

PHYS 5341: ELECTRODYNAMICS

Spring 2021

Instructor:	Hari Nair	Class:	3:30 – 4:50 pm, TR (Jan 19 – May 06)
Email:	hnair@utep.edu	Place:	Liberal Arts Building 303
CRN:	22080	Credits:	3

Note: The lectures will be delivered virtually through Blackboard.

Office Hours: Virtual, by appointment via Teams.

Textbooks

Electrodynamics, J. D. Jackson

Objectives: PHYS 5341 is a graduate physics courses for advanced concepts in electromagnetism. The course objective is to discuss the following topics: *Boundary value problems, polarization and stress tensor. Conservation laws and energy momentum tensor. Relativistic elctrodynamics. Covariant form of field equations. Potentials and gauge invariance.*

Prerequisites: PHYS 4342 Electromagnetics II.

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. 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/>