

Experimental Physics I Syllabus (2021 Spring Semester)

Course	Physics Laboratory1	Department	Physics	Office Hours	
Course No. and Class	20512-01	Hours	3.0	Academic Credit	2.0
Professor	William Jo		Office	Sci. Complex Bldg. A521	
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1. Course Description

Experimental Physics I affords a variety of experiments in physics. Skills of experimental methods, report of experimental results, and scientific presentation as well as the knowledge of advanced physics can be obtained from the course.

2. Prerequisites

Students should read manuals before lab.

3. Course Format

Lecture	Discussion/Presentation	Experiment/Practicum	Field Study	Other
10%	30%	60%	0%	0%

- Explanation of course format:

Through group activities, you will perform one experiment for two weeks (except only 1st item). After one week, student must complete a lab report, following the format prescribed by the lab instructor, and submit it to teaching assistant before the class.

4. Course Objectives

Our goal is to give you an opportunity to understand the basic concepts of physics by several experiments. Students will get experience with laboratory apparatus by hands, develop skills in performing experiment, learn methods for analyzing data and discuss the result through oral presentation

5. Evaluation System

Presentation (Final exam)	Reports	Participation	Other (Attendance)
30%	60% Preliminary report (20%) + Final report (40%)	5%	5%

* Evaluation of group projects may include peer evaluations.

- Explain of evaluation system

- Reports: 60% (Report must be submitted for each of the four experiments.)

- Attendance and Participation: 10% (Attendance is required for every week. 5 weeks or more absence will lead to F.)

- Presentation: 30% (Max: 10 min (excluding Q&A))

6. Required Materials

Experimental Physics I

7. Supplementary Materials

General physics textbook

8. Optional Additional Readings

Relevant information will be posted on the cybercampus.

9. Course Contents

Week	Topic, Materials, Assignments
Week1	Introduction (team assignment, report writing, error analysis)
Week2	Black body radiation
Week3	Black body radiation
Week4	Basic ripple tank system
Week5	Basic ripple tank system
Week6	Basic ripple tank system
Week7	Holiday
Week8	Supplementary exp
Week9	Heat engine
Week10	Heat engine
Week11	Heat engine
Week12	Coulomb balance
Week13	Coulomb balance
Week14	Supplementary exp
Week15	Presentation (Final exam)
Week16	

10. Course Policies

* For laboratory course all students are required to complete the lab safety training.

11. Special Accommodations

* According to the University regulation #57, students with disabilities can request special accommodation related to attendance, lectures, assignments, and/or tests by contacting the course professor at the beginning of semester. Based on the nature of the students' requests, students can receive support for such accommodations from the course professor and/or from the Support Center for Students with Disabilities (SCSD).

* The contents of this syllabus are not final—they may be updated.