

PHYS607 Electromagnetic Theory, Spring 2021

INSTRUCTOR: Dr. Pengwang Zhai
Office: Phys. 427
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DATES AND LOCATION: WeFr 9:00AM-10:15AM
First Day of Class: Jan 26
Last Day of Class: May 12
Spring Break: March 14-21, no class.
Midterm I: Feb. 26
Midterm II: April 9
Final Exam: TBD

OFFICE HOURS: Mon 9:00AM-10:00AM or Through Email Appointment

Email: pwzhai@umbc.edu

Required TEXTS: Modern Electrodynamics, Zangwill

Other Resources: Classical Electrodynamics, Jackson
Introduction to electrodynamics, Griffiths

GRADING:

Homework (25%),
Midterm Exam I: (20%),
Midterm Exam II: (20%),
Final Exam: (35%).

- $91 \leq A < 100$
- $88 \leq A- < 91$
- $85 \leq B+ < 88$
- $81 \leq B < 85$
- $78 \leq B- < 81$
- $75 \leq C+ < 78$
- $71 \leq C < 75$
- $65 \leq C- < 71$
- $60 \leq D < 65$
- $0 \leq F < 60$

Course Strategy:

Email: All emails for this class should have PHYS607 in the Subject line.

Please turn off all cell phones and pagers when entering any classroom. All exams will be in class. Phones, calculators, computers, ipads, etc. are expressly forbidden to be turned on during quizzes and exams.

This course covers the general content of Chapters 1-15 in Zangwill. 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.

Reading the sections of the textbook corresponding to the assigned homework exercises is considered part of the homework assignment; you are responsible for material in the assigned reading whether or not it is discussed in the lecture. Homework will be due weekly in Friday's lecture. Late homework submission is not accepted. Your lowest homework score will be dropped.

Private chatter during lecture is very distracting, but it is perfectly OK to interrupt the lecture by yelling "Question!" Questions in lecture are always good, and are strongly encouraged! I encourage collaboration, an essential skill in science and engineering. However, it is also important that you OWN the material. I strongly suggest you start homework by yourself (and that means really making an extended effort on every problem) Then work with a group, and finally, finish up on your own - write up your own work, in your own way.

Academic Honesty Policy

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. [Statement adopted by UMBC's Undergraduate Council and Provost's Office.]

Disclosures of Sexual Misconduct and Child Abuse or Neglect

As an instructor, I am considered a Responsible Employee, per UMBC's Policy on Prohibited Sexual Misconduct, Interpersonal Violence, and Other Related Misconduct (located at <http://humanrelations.umbc.edu/sexual-misconduct/umbc-resource-page-for-sexual-misconduct-and-other-related-misconduct/>). While my goal is for you to be able to share information related to your life experiences through discussion and written work, I want to be transparent that as a Responsible Employee I am required to report disclosures of sexual assault, domestic violence, relationship violence, stalking, and/or gender-based harassment to the University's Title IX Coordinator.

As an instructor, I also have a mandatory obligation to report disclosures of or suspected instances of child abuse or neglect

(www.usmh.usmd.edu/regents/bylaws/SectionVI/VI150.pdf).

The purpose of these reporting requirements is for the University to inform you of options, supports and resources; you will not be forced to file a report with the police. Further, you are able to receive supports and resources, even if you choose to not want any action taken. Please note that in certain situations, based on the nature of the disclosure, the University may need to take action.

If you need to speak with someone in confidence about an incident, the following Confidential Resources are available to support you:

The Counseling Center: 410-455-2472

University Health Services: 410-455-2542

(After-hours counseling and care available by calling campus police at 410-455-5555)

Other on-campus supports and resources:

The Women's Center, 410-455-2714

Title IX Coordinator, 410-455-1606

Additional on and off campus supports and resources can be found at:
<http://humanrelations.umbc.edu/sexual-misconduct/gender-equitytitle-ix/>.