LAB OUTLINE: PHYSICS I LAB (PHY107L) NORTH SOUTH UNIVERSITY

DEPARTMENT OF MATHEMATICS & PHYSICS

Semester : Fall 2025

Course : Physics I Lab (PHY 107L)

Section : 08 Credit 01

Course Instructor : Dr. Rubaiyet Iftekharul Haque (RUH)

Email : rubaiyet.haque@northsouth.edu

Office Room : SAC 1065A

Lab Instructor: S M Enzamul Haque TaqiEmail: Enzamul.Haque@northsouth.eduOffice Room: SAC 1018 (C) or SAC 1040

Contact Number : +8801521201912

Office Hour : Sunday 11.30-12.30PM. & Tuesday 1.30-2.30PM

Wednesday 2.30-4.30PM

Lab Outline

Lab 1	Introduction to Measurement and Statistical Error
Lab 2	Experiment with a Bouncing Ball
Lab 3	Demonstration of Hooke's Law using spiral spring
Lab 4	Determination of Shear Modulus using Dynamic Method
Lab 5	Period of Oscillation for a Pendulum and determination of value of 'g'
Lab 6	Experiment with Compound Pendulum and determination of value of 'g'

Mark Distributions

Attendance	5%
Class Performance	5%
Pre Labs	5%
Lab Reports	50%
Final (Set Up, Written & Viva)	35%

Instructions for Completing the 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 the LAB

- 1. Each Student must **download and print** the lab manuals from the Canvas/Google Classroom.
- 2. Each student must have their own lab manual. Any sharing of data will result in negative marks if found.
- 3. Students must have **graph papers** (cm scale).
- 4. Lab Class Performance will be evaluated in every 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.
- 7. Bring your own Pencil, Ruler, Calculator.