UNIVERSITY OF HAWAII AT MANOA
PHYS 170 in-person class, General Physics I, Spring 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, MTW 10:30-11:20 am @ WAT 420.
Recitations, F 09:30-10:20 am @ WAT 415 / F 10:30-11:20 am @ PHYSCI 108 / 110.
The Q&A session will be held after each 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_Phys170Spring_Yoon' in 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 from the textbook examples during the class. You should solve them in your own notebook such as composition book, and review yours comparing with the textbook example solutions. You do not need to submit the homework every week, but will turn in your notebooks just before the tests on the dates of Mar 7 and May 4, 2022 to be checked by the instructor.

"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 10:30 am and your answer sheets should be submitted by 11:30 am. Your 'Name and Class ID' should be written at the top on each submitted sheet.

Test Dates:

T1 (Mon Feb 07), T2 (Mon Mar 07), T3 (Mon Apr 04).

Final Exam:

Two-hour closed book in classroom.
Exam Period 4 (Fri May 13, 09:45-11:45 am).

Grading:

Tests: 60%
Final Exam: 30%
Recitations: 10%

Grade Scale:

A (85-100%), B (70-85%), C (55-70%), D (40-55%), F (<40%)
This may be subject to change based on the overall performance of the class.

Last Day of Class:

Wed May 04, 2022.

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

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