PHY 142 -- General Physics II

Spring 2016

Professor: Dr. Michelle Chen **E-mail:** MichelleChen@pointloma.edu
Office: Rohr Science (RS205) **Office Phone:** 619-849-2960
Office Hours: TBA; or by appointment

Lecture: MWF 10:55 am – 12:05 pm (Taylor 106)
Labs: M 2:45 – 4:40 pm; T 8:00 am – 9:55 am; R 10:00 – 11:55 am (Rohr Science 213)
Final Exam: Monday May 2, 2016 10:30 AM - 1:00 PM

Textbook: Physics by Douglas Giancoli, 7th edition, Prentice Hall 2014
Masteringphysics: Access to Mastering Physics (masteringphysics.com)
Course ID: **MPCHEN2016**, Course Name: General Physics II – Spring 2016
(If you were in PHY141 in Fall 2015 your access code from last semester should still work.)

Course Description: General Physics II is the second part of a one-year introductory course designed for the student with a moderate mathematical background. The main topics covered in this semester include: electricity, magnetism, circuits, light, relativity, atoms, nuclei, and radiation.

Student Learning Outcomes: In this course there are a number of specific goals for you to meet from each chapter. These smaller goals fit into the following overall course learning objectives. Once you complete this course, you should be able to:

1. translate the description of physics problems into the mathematical equations required to solve them using relevant physical principles
2. calculate solutions to physics problems once appropriate equations or techniques are identified
3. predict reasonable answers in appropriate problems, and assess the reasonableness of calculated answers
4. explain the physical meaning of the parameters in introductory physics equations
5. create and interpret graphical representations of physical quantities (electric fields, ray diagrams etc.)
6. gather and interpret data in a lab setting

Pre-class Assignments: Before each lecture, there will be three pre-class questions to be answered through Masteringphysics. The questions are based on the reading and are due by 11pm the evening before class. No late submission will be accepted.

Homework: Weekly homework assignments will be announced on Canvas and completed using Masteringphysics.

Lab: Weekly lab meetings will provide you the opportunity for hands-on experience of topics from class meetings, improve lab technique, and data analysis. Labs will be performed in small groups, but each individual is responsible for submitting their own results. You must pass the lab portion of the class to pass the class.

Exam: There will be three in-class exams during the semester and one comprehensive final exam. Partial credit will be given for correct reasoning at any step of a problem, but only if it is communicated clearly enough for me to understand. For problems that call for solution or explanation, no credit will be

given for an answer alone; the method or reasoning must also be shown. The final examination is scheduled for Monday, May 2 at 10:30 am – 1:00 pm. **Successful completion of this class requires taking the final examination on its scheduled day.** You must take ALL the exams in order to pass the class.

Final Grade: The points you receive during the course are weighted accordingly:

Component	**Weight**
Pre-Class	5%
Homework	20%
Lab	20%
Tests (3)	35% (equally weighted)
Final Exam	20%

The grade you earn in this course is based on the following scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-
S≥ 91.5	91.5 >S≥ 89.5	89.5 >S≥ 86.5	86.5 >S≥ 82.5	82.5 >S≥ 79.5	79.5 >S≥ 76.5	76.5 >S≥ 72.5	72.5 >S≥ 69.5	69.5 >S≥ 66.5	66.5 >S≥ 62.5	62.5 >S≥ 59.5

As with all courses at PLNU, this course supports the cause to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Academic Integrity: Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies for definitions of kinds of academic dishonesty and for further policy information.

Academic Accommodations: If you have a diagnosed disability, please contact PLNU's Dis-ability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See Disability Resource Center for additional information.

Attendance: Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See Academic Policies in the Undergraduate Academic Catalog.

FERPA Policy: As a student at Point Loma, you have a legal right to privacy as outlined in the federal FERPA (Family Educational Rights and Privacy Act) legislation. See Policy Statements for full text.