

朝陽科技大學 097學年度第1學期教學大綱
Spectroscopy Bio-macromolecules 生物巨分子光譜學

當期課號	7189	Course Number	7189
授課教師	錢偉鈞	Instructor	CHIEN,WEI JYUN
中文課名	生物巨分子光譜學	Course Name	Spectroscopy Bio-macromolecules
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	本課程之主要目標在使學生銜接光譜技術之原理及其在生物巨分子相關研究之應用發展。課程內容將涵蓋紫外光譜、螢光光譜、紅外光譜、圓二色光譜及核磁共振光譜技術之基本原理以及光譜技術在醣類、核酸及蛋白質分子定性、定量分析及構型測定之應用。	Objectives	The main is to introduce the spectroscopic techniques applied to the current study of bio-macromolecules. The contents include UV, IR, fluorescence, circular dichroism, and NMR spectroscopy and their applications to the study of carbohydrates, nucleic acids and proteins.
教材	1.Circular dichroism : principles and applications / edited by Koji Nakanishi, Nina Berova, and Robert Woody 2.Principles of fluorescence spectroscopy / Joseph R. Lakowicz 3.Electron paramagnetic resonance in biochemistry and medicine /Rafik Galimzyanovich Saifutdinov ... [et al.].	Teaching Materials	1.Circular dichroism : principles and applications / edited by Koji Nakanishi, Nina Berova, and Robert Woody 2.Principles of fluorescence spectroscopy / Joseph R. Lakowicz 3.Electron paramagnetic resonance in biochemistry and medicine /Rafik Galimzyanovich Saifutdinov ... [et al.].
成績評量方式	四份期中報告,各佔20%,共計80% 期末報告20% 總分100	Grading	Total score 100 midterm reports 80% (20% each) final report 20%
教師網頁	http://www.cyut.edu.tw/~wjchien		
教學內容	紫外光譜原理與應用 螢光光譜原理與應用 紅外光譜原理與應用 圓二色光譜原理與應用 核磁共振光譜原理與應用	Syllabus	Theory and application of UV/VIS spectroscopy Theory and application of fluorescent spectroscopy Theory and application of infrared spectroscopy Theory and application of circular dichroism Theoy and aplicaion of nuclear magnetic resonance spectroscopy

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