

農園生產系 96-1 新增課程中英文摘要

一、大學部

能源草類管理

2 選

謝清祥

本課程主要介紹具能源轉換潛力之禾本科草類，其植物特性，生長生理、育種目標及栽培管理制度等。課程內容含冷季型草類，且具高酒精發酵潛力之蘆草(Canarygrass)、梯牧草(Timothy)、軟莖黍(Switchgrass)、芝草(Miscanthus)、小麥草、黑麥草、果園草及高狐草等；及暖季型草類如：百慕達草、甜高粱、象草(Elephant)熱帶芒草等之各作物特性草坪建立、草場管理及收穫貯藏等方式講授。此外，草類資源之能源轉換方式及步驟亦將進行介紹。

Grass Management for Bioenergy Uses

2 S

C. H. Hsieh

The objectives of the course will introduce the highly potential energy transfer grasses on their plant characters、growth and physiology、breeding goals and cultural systems. The course contents include lectures on cool-season grasses such as：Canary grass、Timothy、Switchgrass、Miscanthus、Wheat、Ryegrass、Orchardgrass and warm-season grasses such as：Bermudagrass、Sweet sorghum、Elephant grass and tropical miscanthus；their plant characters、grass establishment、grass management and post-harvest treatments. And, the fermentation process to ethanol will also introduced.

能源草類管理實習

1 選

謝清祥

本實習課程將介紹具能源轉換草類禾本科草類之植物特性，其繁殖與建立方式，田間栽培管理草類內含糖分分析、生質量分析、育種方法、採收處理方式及能源轉換基本步驟之了解等，期能讓學生實際了解能源草類之基本生產模式。

Laboratory on Grass Management for Bioenergy Uses

1 S

C. H. Hsieh

The laboratory lectures will include introduction of plant characters on grasses for bioenergy uses. The propagation and establishment, field cultural management practices, sugar content analysis, biomass analysis, breeding methods、post harvest practices and processes on fermentation for energy transfer will also be performed.

The students can acknowledge the basic production model for management on grasses for bioenergy uses.

二、碩士班

食藥用菌菇特論

2 選

王均琍

本課程主要在講授有關新興之食藥用菌菇，其形態、構造、生活史特性與生理功能。介紹其液體發酵與固體發酵培養之原理、方法與產品應用。

Special Topic on the Edible

2 S

C. L. Wang

and Medicinal Mushrooms

This course is aimed at introducing the characteristics of the morphology, structure, life cycle and physiological functions of some edible, medicinal mushrooms. The principles, techniques and products applications of liquid fermentation and solid fermentation are discussed.

植物發育調控

2 選

陳福旗

本課程探討植物不同發育階段型態變化及生理生化過程如何受到基因表達之調節，以及內生和環境因子對生長發育的影響。此外也涵蓋分子生物及基因轉殖技術應用於植物發育之研究。

Regulatory Mechanisms in Plant Development

2 S

F. C. Chen

The course discusses morphological, physiological and biochemical processes of plant developmental and molecular mechanisms of growth and development regulated by either endogenous or environmental factors. The applications of molecular biology and genetic transformation for studying plant development will also be covered.