

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

Course #: PHYS 2421, CRN 22968  
Course Title: Introductory Electromagnetism  
Credit Hrs: 4  
Term: Spring 2016  
Course Meetings & Location: ULC 210, 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: TR 1:30 - 2:30 pm or by appointment  
Textbook(s), Materials: Required: University Physics, Young & Freedman, 13<sup>th</sup> Edition,  
Online study tool: MasteringPhysics (MPYANG82589)  
(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, 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 can be arranged at the discretion of the instructor. A written excuse and official documents will be necessary for rescheduling an exam.  
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](mailto: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
1. Electric charge and electric field
  2. Gauss's law
  3. Electric potential
  4. Capacitance and dielectrics
  5. Current resistance and electromotive force
  6. Direct current circuits
  7. Magnetic force and magnetic field
  8. Inductance
  9. Electromagnetic waves
- Exam I: Feb. 18<sup>th</sup>, Thursday  
Exam II: Mar. 22<sup>nd</sup>, Tuesday  
Exam III: Apr. 26<sup>th</sup>, Tuesday  
Final: May 10<sup>th</sup>, Tuesday