

# LAB OUTLINE: PHYSICS I LAB (PHY107L)

*Department of Mathematics & Physics*

**North South University**

**Semester** : Summer 2023

**Course** : Physics I Lab (PHY 107L)

**Section** : 2

**Credit** : 01 (one credit)

**Course Instructor** : Dr. Rubaiyet Iftekharul Haque

**Email** : rubaiyet.haque@northsouth.edu

**Office Room** : SAC 1064 B

  

**Lab Instructor** : Md. Rakib Hossain

**Email** : rakib.hossain17@northsouth.edu

**Office Room** : 1061

**Contact Number** : 01743-017894

**Office Hour** : Wednesday 09:00 AM - 12.10 PM & 4.20 PM - 5.30 PM.

## MARK DISTRIBUTION

**Class Attendance** : 5%

**LAB Report** : 60%

**Final Exam** : 25%

**Viva** : 10%

## 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

## **Lab Report**

1. Each group must complete and submit the lab report within the class time.
2. It is mandatory to show working for every calculation in the report.
3. Be consistent with the significant figures of the data and the result of the calculation.
4. Provide units where necessary.
5. Use 80% of a graph paper while drawing the graph. (Further instruction about the graph will be provided in the class).

## **Instructions for LAB:**

1. Each student must print their own lab manual.
2. Each student must also bring his /her own calculator, pen or pencil, geometry box, protector, and graph papers.
3. Report must be Handwritten.
4. Lab Class Performance will be evaluated in every class by asking to build the circuit or to show some functions of the equipment, which are already explained in the class.
5. Use of cell phone for any purpose is strictly prohibited, if found may lead to deduction of marks from performance.
6. Cooperative behavior is highly recommended.