

# PHYS 4342: ELECTROMAGNETICS II

Spring 2021

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<b>Instructor:</b> Hari Nair	<b>Class:</b> 12:00 – 1:20 pm,TR (Jan 19 – May 06)
<b>Email:</b> <a href="mailto:hnair@utep.edu">hnair@utep.edu</a>	<b>Place:</b> College of Business Admin 304
<b>CRN:</b> 22080	<b>Credits:</b> 3

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Note: The lectures for this course will be delivered virtually through Blackboard.

**Office Hours:** Virtual, by appointment via Teams.

## Textbooks

1. Introduction to Electrodynamics, David J. Griffiths
2. Classical Electrodynamics, Walter Greiner

**Objectives:** PHYS 4342 is the second part of a sequence of advanced undergraduate physics courses at the junior or senior level for advanced concepts in electromagnetism. The course objective is to discuss the following topics:

- 1) Review of electrostatics (optional);
- 2) Electrodynamics;
- 3) Conservation laws;
- 4) Electromagnetic waves;
- 5) Potential and fields;
- 6) Radiation;
- 7) Special theory of relativity.

**Prerequisites:** Electromagnetics I.

**Grading Policy:** This is a 3-credits course with letter grading based on the total score from a midterm exam (40%), a final exam (40%), and homework assignments/quizzes (20%). The final exam will cover all the chapters discussed in the class. An 80% total score will fetch you a letter grade A, a score in the range 80-70% will lead to B and, 70-60% C.

**Disability and military statements:** If you have a disability please contact Center for Accommodations and Support Services (CASS) ph: 747-5148, email: [cass@utep.edu](mailto:cass@utep.edu). Office: Union East Building, Room 106. Without CASS documentation, no accommodations can be made. Please take care of this before the first exam. If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact the instructor at the beginning of the semester.

**Academic Honesty:** Lack of knowledge of the UTEP academic honesty policy is not a reasonable explanation for a violation. Details might be here: <https://www.utep.edu/student-affairs/>