朝陽科技大學 091學年度第2學期教學大綱
General Biology（Ⅱ ）普通生物學(二)

當期課號	1826	Course Number	1826
授課教師	蔡新聲	Instructor	TSAY,HSIN SHENG
中文課名	普通生物學(二)	Course Name	General Biology (Ⅱ)
開課單位	應用化學系(四日)一A	Department	
修習別	必修	Required/Elective	Required
學分數	2	Credits	2
課程目標	正統的生物學教育包括國小、國中、高中以及大學之教學，主要涵蓋兩大部份：傳統生物學與分析生物學；前者包括人類感官所認知的動物、植物等(例如動物會動、植物會開花)，它是一種認知的生物學，而後者則是利用已知的物理、化學原理來探求生命現象的表徵，它用到電子顯微鏡、電泳儀、超高速離心機等作爲生物及其代謝物質的分析，主要依賴包括細胞學、生化學與遺傳學。近年來生命科學由於一些貴重儀器與技術的進步，才得以蓬勃發展，其中最令人興奮的莫過於與生物技術的進展(此技術整合與生物有關的各種知識)；您若對這些報導有興趣，就非得從基礎的生物學開始。 基本上，本學期上課內容是銜接上學期普通生物學(一)的教學內容，其主旨是儘可能地提供給同學生物科技的基本知識與全貌。	Objectives	Biology is generally devided as traditional and analytical biology in the education of elementary schools to universities. The former part covers the principles of animals and plants through our observation and recognization, whereas the latter one describes the operational logics of life science through the development of microscopy, electrophoresis...etc. By the aid of cell biology, biochemistry and genetics the analysis of cell metabolism becomes possible and feasible. Meanwhile, the development in biotechnology, the practical application that integrates the knowledge of biology, astonishes us most. If you are interested in this field, then why not prepare yourself from the knowledge of General Biology? Overall, we will continue to introduce the basically important idea of Analytical Biology in this semester. In this way, we aim to give an overall view to biotechnology.
教材	依照1999年版CAMPBELL, 5th ed.之內容，配合投影機教學・	Teaching Materials	1999,CAMPBELL, 5th ed
成績評量方式	測驗・	Grading	TEST
教師網頁	_		
教學內容	1.本課程係依照1999年版CAMPBELL, 5th ed.之內容架構規劃。 2.上學期分別爲： Ⅰ.生物的化學基礎 Ⅱ.生物的基本單位—細胞學 Ⅲ.生物繁衍的基礎—遺傳學 Ⅳ.生物多樣性的理論基礎—演化學	Syllabus	1.Invertebrates and the origin of animal diversity 2.Form and function of plants 2-1. Plant structure and growth 2-2. Transport in plants 2-3. Plant nutrition 2-4. Plant reproduction and development 2-5. Control systems in plants 3.Form and function of animals 3-1. Animal structure and function 3-2. Animal nutrition 3-3. Circulation and gas exchange 3-4. The body's defenses 3-5. Controlling he internal environment 3-6. Chemical signals in animals 3-7. Animal reproduction 3-8. Nervous systems 3-9. Sensory and motor mechanisms 4.Ecology 4-1. An introduction to ecology 4-2. Population ecology 4-3. Community ecology 4-4. Ecosystems

尊重智慧財產權，請勿非法影印。