

朝陽科技大學 098學年度第1學期教學大綱
Advanced Pesticide Chemistry 高等農藥化學

當期課號	7202	Course Number	7202
授課教師	辛竹英	Instructor	Chu, Ying Hsin
中文課名	高等農藥化學	Course Name	Advanced Pesticide Chemistry
開課單位	應用化學系碩士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	本課程首先簡介農藥之重要性與分類，而後詳細闡述界面活性劑在農藥上之應用。界面活性劑之原理、特性、分類、應用方法將在本課程中被詳細地探討。內容亦包括：農藥在動植物體內之分佈及新陳代謝，農藥在土壤及地面水、地下水中之移動與分佈。在應用方法上，農藥之劑型配方技術將會被簡單地介紹。最後會引述生物技術在農藥上之應用，以微生物取代化學性農藥以減少環境污染。	Objectives	For junior and senior undergraduate students, this course includes the content of introduction of pesticides, basic knowledge of surfactants, brief descriptions of herbicides, insecticides and fungicides. Pesticide formulations and biopesticides will also be discussed. Only few organic synthesis of pesticides will be mentioned. With no experiment, student will learn basic knowledge about chemical pesticides and biological pesticides.
教材	Perry, A.S., I. Yamamoto, I. Shaaya, and R. Y. Perry. 1998. Insecticides in Agriculture and Environment. Springer. Berlin. 259pp. Ware, G. W. 1994. The Pesticide Book. 4th ed. Thomson publication. Fresno, CA 386pp. Hassall K. A. 1990. The Biochemistry and Uses of Pesticides. 2nd ed. VCH. New York. 536pp. Stenersen, J. 2004. Chemical Pesticides ---mode of action and toxicology. CRC Press. London. 275pp.	Teaching Materials	Perry, A.S., I. Yamamoto, I. Shaaya, and R. Y. Perry. 1998. Insecticides in Agriculture and Environment. Springer. Berlin. 259pp. Ware, G. W. 1994. The Pesticide Book. 4th ed. Thomson publication. Fresno, CA 386pp. Hassall K. A. 1990. The Biochemistry and Uses of Pesticides. 2nd ed. VCH. New York. 536pp. Stenersen, J. 2004. Chemical Pesticides ---mode of action and toxicology. CRC Press. London. 275pp.
成績評量方式	期中考:50%; 期末考:50%	Grading	midterm exam:50%; final exam:50%
教師網頁	-		
教學內容	單元一:農藥學通論(農藥簡介及發展歷史,農藥毒性,農藥劑型);單元二:殺蟲劑(有機磷劑、氨基甲酸鹽類,合成除蟲菊類、新作用機制藥劑、微生物藥劑及其他類藥劑);單元三:殺菌劑;單元四:除草劑與農藥藥害;單元五:農藥結構與生物活性;單元六:農藥代謝;單元七:農藥殘量分析。 本課程採取協同授課方式由屏科大辛竹英教授,藥毒所周正平博士等聯合授課。	Syllabus	1. Introduction to pesticide; 2. Insecticide; 3. bactericide; 4. herbicide; 5. Structure and bio-activity of pesticide; 6. Metabolism of pesticide; 7. Analysis of pesticide residue.

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