

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

Course #: PHYS 2421, CRN 31862  
Course Title: Introductory Electromagnetism  
Credit Hrs: 4  
Term: Summer II 2014 (Jul. 7 – Aug. 1)  
Course Meetings & Location: CCSB 1.0202, MTWRF 9:20-11:30 AM  
Associated Course: Lab CRN 31863, 31876 and Workshop CRN 31864, 31875  
Prerequisite Courses: Cal I & II  
Course Fee: (if applicable)  
Instructor: Dr. Chunqiang Li  
Office Location: PSCI 221E  
Contact Info: Phone #: 7537  
E-mail address: cli@utep.edu  
Fax #  
Emergency Contact  
Office Hrs: M 11:30-12:30 or by appointment  
Textbook(s), Materials: Required: University Physics, Young & Freedman, 13<sup>th</sup> Edition,  
Chapters 21-29, with selections from Chapters 30-32.  
Suggested:

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, homeworks, one midterm exam, and a final exam.

Assessment of Course Objectives: Outcomes will be measured by exams and other assignments.

Grading Policy: 20% Final Exam (cumulative with emphasis on most recent):  
30% Two 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 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