PHYSICS LABORATORY (1)

Laboratory Information

Lab Name: Physics Laboratory 1
Room No.: G106- Colleges of Engineering and Technology
Capacity: 25 students

The lab is equipped to help engineering students to carry out Physics experiments covering several topics in current electricity, magnetism and optics. Electricity, Magnetism, and Light is an engaging introductory treatment of electromagnetism and optics for first semester physics and engineering majors. Lab experiments focus on conceptual understanding, with an emphasis on relevance and historical development. Mathematics is specific and avoids unnecessary technical development. They emphasize on physical concepts, analyzing the electromagnetic aspects of many everyday phenomena, and guiding readers carefully through mathematical derivations. They Provides a wealth of interesting information, from the history of the science of electricity and magnetism to connections with real world phenomena in science and engineering to common sense advice and insight on the intuitive understanding of electrical and magnetic phenomena, physics laboratory (1) is shown in figure 1.24.

Major Equipment

- Power Supplies.
- Electronic Components.
- Boards.
- Laser Tubes.
- Function generators.
- Heaters.
- Photo Electric System.
- Cathode Ray Oscilloscopes.

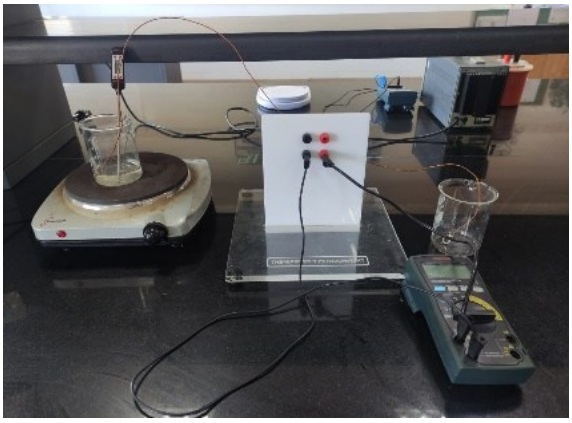

Figure 1.24 Physics laboratory (1)

Laboratory Serves the following courses:

Course Code	Course Title	Semester
BA113	Physics 1	1st

PHYSICS LABORATORY (2)

Laboratory Information

Lab Name: Physics Laboratory 2
Room No.: G206 and G306- Colleges of Engineering and Technology
Capacity: 25 students

The lab is equipped to help engineering students to carry out Physics experiments covering several topics in thermodynamics, heat transfer, waves and sound. Engineering curricula are notoriously demanding. One way to make the material easier to grasp and more fun to learn is to emphasize the experimental or "hands-on" aspects of engineering problems. This unique laboratory is about learning through active participation in experiments, and it specifically aims to dispel some of the mystery so many students associate with the study of thermodynamics and heat transfer. A collection of experiments is performed in heat transfer and thermodynamics contributed by leading engineering educators. Each experiment follows the same step-by-step format, which includes the objective of the experiment, apparatus needed, procedure, suggested headings, and references. The experiments use apparatus that is easily built or attainable. Among the topics covered are heat conduction, convection, boiling, mixing, diffusion, radiation, heat pipes and exchangers, and thermodynamics.

Major Equipment

- Power Supplies.
- Heaters.
- Thermopiles.
- Boil's Apparatus.
- Function Generators.

Laboratory Serves the following courses:

Course Code	Course Title	Semester
BA114	Physics 2	2nd