## CAMPBELLSVILLE UNIVERSITY

COURSE SYLLABUS September 26, 2016 PLEASE TYPE. DATE Natural Science Steve Alston ACADEMIC UNIT FACULTY Please check to indicate this course has a service learning component. Discipline Course# Title of Course Credit Hours Cross Reference Section (if applicable) PHY 144/244-91 Gen. Col/Uni Physics II Lab 1 TEXTBOOK Required Not Required Lab manual Provided Author Title Publisher Date of Publication\_\_\_\_\_ WORKBOOK Author Title Publisher \_\_\_\_\_ Date of Publication PLEASE ANSWER THE FOLLOWING QUESTIONS ON A SEPARATE SHEET OF PAPER AND ATTACH TO THIS FORM. 1. DESCRIPTION OF COURSE: Develop a brief description of the course as it will appear in the Catalog. STUDENT LEARNING OBJECTIVES: List the student learning objectives for the course. Please relate these objectives to the mission and goals of the University and the Academic Unit. For general education courses, please indicate which student learning objectives address general education goals and the intended method of assessment. A minimum of four of the seven general education goals must be included. Example: Students will demonstrate their ability to compare and contrast two types of basket weaving. (Goal: Oral and Written Communication; Evidence: research paper and class presentation) 3. COURSE OUTLINE: Outline the topics/units that are to be taught. EVALUATION: How do you plan to determine the grade in the course? Please include grading scale. REQUIREMENTS: Examinations: State when tests are to be administered, including unit, mid-term, and final examinations. Reports: How many, length required, and what type (Oral, term and/or research, book critiques). Supplemental reading assignments or outside work required. Supplemental instruction aids: Audio visual aids, field trips, guest speakers, etc. BOOKLIST DEAN Date Copy Received\_\_\_\_\_ VICE PRESIDENT FOR ACADEMIC AFFAIRS

Date Copy Received

## PHY 144 – General College Physics II Lab PHY 244 – General University Physics II Lab

Fall 2016, R 9:30-12:00 T 11:00-1:30

Instructor:

Dr. Steve Alston, CH 302 and SSC 218A,

Ph. 270-789-(5250 and 5062); salston@campbellsville.edu

Textbook:

Lab Manual (provided)

Attendance:

Required and recorded; if missed, labs must be made up

Division of credit:

12 total lab reports; 6 formal reports and 6 end-of-lab data-analysis reports; 3 individual formal reports (14% each); 3 group formal reports (9% each); and 6 group data reports (1@6%, 5@5%); missed labs *must* be made up and

only by prior arrangement with instructor

Grading:

Grade based on overall numerical average: A (89+), B (78+), C (67+), D (55+)

Academic integrity:

Each student is expected to actively and equitably contribute *during* labs and to group lab reports and to submit his/her *own work* in individual reports; matters of academic integrity will follow the division's policy (online)

Office hours:

MWF 9:00-10:00 am, 1:00-2:00 pm; TR 1:30-2:30 pm; by appointment

## Learning objectives:

1) To gain a quantitative, experimental knowledge of mechanical oscillations, waves, electric and magnetic fields, electromagnetism, optics, and some modern physics;

- 2) To practice application of the scientific method through attempts to verify known physical relations;
- 3) To learn to set up, work with, and troubleshoot mechanical and electronic experimental equipment;
- 4) To develop skills for analyzing data, writing reports and working in small groups.

Campus Security can be reached anytime at 270-403-3611 (cell phone) for any security issues.

Title IX: Campbellsville University and its faculty are committed to assuring a safe and productive educational environment for all students. To meet this commitment and to comply with Title IX of the Education Amendments of 1972 with guidance from the Office for Civil Rights, CU requires all responsible employees, including faculty members, to report incidents of sexual misconduct that are shared by students to the University's Title IX Coordinator, Terry VanMeter (1 University Dr., UPO 944, Admin. Office 8A, 270-789-5016, <a href="mailto:twvanmeter@campbellsville.edu">twvanmeter@campbellsville.edu</a>). Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: <a href="mailto:www.campbellsville.edu/titleIX">www.campbellsville.edu/titleIX</a>.

Disability Services: Campbellsville University is committed to providing reasonable accommodations for students who have documented physical or learning disabilities or medical or emotional conditions. A student with a documented disability or condition of this nature may be eligible for disability services. Documentation must be from a licensed professional and current in terms of assessment. Please contact the Coordinator of Disability Services (270-789-5192) to inquire about services.

Projected class coverage:		Type	(%)
Tues., Sept. 6 or Thurs., Sept. 8	II.1 Simple Harmonic Motion	gf*	9
Tues., Sept. 13 or Thurs., Sept. 15	II.2 Resonant Wave Motion	gd	5
Tues., Sept. 20 or Thurs., Sept. 22	II.3 - Electric Fields and Potentials	gd	5
Tues., Sept. 27 or Thurs., Sept. 29	II.4 - Capacitance	$\operatorname{gf}$	9
Tues., Oct. 4 or Thurs., Oct. 6	II.5 - Resistive Circuits	if	14
Tues., Oct. 11 or Thurs., Oct. 13	II.6 - Magnetic Force between Wires	$\mathbf{g}\mathbf{f}$ .	9
Tues., Oct. 18 or Thurs., Oct. 20	Fall Break		
Tues., Oct. 25 or Thurs., Oct. 27	II.7 - Electromagnetic Induction	gd	5
Tues., Nov. 1 or Thurs., Nov. 3	II.8 - Electronic Equipment / AC Circuits	gd	5
Tues., Nov. 8 or Thurs., Nov. 10	II.9 - Thin Lenses	if	14
Tues., Nov. 15 or Thurs., Nov. 17	II.10 - Light Interference and Diffraction	gd	6
Tues., Nov. 22 or Thurs., Nov. 24	Thanksgiving Break		
Tues., Nov. 29 or Thurs., Dec. 1	II.11 - Atomic Spectra	if	14
Tues., Dec. 6 or Thurs., Dec. 8	II.12 - Radioactive Decay	gd	5

<sup>\*</sup> gf = group formal report, gd = group data report, if = individual formal report