

ELECTROMAGNETISM
EGR302
Spring 2013

Instructor: Nat Hager

Class: WF 12:30 – 2:50 Esbenshade 182

Office: E173

Office Hours: 1:00 - 2:00 Mo/Tu; and by appointment

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Resources: public directory hagerne or FTP <http://www.win.net/~dorsea/etown/>

Text: *Engineering Electromagnetics, 8th Ed.*, William Hayt & John Buck, McGraw-Hill, 2012, ISBN: 978-0-07-338066-7.

Student Learning Objectives: Students will use differential calculus and analytic geometry in Cartesian, cylindrical and spherical coordinates to solve advanced problems in electro- and magnetostatics. They will design electromagnetic systems using ANSYS.

Course Coverage: The course will cover textbook chapters 1-7 and the ANSYS software.

Prerequisites: PHY201; pre- or co-requisite: MA321

Policy Items:

- 1) Attendance is mandatory, since participation will account for 40% of the course grade. I strongly advise all students to attend and participate in all course activities.
- 2) This course will operate according to the Elizabethtown College Pledge of Integrity. Any cases of academic dishonesty will be handled according to the guidelines under “Academic Judicial System,” in the Elizabethtown College Catalog.
- 3) Elizabethtown College welcomes otherwise qualified students with disabilities to participate in all of its courses, programs, and activities. If you have a documented disability and require accommodations to access course material, activities, or requirements, you must:
 - 1.) Contact the Director of Disability Services, Lynne Davies, in the Center for Student Success, BSC 228, by phone (361-1227) or email daviesl@etown.edu.
 - 2.) Meet with me, the instructor, within two weeks of receiving a copy of the accommodation letter from Disability Services to discuss your accommodation needs and their implementation.

4) Assignments, Point Distribution, and Grading Scale:

Assignment	Percent
Participation	40
First midterm exam	20
Second midterm exam	20
Final exam	20

The participation grade will be based on homework, sample exams, in-class assignments, and presentations. **No assignment for the participation grade will be accepted late.** Homework and sample exams are due at the beginning of the class period for which they were assigned. In-class assignments and quizzes are generally due at the end of the class in which they were assigned.

The first midterm exam (Tues, 21 Feb) will cover material finished by 16 Feb. The second midterm exam (Tues, 3 Apr) will cover material finished by 29 Mar. The final exam (scheduled by registrar) will be comprehensive.

Grading scale

Percent	Grade
93.0 - 100	A
90.0 - 92.9	A-
86.0 - 89.9	B+
83.0 - 85.9	B
80.0 - 82.9	B-
76.0 - 79.9	C+
73.0 - 75.9	C
70.0 - 72.9	C-
66.0 - 69.9	D+
63.0 - 65.9	D
60.0 - 62.9	D-
Below 60.0	F

All final percentages will be rounded to three significant figures. For example, 72.95000000% will be rounded up to 73.0% (C) and 72.94999999% will be rounded down to 72.9% (C-). I will not 'curve' exam scores (or any scores for that matter) and I will not change the grading scale. Do not expect to receive a grade other than you earn according to this scale.

Caveat: This syllabus may be amended during the semester; I will announce changes in class. It is your responsibility to obtain changes to the syllabus should you miss a class in which changes were announced.