

The University of Akron
Department of Electrical Engineering

4400:354-001 Electromagnetics II

Spring 2018

Leigh Hall 409

Time 9:55 - 10:45 AM

MWF

Dr. N. Ida

Room ASECS-252

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TEXT: Engineering Electromagnetics, 3rd Edition, 2015, N. Ida, Springer Verlag. See note at end.

Office Hours: To be decided by mutual agreement. Suggested times: Monday and Friday, 8:00 to 9:45 AM and Wednesday 3:00 to 5:00 PM.

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

Chapter 10: Faraday's Law

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	20%	(Tentative: Friday, February 16)
	2nd Exam	20%	(Firm: Friday, March 23)
	3rd Exam	20%	(Tentative: Friday, April 20)
	Homework	5%	
	Final Exam	35%	(optional, see below)

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	30%
2nd Exam	35%
3rd Exam	30%
Homework	5%

You will receive an initial grade based on these weights. 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 exams do not

need to take the final while those that did not do well can still improve their grades. The final will be given at the scheduled time during examinations week.

PLEASE NOTE! Exams are open notes/book. You are allowed any written material as well as a calculator

The following are not allowed:

Cell phones

Laptops

Any other connected device

Homework: Will be assigned on the first class of the week to be submitted on the first class of the following week. Homework will be corrected, graded and returned the following Monday. Solutions to all homework problems will be posted after the deadline for homework. All homework assignments will be counted in the final grade. The deadline for submission of homework is firm. I wish to remind you that the purpose of homework is to exercise the material and prepare you for exams. Only independent work has the desired effect. I do encourage you to work in small groups (2 – 3 is ideal) to understand the material but your work must be independent.

Supporting material: Additional material (previous exams with solutions, some notes, etc.) will be made available from time to time.

Note on textbook: Please make sure it is the 3rd Edition. It has many changes and corrections that are not present in the previous editions. If however you already possess a copy of the 2nd edition use it but be aware that it does contain some errors and the problems section has been modified. The first edition is not recommended as the changes are major.