

102-2 Preliminary Syllabus, Da-Yeh Univ

| Information | | | |
|-------------------|---------------|-----------------------|----------------|
| Title | 植物生理學(一) | Serial No. / ID | 0609 / MBI3013 |
| Dept. | 分子生物科技學系 | School System / Class | 大學日間部3年1班 |
| Lecturer | 余聰安 | Full or Part-time | 專任 |
| Required / Credit | Optinal / 3 | Graduate Class | No |
| Time / Place | (四)678 / J315 | Language | Chinese |

Introduction

Plant physiology is basic research of plant science. Basic training in life science, technique training in molecular biotechnology development and application, and practice training in bio-industry are our course goals. This course gives instruction in basic background (including the principles of bioenergetics and discusses energy metabolism and the assimilation of carbon and nitrogen, and cell and plant water relation and the uptake of mineral nutrients) in plant physiology. We hope the student get the ability for understanding, analyzing and criticizing capability in plant biotechnology.

Outline

Introduction

Plant cell

Transport and translocation of water and solutes

Water and plant cells

Water balance of plants

Mineral nutrition

Solute transport

Photosynthesis and Metabolism

Photosynthesis: the light reactions

Photosynthesis: carbon reaction

Photosynthesis: physiological and ecological considerations

Photosynthesis: physiological and ecological considerations

Translocation in the phloem

Assimilation of mineral Nutrients

Prerequisite

Botony or life