

ELECTROMAGNETICS II

PHYS 4342 (CRN: 22383; SPRING 2020)

Lectures: Classroom Building C304; 12:00 – 1:20 pm TR

Term: Jan 21, 2020 - May 07, 2020

Prerequisite courses: PHYS 4341

Instructor: Hari Nair (hnair@utep.edu #PSCI 223 C, Ph: 7544)

Office hours: T/TR 10:00 – 11:00, W 9:00 – 10:00

Grader: Nathan Episcopo (nepiscopo@miners.utep.edu)

Office hours: W 1:00 – 3:00 pm

FINAL EXAM DATE: Tuesday, May 12th 1:00 pm – 3:45 pm (scheduled by UTEP)

Course 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. Electromagnetics I is a prerequisite. The course objective is to discuss the following chapters from the prescribed main textbook. 1) Review of PHYS 4341 (optional); 2) Ch 7 Electrodynamics; 3) Ch 8 Conservation laws; 4) Ch 9 Electromagnetic waves; 5) Ch 10 Potential and fields; 6) Ch 11 Radiation; 7) Ch 12 Electrodynamics and relativity.

Main textbook: *Introduction to Electrodynamics*, David J. Griffiths (Third or Fourth Edition).

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 in-class performance and homework assignments (20%). The final exam will cover all the chapters discussed in the class. An 80% total score leads to the letter grade A, a score in the range 70-80% is B, 60-70% is 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 Integrity policy

<https://www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html>