99-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	植物生理學(一)	Serial No. / ID	1625 / 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 / J307	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 discuses 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