

# PHYS 607: E&M I

## WF 9:00 – 10:15 AM, Sondheim 204

**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:** Classical Electrodynamics, Jackson, 3rd ed.

### Course Description

This course is all about exploring the richness of Maxwell's equations. 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. We will closely follow the first seven chapters of Jackson, time permitting. You are responsible for reading the textbook on your own. I intend to use the class time to reinforce key concepts, take questions, and work through examples.

### Assignments

Homework will be assigned regularly. Some of the textbook problems have solutions posted on the internet. Some of those solutions are even correct. I encourage you to consult those solutions responsibly and cite anything you find 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.