

The University of Akron
Department of Electrical Engineering

4400:354-301 Electromagnetics II
SUMmer 2008 Schrank South 222*
Time 8:00 - 9:40 AM*
MTuW

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***See: Method of delivery**

TEXT: Engineering Electromagnetics, 2nd Edition, 2nd Printing, 2007, N. Ida, Springer Verlag

Office Hours: See method of delivery.

Course Outline: We will follow the notes rather closely. The material covered includes chapters 10 (review), 11, 12, 13, 14, 15, 16. The topics are:

- Chapter 10: Faraday's Law (review)
- Chapter 11: Maxwell's equations.
- Chapter 12: Electromagnetic waves and propagation
- Chapter 13: Reflection and transmission of plane waves
- Chapter 14: Theory of transmission lines
- Chapter 15: The Smith chart, impedance matching and transmission line circuits
- Chapter 16: Transients on transmission lines

Grading:	1st Exam	15%	(Tentative: Wednesday, July 8)
	2nd Exam	20%	(Tentative: Monday, July 27)
	3rd Exam	15%	(Tentative: Monday, August 10)
	Homework	15%	
	Final Exam	35%	(optional, see below, on August 12)

Note: after the third exam, which will be given on or around the last week of the Semester (or perhaps a few days earlier), your initial grade will be computed using the following weights:

1st Exam	22.5%
2nd Exam	35%
3rd Exam	22.5%
Homework	20%

You then have the option of taking the final exam. There is no need to tell me what you want to do. If you take the final exam, I will re-compute the grade according to the first weights above. If not, your initial grade becomes your grade for the Semester. This option is designed so that students that do very well in term exams do not need to take the final whereas those that did not

do well can still improve their grades. The final is comprehensive and will be given at the scheduled time.

Homework: Will be assigned Wednesdays, to be submitted on the following Monday. Homework will be corrected, graded and returned the following Monday (see below). Please note: this is a summer class and each week of classes is roughly equivalent to two weeks of regular semester classes. The homework will also be equivalent to two homeworks. You will have between Wednesday to the following Monday to do the homework. Because of the extent of the homework and the short period of the summer class the submission times are firm.

Supporting material: Additional material (previous exams with solutions) will be made available on the website.

Method of delivery and other details

During Summer 2009, the course will be web-based. This means the following:

- **The lectures will be available on line or for download on my website:**
<http://ee.ascs3.uakron.edu/ida/> (navigate to the Electromagnetics II class to view and/or download the lectures)
- **Prior to each scheduled lecture date, there will be two 50 minutes lectures available for viewing/downloading**
- **These will be available until the next scheduled lecture. After that they will be removed from the web site.**
- **We are also trying to have these lectures shown in the scheduled classroom by the student assistant but this is not certain. I will let you know by e-mail if this will be possible.**
- **I will assign homework by e-mail. I will use your University of Akron e-mail unless you wish to use a different e-mail. If you do, send me an e-mail to that effect.**
- **Homework will be collected by the student assistant, graded and returned to you.**
- **Unfortunately, in this method of delivery, there will be no office hours. You can communicate with me at any time as follows:**
 - **By telephone: call my office telephone (330-972-6525) and your call will be transferred to my skype telephone number**
 - **Call my skype telephone number directly (330-331-4783)**
 - **Call me on skype from your computer: My skype name is nathanida**
 - **Send me an e-mail**
 - **Note: because I may not be in the country when you call there may be a time difference between Akron and where I may be. If that's the case I will call you back as soon as practical. Make sure you leave contact information.**
- **I am also trying to have the class evaluation forms on line. However, since evaluations are managed by the Dean's office, I will have to wait for their approval.. Should this idea not be feasible, the evaluation forms will be given in class by the student assistant.**
- **Exams: the exams will be written by me and proctored by the student assistant in**

the assigned class and assigned time. These exams will be scanned, e-mailed to me for grading and I will then send you the graded exam by e-mail.

Feedback:

This method of delivery is new for me and for the department. In that sense it is an experiment. I ask that you give me as much valid feedback as possible so I can assess the effectiveness of the method from your point of view. I am particularly interested in what does not work well, how it can be changed and improved and, in general, in your impressions. But please do not wait until the end of the semester but rather, send me your comments as soon as possible so I can relate them with the material and perhaps introduce changes as we go. I will share with the class all comments (anonymously, of course), again for the purpose of soliciting the class's input as a whole.