EE 411, Fall 2009, Circuit Theory, Unique Numbers 16345 and 16350
Lecture MWF 11-12, ACA1.104
Recitation for 16345 on Wed. 1:00-3:00 in ENS109, and for 16350 on Fri. 2:00-4:00 in ENS115

Professor. Dr. Mack Grady, ENS348, grady@mail.utexas.edu, 471-5231.
Office Hours. MWF 3-4. Also, Fri 10-11 on test days.
TA. Robbie Heath, rheathjr@gmail.com (office hours to be determined)
Course Home Page. www.ece.utexas.edu/~grady/EE411_Fall09.html (notes, solutions to homework and tests)
Course Description. Capacitance and inductance; first- and second-order transient circuit response, including operational amplifier circuits; sinusoidal steady state analysis; bode plots; three-phase circuits; transformers; two-port networks (z-parameters and y-parameters); and computer-aided analysis and design.

Schedule

General Circuit Analysis Concepts and Procedures, Illustrated with DC
Week 2 (Sept. 7) Mon. holiday. Thevenin and Norton equivalents. Chap. 4. Test 1 on Friday.

Steady-State AC Circuits and Power
Week 3 (Sept. 14) Complex numbers. Sinusoids and phasors. Appendix A9, Chap. 9.
Week 4 (Sept. 21) Sinusoidal steady-state analysis, cont. Chap. 10. Test 2 on Friday.
Week 6 (Oct. 5) Three-phase power. Chap 12. Test 3 on Friday.

Transient Circuits
Week 10 (Nov. 2) Second-order circuits. Chap. 8. Test 5 on Friday.
Week 11 (Nov. 9) Second-order circuits, cont.

Other Components and Concepts
Week 14 (Nov. 30) Design exercise. Specifying a residential PV system. No test this week.

Six 30-minute Tests (60%). Every other Friday, beginning Sept. 11. One 8½ x 11” sheet of notes (both sides) is permitted. If you miss one of the tests, your final exam grade will be substituted for the missing test grade. Additional missed tests will be handled on a case-by-case basis. If necessary, each test and the final exam is curved upward to achieve an average of 75. The solution is discussed at the end of class.

Homework. Homework will be assigned each week. Working in teams is encouraged. Homework will not be turned in for grading. Instead, recitation quizzes will be your homework grade.

Recitation Sessions and Quizzes (15%). Recitation sessions begin on Wed., Sept. 2. Stick with your assigned time unless you clear it first with Dr. Grady. Sessions will focus on solving the homework problems and other problems related to classroom lectures. Some sessions will include laboratory experiments. A fifteen-to-twenty minute quiz will be given at the end of most recitation sessions that covers the most recent homework assignments. Your lowest grade will be dropped in determining your recitation quiz average. You must be present for the entire recitation session to take the quiz. There are no makeups, but if you miss a quiz, keep a log book and staple an explanation sheet your final exam.

Final Exam (25%). Cumulative. Given during the official UT-scheduled time period and location. One 8½ x 11” sheet of notes (both sides) is permitted.

Cell phones, text messaging, email, chit-chat, unnecessary racket, laptops, continually arriving late. No.

Formula for Success: 1. Show up for class and recitation sessions. 2. Work problems, at least two each day. 3. Don’t get behind. 4. Work more problems. 5. Come to office hours if you need help. 6. Work more problems.