, January 18th: Martin Luther King Jr. Day (No Classes)
- Tuesday, January 19th: SCCC Drop/Add Ends
- Tuesday, March 9th: SCCC Midterm Grading Period Ends
- Wednesday, March 17th: Last Day to Withdraw With a Grade of “W”