

UNIVERSITY OF HAWAII AT MANOA

PHYS 170 in-person class, General Physics I, Fall 2022

Instructor:

Prof. S. Wang Yoon, swyoon@hawaii.edu

Office: WAT 413

Office Hours: By appointments and Q&A after the lectures.

Course Description:

Calculus-based introductory general physics for future scientists and engineers. Basics of mechanics, fluids, oscillations, wave motions and sound will be covered.

Textbook:

University Physics, by Young and Freedman, 15th Ed., Chapters 1-16

Pearson Student Access through Laulima

Course ID through Laulima

The “ebook with Mastering Physics” will be used.

Lectures, Time, Location:

In-person lectures, MWF 11:30a-12:20p @ PHYSICI 217

Recitations, T 10:30-11:20a, 11:30a-12:20p, 12:30-01:20p @ WAT 113 /

R 10:30-11:20a, 12:30-01:20p @ WAT 113 / F 10:30-11:20a @ PHYSICI 108

The Q&A session will be held after the lecture.

The lecture slides for each week will be posted in Google Drive.

The lecture will generally cover one chapter per week.

Recitations:

Detailed instructions will be provided by the recitation TAs. They are based on the problem-solving method and more likely “advanced or applied problem solving” sessions.

Learning outcomes:

Understanding and applying basic principles of physics to better understand the world around us. At the end of this course, students should be able to:

- understand and discuss basic topics in Physics
- solve problems by making appropriate approximations and applying physical principles and equations
- utilize the understanding to recognize physical processes happening in natural phenomena, in technology and in everyday life.

Class Folder:

Syllabus, schedule and other announcements are posted in our shared folders named ‘2022_Phys170B_Fall_Yoon’ on Laulima and the Google Drive. You will receive access emails.

Class ID: Every student will have a class identification number assigned for the class.

Homework:

Homework assignments will be given during the class. The solutions to assigned example problems in the textbook will not be posted. You do not need to submit the homework, but compare and review yours with the textbook solutions for the example problems. “Preview; reading lecture materials before the class” and “Review; solving the examples after the class” in the textbook are strongly suggested as further homework.

Tests: One-hour closed book in classroom.

Three ‘one-hour midterm’ tests will be given. The tests begin at 11:30 am and your answer sheets should be submitted by 12:30 pm. Your ‘Name and Class ID’ should be written at the top on each submitted sheet.

Test Dates: T1 (Mon Sep 12), T2 (Mon Oct 10), T3 (Mon Nov 07).

Final Exam: Two-hour closed book in classroom.

Exam Period 5 Mon Dec 12, 12:00-02:00 pm.

Grading: Tests: 60%, Final Exam: 30%, Recitations: 10%, Attendance: Extra 10% tentative

Grade Scale: A⁺ (93-100%), A (85-92%), B⁺ (78-85%), B (70-77%),

C⁺ (63-70%), C (55-62%), D⁺ (48-55%), D (40-47%), F (<40%)

This may be subject to change based on the overall performance of the class.

Last Day of Class: Wed Dec 07, 2022.

The syllabus may be changed by the instructor at any time. It will be announced in the class.