

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

Course #: PHYS 2421, CRN 22758
Course Title: Introductory Electromagnetism
Credit Hrs: 4
Term: Spring 2017
Course Meetings & Location: EDCU 301, TR 12:00 pm - 1:20 pm
Associated Course: Lab & Workshop
Prerequisite Courses: Cal I & II
Course Fee: (if applicable)
Instructor: Dr. Huiyan Yang
Office Location: PSCI 215 B
Contact Info: Phone #: 7510
E-mail address: hyang4@utep.edu
Fax #: 915-747-5447
Emergency Contact #: 915-747-5536
Office Hrs: MW 10:00 - 11:00 am or by appointment
Textbook(s), Materials: Required: Physics for Scientists and Engineers: A Strategic Approach, 4th Edition, by Randall D. Knight. Online study tool: MasteringPhysics (MPYANG18525) (Homework is assigned and graded in MasteringPhysics. All students are required to have access of MasteringPhysics.)
Course Objectives (Learning Outcomes): This semester you will be learning about the AMAZING world of electricity and magnetism and it all revolves around the physical property known as “charge”. A simple way to think about EVERYTHING you will learn in this course is that you will learn about 1) stationary charges, 2) flowing charges (moving together with more or less constant velocity), and 3) accelerating charges.
Course Activities/Assignments: Course activities include reading assignment, lectures, homework, quizzes, three midterm exams, and a final exam.
Assessment of Course Objectives: Outcomes will be measured by exams and other assignments.
Grading Policy: 20% Final Exam (comprehensive):
30% Three Midterm Exams
10% Quizzes
20% Lab
20% Homework: to be submitted through Mastering Physics or on paper when asked
Make-up Policy: No credit will be given to missed homework. Attendance at exam is mandatory. Make up exams are given only on extraordinary cases of severe illnesses or emergencies. They can be arranged at the discretion of the instructor. A written excuse and official documents will be required and investigated.

- Attendance Policy:** Attendance in class is the responsibility of the students. If class is missed, you are responsible for obtaining the notes from another student or from the instructor.
- Academic Integrity Policy:** Acts of academic dishonesty will not be tolerated in this class. Lapses in academic integrity will be referred to the Dean of Students, as required at <http://academics.utep.edu/Default.aspx?tabid=23785>.
- Civility Statement:** This course requires positive behaviors: Be on time and be focused on your work. Please do not distract yourself or others with telephones or music.
- Disability Statement:** If a student has or suspects he/she has a disability and needs an accommodation, he/she should contact the Center for Accommodations and Support Services (747-5148 or cass@utep.edu). or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any CASS accommodation letters and instructions.
- Military Statement:** 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 me as soon as it appears that your service will interfere with this course. The instructor will work with you to ensure that your service will not adversely affect your academic progress.
- Course Schedule:** Tentative List of Topics and Exam Dates
1. Electric charges and forces
 2. The electric field
 3. Gauss's law
 4. The electric potential
 5. Potential and field
 6. Current and resistance
 7. Fundamentals of circuits
 8. The magnetic field
 9. Electromagnetic inductance
 10. Electromagnetic fields and waves
 11. AC Circuits
- Exam I: Feb. 21st, Tuesday
Exam II: Mar. 21st, Tuesday
Exam III: Apr. 25th, Tuesday
Final: May 9th, Tuesday