## 98-1 Preliminary Syllabus, Da-Yeh Univ

| Information       |                          |                       |                |
|-------------------|--------------------------|-----------------------|----------------|
| Title             | 腫瘤生物學                    | Serial No. / ID       | 0853 / 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      | (一)5 / J315 (三)34 / J307 | 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
- Growth Factor Signaling and Oncogenes
- 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