



LAB OUTLINE: PHYSICS I LAB (PHY107L)

NORTH SOUTH UNIVERSITY

DEPARTMENT OF MATHEMATICS & PHYSICS

Semester : Fall 2022
Course : Physics I Lab (PHY 107L)
Section : 11 & 14
Credit : 01
Course Instructor : Dr. Md. Rakibul Islam (RKS)
Lab Instructor : Marzia Akter Mona
Email : akter.mona@northsouth.edu
Office Room : SAC 1061
Office Hour : Saturday (02:40 pm – 05:50 pm) & Monday (02:40 pm – 05:50 pm)

Lab Outline

Lab 1	Introduction to Measurement and Statistical Error
Lab 2	Bouncing Ball experiment
Lab 3	Demonstration of Hooke's Law using spiral spring
Lab 4	Determination of sheer modulus using Dynamic Method
Lab 5	Period of Oscillation for a Simple Pendulum
Lab 6	Compound Pendulum and simple harmonic motion

Marks Distribution

Attendance	5%
Performance	5%
Pre-Lab	10%
Lab Reports	50%
Final (Set Up, Written & Viva)	30%

*Marks distribution will be changed if necessary.

Instructions for Completing Lab Report

1. Lab reports are group submission and should be hand-written.
2. Each group must complete and submit the lab report within the class time. The lab report should be submitted along with cover page.
3. It is mandatory to show working for every calculation in the report.
4. Be consistent with the significant figures of the data and the result of the calculation.
5. Provide units where necessary.
6. Use 70% - 80% of a graph paper while drawing the graph. (Further instruction about the graph will be provided in the class).

Instructions for the Lab

1. Students are requested to attend the classroom on time.
2. Each group must collect or download the lab manual from the Canvas. Please **use the NSU Gmail account** to join the Canvas instead of **regular Gmail account**.
3. The lab manuals and prelab of every experiment should be collected from the Canvas. Students are requested to **submit the completed prelab before the class starts**.
4. Each group must **have a printed copy of the lab manual & graph paper** in the class and also go through the whole manual before the class. Students must use the **graph paper in cm scale**.
5. Each group must have their own lab report. **Negative marking will be considered for any sharing of data / Plagiarism and late submission**.
6. **Plagiarism/copy** in the quiz and final exam will be given Zero (0).
7. Lab Class Performance will be evaluated in every class by asking some questions from the manual or to show some functions of the equipment, which are already explained in the class.
8. **Use of cell phone for any purpose is strictly prohibited, if found may lead to deduction of marks from performance**.
9. There will be no make-up for Final exam (conditions apply). However, **one (1) make-up lab** can be considered only.
10. Cooperative behavior is highly recommended.