98-2 Preliminary Syllabus, Da-Yeh Univ

| Information | | | |
|-------------------|----------------------|-----------------------|----------------|
| Title | 生物技術概論 | Serial No. / ID | 1026 / MBI1005 |
| Dept. | 分子生物科技學系 | School System / Class | 大學日間部1年1班 |
| Lecturer | 張雲祥 | Full or Part-time | 專任 |
| Required / Credit | Required / 2 | Graduate Class | NO |
| Time / Place | (<u></u>)34 / J121 | Language | Chinese |

Introduction

Biotechnology-the use of living organisms or their products to enhance our lives and our environment-is a broad and increasingly complex discipline that encompasses many specialized areas. Our understanding of living organisms has been immensely deepened by the contributions that molecular biology and recombinant DNA methods have made to basic scientific research. We are able to isolate, analyze, and manipulate genes and alter the genetic makeup of living organisms. Cloning organisms has become almost routine, and stem cell research looks promising. In deed, biotechnology is revolutionizing agriculture and medicine.

Outline

Biotechnology: old and new; From DNA to protein; Basic principles of recombinant DNA technology; Microbial, plant, animal, medical, and marine biotechnology; Genomics and beyond; DNA profiling, forensics, and other applications; regulation, patents and society.

Prerequisite

Biology