

PHYS 607: E&M I

WF 9:00 – 10:15 AM, Meyerhoff 256

Instructor: Dr. Jason Kestner
Office: Physics 316
Office Hours: W 2:30–3:30 PM, or anytime my door is open
Email: jkestner@umbc.edu
Textbook: Modern Electrodynamics, Zangwill
Other Resources: Classical Electrodynamics, Jackson
Introduction to Electrodynamics, Griffiths

Course Description

This course covers the general content of Chapters 2-15 in Zangwill, though we will not necessarily follow the textbook exactly. You will learn to calculate the electrical and magnetic fields in various physical scenarios, and just as importantly, develop valuable technical and problem-solving skills. You may find it useful to consult Griffiths along the way to aid basic conceptual understanding. I will also assign many problems from Jackson's classic (and infamous) text on E&M. However, Zangwill is much better written, and I will teach with the assumption that you are studying from that text on your own.

Assignments

Homework will be assigned regularly. Many of the problems have solutions posted on the internet. Some of those solutions are even correct. I encourage you to consult those solutions responsibly and, following ethical scientific practice, cite any source you found useful. However, the work you turn in must be self-contained, logical, and neat. You may use Mathematica or other software freely. When you do so, attach a printout to your homework.

Exams

There will be two midterm exams and one final exam. The final exam will be cumulative.

Overall Grades

Your course grade will be determined by the following components:

Homework	20%
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	30%

This course will not be graded on a curve. Total scores translate to grades in the following way:

Score	Grade
90–100	A
88–90	A-
85–88	B+
81–85	B
78–81	B-
75–78	C+
71–75	C
68–71	C-
65–68	D
0–65	F

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.