



Course Syllabus

Course Name: Physics Laboratory II

Course Code: Vp241

Course Pre-requisites

Physics II (Vp240) or Honors Physics II (Vp260), concurrently

Textbook

Hugh D. YOUNG, Roger A. FREEDMAN, *University Physics* (14th edition)

Instructor

Mateusz KRZYZOSIAK (m.krzyzosiak@sjtu.edu.cn)

Office hours: Tuesday 18.00-20.15, Wednesday (weeks 1-5), 16.00-17.30, Thursday (other weeks) 13.00-13.45; and by appointment

Office: Room 211 (JI building), Phone: 021-34206765 ext. 2111

Teaching Assistants/Laboratory Sessions Instructors

GU Yichen, office hours: TBA, email: clover-chen@sjtu.edu.cn

LIN Yiqiao, office hours: TBA, email: ivylin1997@sjtu.edu.cn

LIN Xinyu, office hours: TBA, email: 675563405@qq.com

JIANG Yicheng, office hours: TBA, email: jason_jyc@126.com

CHENG Junkai, office hours: TBA, email: cheng.junkai@qq.com

Please check Canvas regularly for updates.

Grading Policy

Pre-lab Quiz 10 x 1.5% = 15%

In-class Lab Work 10 x 3.5% = 35%

Lab Report 10 x 5% = 50%



Laboratory Sessions

There will be 5 laboratory sessions. Students are required to read the lab manual and the corresponding sections of the textbook before the session. Failing to attend a lab session results in the zero score for all items corresponding to the missed session.

Quiz

A short quiz will precede each lab session.

Data Sheet

Measurement data must be recorded on a separate data sheet and shown to the instructor before leaving the laboratory. The student's name, ID, date, and group number should be clearly indicated. The data sheet needs to be signed by the instructor and will not be accepted if the data is recorded with a pencil or modified with a correction fluid/tape. Students are required to hand in the original data sheet along with the lab report.

Lab report

The students are required to write a lab report and submit it within a week after the laboratory session. Reports are due on Friday (one week after the session) at 3.30 p.m. Hardcopy of the lab report should be placed in the mailbox of the TA in charge of the exercise and the corresponding electronic version (in the pdf format), matching exactly the hardcopy, needs to be submitted on-line in Canvas by this deadline. You are allowed to submit on-line only once, so please make sure that the correct file is uploaded.

Please plan your time well, as late submissions will carry a penalty: 10% of the marks will be subtracted if the report is submitted after the deadline, but before Saturday 5.00 p.m.; there will be a 25% deduction for submissions after Saturday 5.00 p.m. but before Monday 11.30 a.m. No reports will be accepted after Monday 11.30 a.m.

Report submission is regarded to be complete is both the hardcopy (with the original data sheet) and the electronic version are received on time. Otherwise late-submission penalties apply.

For exercises designed to be completed in groups of two, each student needs to submit his/her own report (please see the 'Honor Code' section below).



Honor Code

Oral discussion of the contents of laboratory exercises with other students is allowed and encouraged. It is not allowed to show any written work to other students. No electronic data can be shared (including raw measurement data and plots). In particular, the students are required to type the lab report, enter the raw data into the data analysis software and plot all graphs by themselves. Use of fabricated, altered, and other students' data in the report is a violation of the Honor Code. The electronic version submitted on-line must match the hardcopy submitted to the mailbox.

All suspected violations of the Honor Code will be reported to the Honor Council immediately.

If any references to academic textbooks or research journals are made, they should be properly identified with bibliographical data. No references to Wikipedia entries are allowed.

Course description and detailed teaching schedule

Physics laboratory Vp241 is aimed at providing students with hands-on experience in an introductory physics laboratory.

VP241

- (1) Basic characteristics of magnetic materials
- (2) Hall probe: characteristics and applications
- (3) Solar cells: I - V characteristics
- (4) Polarization of light
- (5) RC, RL, RLC circuits

Classes start in week 6.