

97-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	普通物理(電學)	Serial No. / ID	2629 / MAV1009
Dept.	機械與自動化工程學系	School System / Class	四技部2年1班
Lecturer	陳昭翰	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	NO
Time / Place	(二)N / P301 (五)56 / P301	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 motors 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