100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	普通物理(電學)	Serial No. / ID	1122 / MAV1009
Dept.	機械與自動化工程學系	School System / Class	四技部1年1班
Lecturer	陳國祥	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)56 / H439 (四)6 / H439	Language	Chinese

Introduction

In this course, the following topics will be investigated:

Electrostatics involves electric charges, the forces between them, and their behavior in materials.

The motion of electric charges, or electric currents.

The relationship of electric currents to magnetism.

How magnetism and electricity can be controlled to operate moters and other electrical devices.

How electricity, magnetism, and light are connected.

Outline

Electric Charge Electric Fields Gauss ' s Law Electric potential Capacitance Current and Resistance Circuits Magnetic Fields Magnetic Fields Dut to Currents Induction and Inductance Electromagnetic Oscillations and Alternating current Maxwell ' s equations Electromagnetic waves

Prerequisite

Calculus