

THE UNIVERSITY OF TEXAS AT EL PASO  
COLLEGE OF SCIENCE  
DEPARTMENT OF PHYSICS

<b>Course</b>	PHYS 4342
<b>Course Title</b>	Electromagnetics II
<b>Credit Hours</b>	3.0
<b>Course Meetings &amp; Location</b>	PSCI 218: 6:00 pm to 7:20 pm (Monday and Wednesday)
<b>Prerequisite Courses</b>	MATH 2326, 3323, and 3335, and PHYS 2421 w/C or better
<b>Instructor(s)</b>	<b>Dr. Md Fhokrul Islam</b>
<b>Office Location</b>	PSCI 121E/PSCI 200
<b>E-mail</b>	<b>mfislam@utep.edu</b>
<b>Office Hours</b>	Tuesday: 10 am – 11 am (Possible to meet other times by appointment)
<b>Textbook(s), Materials</b>	Main textbook: <i>Introduction to Electrodynamics</i> by <i>David J. Griffiths (Fourth Edition)</i>
<b>Course Objectives (Learning Outcomes)</b>	<p>The objective of PHYS 4342, which is the second part of the introduction to electrodynamics course for the advanced undergraduate physics students at the junior or senior level, is to provide students with a rigorous problem-solving abilities and description of physical phenomena.</p> <p>We will study the following topics: Electrodynamics, conservation laws, electromagnetic waves, potential and fields, and radiation.</p> <p>Final exams must be given at the scheduled time; any/all exceptions must be approved by both the Department Chair and the Dean.</p>
<b>Course Activities/Assignments</b>	<p><b>Homework</b> Several homework sets will be assigned. Homework is a key component of this course, as acquiring and improving your analytical skills critically depend on the number and variety of problems you attempt to solve. Solving homework problems in groups is encouraged. Due dates for homework will be announced, and no late homework will be accepted.</p> <p><b>Class participation:</b> Each student will be assigned to solve homework problems on the whiteboard during class at some point in the semester.</p>
<b>Course Activities/Assignments</b>	Feel free to form study groups with your classmates. Make sure that you understand the solutions and write them up yourself. There is a strong correlation between homework scores and exam scores!
<b>Make-up Policy</b>	An extension of the due date for the homework as well as the make-up of missing exams will be granted only in extraordinary circumstances.
<b>Civility Statement</b>	<p>Cell phones and pagers should be turned off during class time.</p> <p>When absences occur, it is your responsibility to obtain handouts and notes from your peers.</p> <p>Academic integrity is to be always practiced.</p>

<b>Disability Statement</b>	<p>If you have a disability and need classroom accommodations, please contact the Center for Accommodations and Support Services (CASS) at 747-5148, or by email to <a href="mailto:cass@utep.edu">cass@utep.edu</a>, or visit their office located in UTEP Union East Building, Room 106. For additional information, please visit the CASS website at <a href="http://www.sa.utep.edu/cass">www.sa.utep.edu/cass</a>.</p> <p>The student is responsible for presenting to the instructor any accommodation letters and instructions.</p>
<b>Military Statement</b>	<p>If you are a military student with the potential of being called to military service and/or training during the semester, you are encouraged to contact the instructor at the beginning of the semester.</p>

### Grading Policy:

Grades in this course will be based on your scores on two midterm exams, a final exam (comprehensive, but with emphasis on the last part of the course), homework assignments, and class participation.

**Important\*: No electronic devices (smartphone, laptop, tablet, etc.) are allowed during the exams. Fail to comply will lead to immediate expulsion.**

Class participation	10%
Midterm exams:	30%
Final exam:	30% (comprehensive)
Homework:	30%

Grade	Mark range
A	86 - 100%
B	70 - 85 %
C	60 - 69 %
D	50 - 59 %
F	< 50 %

## Schedule of class (from the textbook)

Week	Content	Comments
Jan 19-22	Chap 7	
Jan 26 – 28	Chap 7	
Feb 2 – 4	Chap 7	
Feb 9 – 11	Chap 8	
Feb 16 – 18	Review	<b>Midterm I, Wednesday Feb 18</b>
Feb 23 – 25	Chap 8	
Mar 2 – 4	Chap 8	
Mar 9 – 11	Chap 9	
Mar 16– 20	Spring Break!	
Mar 23 – 25	Chap 9	
Mar 30 – Ap 1	Review	<b>Midterm II, Wednesday April 1</b>
April 6 – 8	Chap 10	
April 13 – 15	Chap 10	
April 20 – 22	Chap 11	
April 27 – 29	Chap 11	
May 4 – 6	Review	
May 11 – 15	Final Exam week	<b>FINAL EXAM (Comprehensive) Wednesday May 13, 7:00-9:45 PM</b>