

## 99-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	近代物理	Serial No. / ID	0689 / EEI3028
Dept.	電機工程學系	School System / Class	大學日間部2年1班
Lecturer	李得勝	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(二)6 / H563 (四)78 / H563	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"> <li>1. Basic: teaching basic knowledge of mathematics and information.</li> <li>2. Professional: professional and technical training in electrical engineering.</li> <li>3. Integration: Strengthening the integration of technology application and training.</li> <li>4. International outlook: foreign language skills, culture and international perspective.</li> </ol> <p>B. Department of Electrical Engineering Da-Yeh University, Education core competencies (Educational Outcomes)</p> <ol style="list-style-type: none"> <li>1.1 has a basic knowledge of mathematics and ability.</li> <li>1.2 has a physical basis of knowledge and skills.</li> <li>1.3 has a basic knowledge of information technology and capability.</li> <li>2.1 with electrical engineering expertise and application capability.</li> <li>3.1 with data collection, simulation analysis, experimental design and problem solving ability.</li> <li>3.2 necessary for engineering practice and implement the technical ability.</li> <li>4.1 English with basic motor skills.</li> <li>4.2 understanding of domestic motor development trend of related industries and pulse.</li> <li>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.</li> </ol> <p>Course Objectives:</p> <p>Enable students to understand modern physics in 1900 found that when the Planck blackbody radiation to quantify the role of energy in the beginning, with this revolutionary idea as expressed by Einsteins relativity theory and the same revolutionary quantum theory of light.</p> <p>Indeed, some of the views of modern science is the view of contemporary life will not be provided by modern physics understanding of matter and energy for change, and modern physics will enter its second century, still an active area of science.(A1, A2, A4, B1.1, B1.2, B2.1, B3.1, B4.1, B4.2)</p>

Outline
Chapter 1 Theory of Relativity
Chapter 2 the particle properties of waves
Chapter 3 Wave particles
Chapter 4 atomic structure
Chapter 5 Quantum Mechanics
Chapter 6 Quantum theory of hydrogen atom

Chapter 7 Multi-electron atoms  
Chapter 8 Molecule

Prerequisite

Calculus and General Physics