

97-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	普通物理實驗(電學)	Serial No. / ID	0812 / EEI1049
Dept.	電機工程學系	School System / Class	大學日間部1年4班
Lecturer	李世鴻	Full or Part-time	專任
Required / Credit	Required / 1	Graduate Class	NO
Time / Place	(四)34N / H205	Language	Chinese

Introduction
<p>A. Department of Electrical Engineering Da-Yeh University, the aims of education (Educational Objectives)</p> <ol style="list-style-type: none"> 1. Basic: teaching basic knowledge of mathematics and information. 2. Professional: professional and technical training in electrical engineering. 3. Integration: Strengthening the integration of technology application and training. 4. International outlook: foreign language skills, culture and international perspective. <p>B. Department of Electrical Engineering Da-Yeh University, Education core competencies (Educational Outcomes)</p> <ol style="list-style-type: none"> 1.1 has a basic knowledge of mathematics and ability. 1.2 has a physical basis of knowledge and skills. 1.3 has a basic knowledge of information technology and capability. 2.1 with electrical engineering expertise and application capability. 3.1 with data collection, simulation analysis, experimental design and problem solving ability. 3.2 necessary for engineering practice and implement the technical ability. 4.1 English with basic motor skills. 4.2 understanding of domestic motor development trend of related industries and pulse. 4.3 fully recognizes the importance of professional ethics, understanding of engineering technology on the environment, social and global implications, fulfilling the social responsibility of engineers. <p>Course Objectives:</p> <ol style="list-style-type: none"> 1. so that students understand the basic principles of General Physics Electricity 2. how to operate the equipment for Physics Experiments 3. Verify the laws of physics and familiar with the instrument training 4. the ability to analyze data <p>(A1, B1.2, B3.1)</p>

Outline
<ol style="list-style-type: none"> 1. Electric field lines distribution experiment 2. DC Circuits 3. Millikan oil- d r o p experiment 4. Wheatstone bridge experiment 5. solenoid magnetic field experiment 6. electronic charge and mass ratio experiment 7. the level of intensity of magnetic moment and magnetic measurements

8. inductance measurement experiment
9. AC series resonant test
10. Microwave Device Laboratory
11. refractive index measurement experiment
12. basic optics (a) single-slit diffraction phenomenon (b) of the double-slit interference
13. Photoelectric Effect
14. oscilloscope experiment
15. hysteresis
16. Hall effect is measured

Prerequisite

General Physics (electrical, magnetic and optical)