

**ELEC 302      ELECTRICAL MACHINERY LAB      Spring 2013**

**Instructors:**

Section 01, 02, R. Barsanti, Grimsley 327, 953-7593, [robert.barsanti@citadel.edu](mailto:robert.barsanti@citadel.edu)  
Section 81, H. Weatherford, Grimsley 312, 953-???, [HWeatherford@Citadel.edu](mailto:HWeatherford@Citadel.edu) ;  
[Harry.WeatherfordJr@Nucor.com](mailto:Harry.WeatherfordJr@Nucor.com)

**Text:** Labs can be found at [ELEC 302.htm](http://ELEC 302.htm)

**Meeting Times:**

**Section 81: Monday 2015 - 2200**

**Tentative Schedule**

<b>Week #: Mon</b>	<b>Pre-Lab</b>	<b>Report</b>	<b>Lab Work</b>
Week 1 : 1/7	None	None	Introduction
Week 2 : 1/14	Lab 1	None	Lab 1
Week 3 : 1/21*	None	None	None
Week 4 : 1/28	Lab 2	Lab 1	Lab 2
Week 5 : 2/04	Lab 3	Lab 2	Lab 3
Week 6 : 2/11	Lab 4	Lab 3	Lab 4
Week 7 : 2/18	No Lab	No Lab	No Lab
Week 8 : 2/25	Lab 5	Lab 4	Lab 5
Week 9 : 3/04	Lab 6	Lab 5	Lab 6
Week 10 : 3/11	Lab 7	Lab 6	Lab 7
Week 11 : 3/18	Spring Break	Spring Break	Spring Break
Week 12: 3/25	Lab 8	Lab 7	Lab 8
Week 13 : 4/01	Lab 9	Lab 8	Lab 9
Week 14 : 4/08	Lab 10	Lab 9	Lab 10
Week 15 : 4/15		Lab 10	Lab Final

\* MLK Day -no classes 1/21/2013

**Grading**

<u>Item</u>	<u>% Grade</u>
Pre-Labs and Lab Notebook	30 %
Lab Reports	50 %
Lab Performance	10 %
Lab Final / Practical	10 %

**A (>90), B (80 – 89), C (70 – 79), D (65 – 69), F (<65)**

**Skills to be developed:**

- AC power measurements
- Three phase transformer measurements
- DC motor and generator operation characteristics
- AC motor and generator operation characteristics
- Preparation of technical reports
- Working as part of a technical team

**Course Policies:**

*Attendance:* A student missing a lab must work out a time with the instructor to make it up. Missing more than 2 labs will result in a failing grade in the course.

*Lab teams:* The students will be divided into teams of two or three individuals. The lab work, lab notebook, and technical reports are the responsibility of all team members.

*Lab decorum:* Each lab team member is expected to earnestly participate in each experiment. Students must respect the lab equipment and clean their lab bench by properly stowing all wires and components after each experiment. Food and drink are not permitted in the laboratories.

*Safety:* **This laboratory uses high voltages, high currents, and high speed rotating equipment. Adherence to all safety rules is mandatory!** Absolutely no “horse play” of any kind will be tolerated, and could result of expulsion of the student from the course. **All potentially hazardous situations must be reported to the instructor.**

*Lab Notebooks:* Each lab team will keep a handwritten lab notebook in accordance with the prescribed format. All pre-labs should be in the lab notebook, and presented to the instructor at the start of the lab period.

*Lab reports:* Lab reports shall follow the prescribed format and be the printed output of a word processor. They must be neat and legible and signed on the first page by all team members. Late pre-labs or lab reports will not be accepted unless a prior arrangement is made.

*Lab practical or final:* At the end of the course, a lab practical examination or final exam will take place during the last regular class period.

*Accommodations for learning disabilities:* Upon receipt of a bona fide letter from the Office of Access Services, Instruction, and Support (OASIS), appropriate accommodations will be made for learning disabilities.