PHYS 1404 – General Physics II, Fall 2016 - CRN 13725 TR 3:00 – 4:30 PM, LART 211

Instructor: Jorge A. López

Coordinates: Office: PSCI 311, Tel.: 747-7528, e-address: jorgelopez@utep.edu

Office hours: Without appointment: TR 12:00-3:00, MW 11:00-2:30 and by appointment.

Prerequisite Courses: PHYS 1403 or Instructor approval

Textbook and materials needed:

• Physics, Giambattista, Richardson and Richardson

Scientific calculator (no phone or tablet like calculators)

• Green scantron sheets for guizzes and final exam

Learning outcomes and objectives: General Physics II is the second part of a sequence of two algebra-based introductory physics courses whose main two objectives are to provide students with a rigorous description of electricity and magnetism and geometric optics and to improve student's problem-solving abilities.

Activities: Class will be composed of two 1.5-hour weekly lectures with the instructor, and a 2-hour weekly laboratory.

Objectives: Topics to be covered are shown in the list below. The pace will be about 1.5 chapters per week.

Ch. 16: Electric forces and fields.

• Ch. 17: Electric potential.

Ch. 18: Electric Current and circuits.

• Ch. 19: Magnetic forces and fields.

- Ch. 20: Electromagnetic induction.
- Ch. 21: Alternating currents.
- Ch. 23: Reflection & refraction of light.

Assessment of Course: Assessment will be through weekly quizzes (MCAT style), a final exam and the laboratory grade. Grade corrections of individual quizzes should be made within a week of receiving them, no grade changes of individual quizzes will be allowed after the end of the semester. Grade distribution:

Weekly quizzes (lowest two grades to be dropped) 65%
Comprehensive final exam 20%
Laboratory 15%

Quizzes and Homework: Homework problems will be assigned but not collected nor graded, but solutions will be discussed in class and posted on Blackboard. Weekly quizzes based on the homework of the previous week will be given every Thursday in the last 20 minutes of class. The use of a formula sheet is allowed, the formula sheet will be provided ahead of time through Blackboard, and students are responsible for downloading it and

printing it. The lowest two quiz grades will be dropped and there will be no make-ups. Students must bring scantron sheets for the quizzes.

Laboratory: Attending the Laboratory is mandatory and the lab grade will count 15% of your total grade. You must approve the lab with a minimum of 60% in order to approve the course.

Final Exam: There will one comprehensive final exam based on the weekly quizzes. Students must bring scantron sheets for the final exam.

Make-up Policy: There will be no make-up quizzes, instead, the lowest two quiz grades will be dropped. Exceptions will be made if you miss more than two quizzes and have a valid excuse (medical emergencies, personal situation, military duties, etc., all with written evidence) for all absences. Make-up policy for the laboratory will be given by the lab instructor. There will be no make-ups for the final exam.

Calendar: Classes begin: August 22 Course drop deadline: October 28

Last day of classes: Dec. 1 Final exam: Thursday Dec. 8, 4:00–6:45 PM

Attendance Policy: Attendance is not taken into account for the grade, but not attending the class will result in missing quizzes.

Academic Integrity Policy: Any student who commits an act of academic dishonesty is subject to discipline. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures, and available on the homepage of the Dean of Students at http://sa.utep.edu/studentlife/, may result in sanctions ranging from disciplinary probation, to a failing grade on the work in question, to a failing grade in the course, to suspension or dismissal, among others.

Civility Statement: During class, please do not eat, sleep or read newspapers or any other material not related to class. Turn off cell phones, iPods, and any other devices which might disturb class. Use computers and tablets only for class purposes, and do not talk excessively (definition of "excessive" is up to the instructor).

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website atwww.sa.utep.edu/cass.

Military Statement: Students being called for military duties need to contact the instructor as soon as possible.

TENTATIVE CALENDAR

| WEEK | CONTENT | OBSERVATIONS | QUIZ |
|------------|------------------------|--|-------------------------|
| 8/22-26 | Intro + Ch. 16.1, 2, 3 | | No quiz on first week |
| 8/29-9/2 | 16.4, 5, 6 | | 1: 16, Sec. 1, 2, 3 |
| 9/5-9 | 16.7, 17.1, 2 | Monday is a Holiday | 2: 16, Sects. 4, 5, 6 |
| 9/12-16 | 17.3, 4, 5 and 6 | | 3: 16.7, 17.1, 17.2 |
| 9/19-23 | 17.7, 18.1-4; 18.4-5 | | 4: 17.3, 4, 5 and 6 |
| 9/26-30 | 18.5-6; 7 | | 5: 17.7, 18.1-4 |
| 10/3-7 | 18.10, 19.1,2;3,5 | | 6: 18.5, 6 and 7 |
| 10/10-14 | | | |
| 10/17-21 | 19.6, 8; 9, 20.1 | | 7: 18.10, 19.1, 2; 3, 5 |
| 10/24-28 | 20.2, 3; 4, 6 | Drop deadline: 10/28 | 8: 19.6, 8; 9, 20.1 |
| 10/31-11/4 | 20.9, 10; 21.1, 2 | | 9: 20.2, 3; 4, 6 |
| 11/7-11 | 21.3,4,5; 21.6,22.1 | | 10: 20.9, 10; 21.1, 2 |
| 11/14-18 | 22.2,3,4; 23.1;2,3 | | 11: 21.3,4,5,6 |
| 11/21-25 | 23.4,6,7,8,9 | Thanksgiving 11/24-25 | 12: 22.1,2,3,4,23.1,2,3 |
| 11/28-12/2 | Review | 12/2 is dead day | No quiz |
| 12/5-9 | | Final exam: Thursday 12/8, 4:00–6:45 PM | |
| | | | |