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

Information			
Title	腫瘤生物學	Serial No. / ID	0487 / MBI4002
Dept.	分子生物科技學系	School System / Class	大學日間部4年1班
Lecturer	蔡孟峰	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	Yes
Time / Place	(−)2 / J309 (Ξ)34 / J309	Language	Chinese

## Introduction

The purpose of this course is to increase your knowledge of the principles of cancer biology with a background in cellular and molecular biology. The course addresses the following questions: What is cancer,. What causes cancer, How does cancer progress. The lectures include: DNA structure and stability, oncogenes and tumor suppressor genes, apoptosis, and metastasis. The focus of this course is on the basic science and research of cancer, with a particular emphasis on the exciting new treatment options that are emerging from the biotechnology and pharmaceutical industries.

## Outline

- 1. What is cancer
- 2. DNA Mutations vs. Repair
- 3. Growth Factor Signaling and Oncogenes
- 4. Growth Inhibition and Tumor Suppressor Genes
- 5. Apoptosis
- 6. Metastasis
- 7. Cancer in the future: focus on diagnostics and immunotherapy

## Prerequisite

1.Biology

2. Molecular cell biology