

# Applied Physics

## General Information

<b>Course Number</b>	PHY-150
<b>Credit Hours</b>	(2+1) 3 hours
<b>Prerequisite</b>	None
<b>Course Coordinator</b>	Dr. Muhammad Asim Ali

## Course Objectives

It is a computing support course for a computer science program. The aim is to equip the student with the concepts of physics. Course brushes students' basic knowledge by starting from the basic concepts and then progressing gradually toward the advanced concepts. By the course completion, students would have developed a good understanding of physics fundamentals.

## Catalog Description

PHY-150

## Course Content

<b>Session No.</b>	<b><i>Topics</i></b>
01-02	<b>Units</b> SI Units / Unit Conversions Scalar and Vectors / Dot and Cross Products
03-05	<b>Electrostatics:</b> Attraction and Repulsion of Charges Coulomb's Law Superposition Principle
06-07	<b>Electric Field and Electric Potential:</b> The Electric Field Electric Potential The electron Volt Electromotive force
07-08	<b>Electric Current:</b> Motion of charges in electric Field Resistance and Resistivity Electric Current Kirchhoff's Rules Series / Parallel Circuits
09-12	<b>Magnetic Fields and Electromagnetics Waves:</b> Magnetic Fields Force on Current Carrying Wires Torque on a Current Loop Magnetic Dipole Moment Force on a Moving Charge

