

97-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	細胞生物學	Serial No. / ID	0307 / BRI2021
Dept.	生物資源學系	School System / Class	大學日間部2年1班
Lecturer	孫芳君	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	NO
Time / Place	(一)2 / J307 (二)56 / J307	Language	Chinese

Introduction

The cell is the basic unit of biology. This course will lead the students to know the structures and functions of the cells, and further understand the capabilities and limitations of living organisms, whether they are animals, plants, fungi, or microorganisms.

Outline

1. A preview of the cell
2. The structure and functions of biological molecules
3. Bioenergetics, enzymes and metabolism-mitochondria
4. Oxidative stress
5. Cellular organelles and membrane trafficking
6. Midterm Exam
7. Cell interaction and connection
8. Controlling gene expression / Genes, chromosomes, and Genomes
9. Cell signaling pathway
10. Replication and repairing DNA
11. Introduction of stem cells
12. Stem cell in regenerative medicine
13. Therapy of cell transplantation
14. Cell-associated application in cosmetic medicine
15. Cellular and molecular biotechnology
16. Final Exam

Prerequisite

Cell biology