

# 102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	細胞生物學	Serial No. / ID	2416 / BRI2021
Dept.	生物資源學系	School System / Class	大學日間部3年1班
Lecturer	張瑞芝	Full or Part-time	兼任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(五)123 / J216	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
<ol style="list-style-type: none"><li>1. A preview of the cell</li><li>2. The structure and functions of biological molecules</li><li>3. Bioenergetics, enzymes and metabolism-mitochondria</li><li>4. Oxidative stress</li><li>5. Cellular organelles and membrane trafficking</li><li>6. Midterm Exam</li><li>7. Cell interaction and connection</li><li>8. Controlling gene expression / Genes, chromosomes, and Genomes</li><li>9. Cell signaling pathway</li><li>10. Replication and repairing DNA</li><li>11. Introduction of stem cells</li><li>12. Stem cell in regenerative medicine</li><li>13. Therapy of cell transplantation</li><li>14. Cell-associated application in cosmetic medicine</li><li>15. Cellular and molecular biotechnology</li><li>16. Final Exam</li></ol>

Prerequisite
Cell biology