101-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	普通物理實驗(電學)	Serial No. / ID	2977 / EEI1049
Dept.	電機工程學系	School System / Class	大學日間部1年2班
Lecturer	李得勝	Full or Part-time	專任
Required / Credit	Required / 1	Graduate Class	No
Time / Place	(三)9AB / H205	Language	Chinese

Introduction

- A. Department of Electrical Engineering Da-Yeh University, the aims of education (Educational Objectives)
- 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.
- B. Department of Electrical Engineering Da-Yeh University, Education core competencies (Educational Outcomes)
- 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.

Course Objectives:

- 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

(A1, B1.2, B3.1)

Outline

- 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)