



SECOND SEMESTER 2020-2021

COURSE HANDOUT (PART-II)

Date: 18/01/2021

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 F244
Course Title : MODERN PHYSICS LAB
Instructor In-charge : **Madhukar Mishra**
Instructors Name : D. D. Pant, Srijata Dey and J. N. Bandyopadhyay

1. AIMS AND LEARNING OBJECTIVE:

This lab consists of experiments on Modern Physics. The aim of this lab is to expose students to various topics in the above subject area by carefully chosen experiments and hence to integrate the theoretical knowledge they acquire in the corresponding theory courses. Students also gain other skills in the process such as how to use various scientific equipments, how to analyze data, how to estimate errors, to cite a few examples.

2. LAB MANUAL : Laboratory Manual will be uploaded on the Google Classroom.

3. EVALUATION SCHEME:

EVALUATION COMPONENT	DURATION	MARKS (%)	MARKS
DAY TO DAY PERFORMANCE	4 Hrs/Week	58.33	175
PRESENTATION	20 minutes	6.67	20
LAB COMPRE	2 Hrs	13.33	40
COMPRE EXAM. (THEORY)	2 Hrs	21.7	65
TOTAL		100	300





The expectations from students such as attendance, maintenance of lab record book, participation for the lab, etc., will be announced in the first lab.

4. Important Instructions to the students:

- a) Day to day performance would carry **20+5** marks. 10 marks for Performing Experiment and 6 for calculations/graphs and 4 for writing results and conclusion. **Quiz** would carry **5** marks for each experiment.
- b) Best 7 (N-1) out of total 8 experiments would be considered for the final evaluation. So, total marks for day to day performance would be **175**.
- c) Students would perform **1 experiment per turn**, write readings on your note book (**with Name & ID**) and upload the scanned copy (in pdf format) of the same within 24 hours after completing the experiment. Upload calculations and the results on the Google Classroom before the next turn in the given Google sheet. For extra calculations, a separate sheet with own handwritten calculations, (scanned in Pdf format) may be uploaded along with that Google sheet. If they fail to do so, **3 marks per experiment** would be deducted from day to day performance for that experiment.
- d) Students are expected to maintain laboratory discipline during the lab hours. They can be penalized for any indiscipline in the lab.

5. Responsibilities of the students:

- a) To carry his/her valid identity card issued by the institute.
- b) To "join the Google meet punctually", not late.
- c) To complete the experiment on time.
- d) To not indulge in any unfair means in the evaluation component. Institute has very strict policy on plagiarism. If it is observed that the readings and results are copied from any other sources, then no marks for that experiment would be awarded.

6. MAKE-UP:

Students are expected to attend all the labs regularly. Make-up will be given in the following conditions only

1. Hospitalized cases
 2. Marriage of his or her own brother and sister or any other ceremony in their family (Cards or parent declaration is required).
- Without proper proof, make-up will **NOT** be granted. This will be implemented strictly.*

7. NOTICE: Notices shall be uploaded on the Google Classroom.

Instructor-In-Charge

PHY F244

