

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI
HYDERABAD CAMPUS
INSTRUCTION DIVISION
FIRST SEMESTER 2020-2021
COURSE HANDOUT (PART-II)

Date: 2-11-2020

In addition to part I (General handout for all courses appended to the timetable) this portion gives further details regarding the course.

Course No. : **PHY F110**

Course Title : **Physics Laboratory**

Instructor In charge : **Sarmistha Banik**

Instructors Name : Asrarul Haque, Souri Banerjee, Kannan Ramaswamy, Swastik Bhattacharya, Aranya B Bhattacharjee, V Satya Narayana Murthy
Sajia Yeasmin, Surabhi Yadav, K Nobleson, Haridev S R, Sabur Ahmed Barbhuiya/Sateesh Kandukuri, Yuganand Nellabakam, Waseem Ahmad Wani, Yash Praeek, Anamika Avinash Pathak, Aiswarya

1. Aims and Learning Outcomes:

Familiarize the students to the experimental methods in physics and also to integrate theoretical knowledge with practical experience. Students will learn operation of scientific equipment for collecting data from the online videos and do the analysis of collected data.

Learning outcomes:

- Identifying and quantifying sources of error in an experiment.
- Fitting experimental data to an expected theoretical expression.
- Error analysis.
- Use of logarithmic graph sheets.
- Usage of optical instruments such as microscopes and spectrometers, through online videos.

2. TEXT BOOK:

Lab manual (Soft copy), slides and videos

Reference: Relevant reference materials are specified in the lab manuals.

3. EVALUATION SCHEME:

EVALUATION COMPONENT	DURATION	WEIGHTAGE
DAY TO DAY Performance	1 hour 50 min per class	35 %
Mid Sem	29/12/2020 3:30-4:30pm (1 hour)	30%
Compre	24/02/2021 9-10.30 am (1.5 hour)	35%

4. DAY-TO-DAY PERFORMANCE FOR EACH LAB class:

ACTIVITY	MARKS
Active Participation in Lab (Discussion/quiz)	10
CALCULATION AND GRAPH (submission within 72 hours)	25
TOTAL	35

The total marks for day-to-day performance of the labs will be scaled down to the corresponding total marks mentioned in the first row of the previous table.

Students MUST submit the lab report in the specified format for each experiment within 72 hours of the class. Late submission will not be counted as SUBMISSION and therefore no marks would be awarded. Students are expected to read the allotted experiments from the manuals before attending the lab, so that they can actively take part in the discussion and answer the quiz.

5. MAKE-UP:

The schedule of the experiment is very strict: the students are expected to attend all the labs regularly. Make-up will be given only in case of hospitalization/other unavoidable technical issues. More than 2 make-up experiments will not be entertained.

6. NOTICE: Notices concerning this course will be displayed on CMS and the google classroom.

**Instructor-In-Charge
PHY F110**