

100-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	分子生物學(一)	Serial No. / ID	0548 / MBI3001
Dept.	分子生物科技學系	School System / Class	大學日間部3年1班
Lecturer	游志文	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(二)34 / J320 (四)2 / J320	Language	Chinese

Introduction
<p>This course emphasizes not only in understanding how life operates in molecular level, but also problem based learning. There are three main goals of this course:</p> <ol style="list-style-type: none"> 1. Understand the life processes in molecular level. 2. Develop an appreciation of how molecular biology is used in every field of biology. 3. Learn how to analyze and interpret experimental data by formulating models

Outline
<p>Introduction: a brief history</p> <p>Chapter1. The Mendelian View of the World</p> <p>Chapter2. Nucleic Acids Convey Genetic Information</p> <p>Chapter3. The Importance of Weak Chemical Interaction</p> <p>Chapter4. The Importance of High-Energy Bonds</p> <p>Chapter5. Weak and Strong Bonds Determine Macromolecular Structure</p> <p>Chapter6. The Structures of DNA and RNA</p> <p>Chapter7. Chromosomes, Chromatin, and the Nucleosome</p> <p>Chapter8. The Replication of DNA</p> <p>Chapter9. The Mutability and Repair of DNA</p> <p>Chapter10. Homologous Recombination at the Molecular Level</p> <p>Chapter11. Site-Specific Recombination and Transposition of DNA</p>

Prerequisite
<ol style="list-style-type: none"> 1. Biology 2. Biochemistry