ECE 3354 POWER ENGINEERING LABORATORY Summer II 2008

Course Supervisor: Dr. Jaime De La Ree.

Objective: The overall objective of this course is to enhance the students understanding of the concepts of electromechanical energy conversion and machine performance. Each experiment has a stated objective.

Text: ECE 3354 *Power Engineering Lab* Manual, available online at **http://www.ece.vt.edu/ece3354/**

Course Format: This is a concept laboratory. Each student is expected to perform each experiment as part of a group, document the observations, and write a report explaining the observations in terms of the theory learned in courses ECE 3304. Merely reporting the observations is not sufficient for successful completion of the course. The emphasis is on how and why a device responded the way it did.

Reports: Each student must **write a report independent** of the other students. Use the template for each report. **Sharing of explanations and conclusions is a violation of the honor code.**

Reports must be neat and legible. They must be typed and must include the ordinal data sheets. **Late reports** will be penalized at the rate of **5 points for every day late**. A report must be submitted even if it is too late to receive a grade.

ACCOMMODATIONS FOR MEDICAL OR PERSONAL/FAMILY EMERGENCIES

If you become ill and have to miss class, especially in the case of an exam or some due date, you should see a professional in Schiffert Health Center in McComas Hall and acquire a medical excuse**. If you experience a personal or family emergency, you should contact the Dean of Students Office at 231-3787 or visit them at 201 W. Roanoke St. (gray house at the corner of Draper Ave. across from the 7-11).

**which is then provided via email to the instructor from the College of Engineering Dean's office.

Prelab

For preparation read the lab, be familiar with the lab procedures and the concepts to be demonstrated.

Grading:

*Reports and Quizzes	85%	There will be a **50% deduction** if the lab is not completed before the Quiz or Report.
*Final exam:	15 %.	

The final exam will be based on the experiments and will measure the students understanding of the concepts.

Each experiment must be performed, each report submitted or quiz taken, and the final exam taken to qualify for course credit.

Honor Code: Since students must work in groups, there will be sharing of measured data. Each student must **write a report independent** of the other students. **Sharing of explanations and conclusions is a violation of the honor code.**

Realities: Experiments don't always come out as planned. If the observed data is not correct, the report should reflect that the student recognizes the data is incorrect. The report must then explain what is wrong and how the errors will be corrected during a rerun of the experiment. Experiments will not be rerun because neither the student, the instructor, not the laboratory has enough free time to do it.