

EE221 INTRODUCTION TO ELECTRICAL ENGINEERING I

Course Policy

Section 4321

Fall 2006

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1 Introduction

The course objectives, course syllabus, a course “roadmap”, and the laboratory policy are posted on the web at URL <http://www.usna.edu/EE/ee221/>. However, the course policy at that same URL is general. This document provides the course policy for Section 4321.

2 Textbook

1. Charles K. Alexander and Matthew N. O. Sadiku, *Fundamentals of electric circuits*, 3rd edition, McGraw-Hill, Boston, 2007.

The text includes the circuit simulation and analysis software Multisim 2001, which we will use throughout the course. We will cover the first half of the text in EE221 and most of the latter half of the text in the follow-on course EE228.

2. Mahmood Nahvi and Joseph A. Edminister, *Schaum's Outline of Theory and Problems of ELECTRIC CIRCUITS*, 4th edition, McGraw-Hill, 2003.

This book is optional. Its value is that it has numerous worked-out examples that may help you understand the circuit analysis techniques. The material in this book will help you in both EE221 and EE228.

3. Syed A. Nasar, *Schaum's 3000 Solved Problems in Electric Circuits*, McGraw-Hill, 1988.

This book also is optional and contains additional worked-out examples that you can use as reference to help you understand circuit analysis techniques.

4. Project Kits will be used in the latter half of the course to allow you to pursue a more meaningful hands-on circuit design, build, and test experience. Each student will build a power supply circuit and all students will be encouraged to build other circuits independently.

3 Readings

Readings for each lesson are as specified in the syllabus at URL <http://www.usna.edu/EE/ee221/syllabus.htm>. I expect you to have read the material *prior* to the class in which we discuss it.

4 Homework

Homework assignments for lessons also are listed in the syllabus at <http://www.usna.edu/EE/ee221/syllabus.htm>. I will collect assignments at the *beginning* of the lecture in which they are listed. For example, the problem set for Lesson 3 is due at the beginning of Lecture 3. If you will be absent from class, submit your homework to me in advance or get a reliable classmate to submit it for you. I will not grade homework assignments but I will check to see that you have done them. You get 4 points if they appear to be in good order, 2 points if not, and 0 points if they are not submitted. The solutions will be posted online within a few days so that you can check your work yourself. If you do not understand the solutions after that, see me for extra instruction.

Make a practice of organizing all your written work and make it legible. If you also include a statement of

the problem, you will find it a useful study aid. (Without the inclusion of the problem, it will probably be useless for that purpose.) A properly formatted solution contains definitions of all variables, conveys ideas algebraically rather than numerically, includes a schematic diagram if appropriate, and flows from left to right and top to bottom. Plots of data require a title; labels, units, and a scale for the axes; and a legend if more than one graph is shown on a single plot.

Include all measurement units (e.g., volts or amperes) where appropriate. Use *Système Internationale* (SI) unit symbols and prefixes, e.g., 15.3 mV or 213.4 μ A.

5 Labs

A detailed discussion of the lab policy is on the web at URL <http://www.usna.edu/EE/ee221/labpolicy.htm>.

I encourage you to help and get help from other students in the lab.¹

6 Quizzes

I will occasionally hold short quizzes. All quizzes will be closed-book. Quizzes may cover reading assignments as well as problem-solving. If you are absent for a quiz, you have one week in which to schedule a make-up quiz with me.

7 Tests and Exams

There will be five closed book tests as shown on the course syllabus. Each will include a one-hour in-class portion, and may additionally include a take-home portion intended for computer simulation and analysis.

The Final Exam will be closed book and three hours (180 minutes) in length. The Final will be cumulative. All midshipmen are required to take the exams at the time prescribed by the Academic Dean. The allowance of make-up exams will be reviewed on an individual basis by the course coordinator and the EE Dept Chair and must be in accordance with the Commandant's Priorities.

¹Of course, this is completely distinct from and not permission to commit plagiarism.

Exams will have a strict start/stop time. I will announce the start and end of each exam by the commands "*Begin work*" and "*Cease work*." You shall immediately place any writing instrument in your hand on the desk/table top and close the exam (cover sheet on top). I shall keep the class apprised of the time remaining.

8 Collaboration

Collaboration with your fellow Midshipmen is permitted and encouraged. Such collaboration is a hallmark of all professional officers. However, the assignment you hand in must be your own. Claiming someone else's work as your own—plagiarism—is totally unacceptable. Collaboration is not permitted during quizzes, tests, or exams.

9 Calculators

You may use a calculator in every class, lab, quiz, test, and exam. You may store programs and functions in your calculator, but not text. I will not permit you to share calculators during quizzes, tests, or exams. If your calculator doesn't work and you have not brought spare batteries, plan to do arithmetic manually for you have no alternative.

10 Grades

I score all problems on a 4.0 scale and weight them according to difficulty or other criteria.

I determine grades initially as shown in Table 1 on page 3. I award a letter grade of A for a numerical grade of 3.5 or better; B for 2.5 to 3.5; C for 1.5 to 2.5; D for 0.5 to 1.5; and F for less than 0.5. However, I reserve the right to alter course letter grades up or down based on your class participation, trends, and my overall impression of your performance.

11 Extra Instruction

I would prefer that you make an appointment by e-mail for EI. See my schedule at

<http://www.usna.edu/Users/ee/cameronc/>

	6-week	12-week	16-week	Final Grade
Final Exam	—	—	—	20%
Exams (5)	28.6%	37.5%	50.0%	40%
Homework	8.9%	7.8%	6.2%	5%
Lab Exercises	35.7%	31.3%	25.0%	20%
Quizzes	26.8%	23.4%	18.8%	15%
Class Participation	subjective			

Table 1: Grade Weightings

for a list of generally open times.

For EI, bring your course notes, homework problems, and specific questions or problems confronting you. If you are having trouble learning the material and applying it to solving problems, it would be wise to get extra instruction.

I will accept phone calls at home up to 2200 and will do my best to give decent assistance by telephone. I am almost invariably in my office by 0730, if not earlier.

Finally, you may ask me questions via e-mail, too.

12 Administrative Matters

12.1 Questions

Feel free to ask questions in class. I would rather clear up a difficulty immediately than see you cease all progress because of a misapprehension. If it is indicated, I may ask you to schedule extra instruction.

12.2 Sleeping in Class

Even if you are drowsy, *do not sleep in class*. Stand up quietly and go to the back of the room. You do not need my permission to do so. When you are ready, quietly return to your seat.

12.3 Omitted Material

I cannot cover everything during class. If some topic or example is not covered, that does not mean it is unimportant. Refer to the EE462 course objectives to make sure you have not overlooked anything.

12.4 E-mail and the Web

I plan to rely heavily on e-mail and the web to communicate with you. Check your e-mail at least daily so you don't miss something I send you. Bear in mind that e-mail is not instantaneous: although the mail may be in my box, I may not read it for some hours.

The course web page is at

<http://www.usna.edu/EE/EE221/>

12.5 Absence/Makeup Policy

You must notify me prior to missing class if you will be absent. Arranging for makeups of exams, quizzes, or labs is *your responsibility* and must be done within one week.

12.6 Section Leader's Duties

I will appoint a Section Leader and an alternate during the first class. The alternate will fill in for the Section Leader if the latter is absent. I require the Section Leader to

- call the section to attention and report the names of absent students at the start of class;
- collect and submit all homework and other assignments to me at the start of class. Separate different assignments into different piles;
- call the class to attention for dismissal at the end of class;
- muster the class in the Maury Hall parking lot during emergencies, fire drills, etc., and report absences to me; and
- contact the EE Department by phone (3-6150) if I am more than 10 minutes late for class to ask my whereabouts. If I am not expected to arrive

at all, direct the class in a study period, collect all homework, and deliver it to the EE Office before the close of business that day. Do not dismiss the class early.

I am obliged to report Midshipmen who are late or absent or who leave early.

12.7 Eating and Drinking in Class

No eating or drinking is allowed in the lab area. Drinks are permitted in the classroom area provided they are in a covered container. You are responsible for keeping the classroom clean. Abuse of this privilege will result in drinks being banned from the classroom.

12.8 Contacting the Instructor

Instructor: CDR Charles B. Cameron

Telephone: (410) 293-6181 (Work)

(410) 757-8876 (Home, up to 2200)

E-mail: cameronc@usna.edu

Office: Maury Hall 336