General Physics Experiment I - Syllabus

Spring semester 2024

Course information

Code	Title	Credit	Coordinator
PHYS161	General Physics Experiment I	1	Office of General Physcis (*KPOP&* Collaboration)

Major Competency based Course Objective: By carrying out fundamental laboratory experiments involving classical mechanics, develop **creative problem-solving** skills and **convergent thinking** skills.

Students recommended to take the course: All students.

Prerequisites: None.

Textbook: ***KPOP&*** Physics Experiment **A** (Version 2024)

Reference: ***KPOP&*** Physics **X** (Version 2024)

Course Policies (Optional)

- All courses are taught off-line.
- Evaluation : [15 points per class] $\times$ [9 classes] + [orientation 1 points per class] $\times$ [2 classes] + α = [137 points total] + α
- **A student should upload his/her (team) digital experiment report and discussion answers in the Blackboard system every class hour**. (**Paperless, no homework, and no Mid/Final exam**)

The number of warnings	Penalties
$3 \sim 5$	one-step downgrade
$6 \sim 9$	two-step downgrade
10 or more	F

- If the number of absences is 3 or more, then the grade will be F.

Tentative Course Outline

Week	Dates	ACTIVITIES	Comments
W1	03/04 ∼ 03/08	**ORIENTATION**	
W2	03/11 ∼ 03/15	**SETUP 1**	No class
W3	03/18 ∼ 03/22	**A1.** $[M]^a[L]^b[T]^c$	
W4	03/25 ∼ 03/29	**A2.** $\overrightarrow{F} = m\overrightarrow{a}$	
W5	04/01 ∼ 04/05	**SETUP 2**	No class
W6	04/08 ∼ 04/12	**A3.** $\overrightarrow{F}_{1\to 2} + \overrightarrow{F}_{2\to 1} = \overrightarrow{0}$	
W7	04/15 ∼ 04/19	**A4.** $\Delta E = 0$	
W8	04/22 ∼ 04/26	**MIDTERM-EXAM WEEK**	No class
W9	04/29 ∼ 05/03	**A5.** $I = \int r^2 dm$	
W10	05/06 ∼ 05/10	**SETUP 3**	No class
W11	05/13 ∼ 05/17	**A6.** $T = 2\pi\sqrt{\frac{\ell}{g}}$	Holiday 5/15, No class for Wed.
W12	05/20 ∼ 05/24	**DEA-DONG JAE WEEK**	No class
W13	05/27 ∼ 05/31	**A7.** $\overrightarrow{\tau} = \frac{d}{dt}\overrightarrow{L}$	
W14	06/03 ∼ 06/07	**A8.** 	Holiday 6/6, No class for Thur.

W15	06/10 ∼ 06/14	**A9.** 🔊 + 🔊 = 🔉 🔊
W16	06/17 ∼ 06/21	**FINAL OT/ EXAM WEEK**