

朝陽科技大學 091學年度第1學期教學大綱
Introduction of Biotechnology 生物技術概論

當期課號	6435	Course Number	6435
授課教師	賴龍山	Instructor	LAI, LONG SHAN
中文課名	生物技術概論	Course Name	Introduction of Biotechnology
開課單位	應用化學系(二進)五A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	<p>Biotechnology一詞之一般譯名是生物技術，它又稱生物工學。繼資訊科技之後，為人類健康圓夢的生物科技已蔚為新世紀的主導型高科技。隨著政府允諾每年百億新資金的大跨步投入和科技發展計畫的開放民間參與，未來幾年上千的生物科技工作機會已隱然成形。整體來說，生物技術的基礎學科範圍極廣，涵蓋生物、化學與工程三大領域之綜合，互通有無；生物技術的應用方面所包括部份很廣，舉凡基於某些特定用途的前提下，以生物體整體或其部份進行合成、轉換等生化反應用以製造或改良產品，以開發或增進微生物、植物、動物的生產力，皆可曰生物技術。</p>	Objectives	<p>After information technology, biotechnology (also called bio-engineering) is widely recognized as one of the most-promising hi-technology as it can largely improve the quality of our life. In general, this technology covers many fields of science in laboratory such as chemistry, microbiology, biochemistry, and genetics. For potential applications in industry, it is also strongly related to bio-chemical engineering. Above of all, the knowledge of biology can be viewed as the basic part for its development and applications in future. In short, biotechnology is defined to use the whole or parts of the cells thereof to produce chemicals and/or to supply services so as to improve the quality of human life.</p>
教材	上課講授與同學參與討論,上課內容將依同學背景作調整.	Teaching Materials	Teaching and discussion at the class. Class notes will be altered according to the requirements of students.
成績評量方式	期中考與期末考各50%,再加上平常成績(主要視上課點名為主,以10%為上限).	Grading	<p>The final course evaluation will be evaluated based on the following two gradings:</p> <p>(1). Mid.term exam (2). Final exam.</p> <p>Bonus will be given mainly based on the course attendance.</p>
教師網頁	-		
教學內容	<p>Biotechnology一詞之一般譯名是生物技術，它又稱生物工學。繼資訊科技之後，為人類健康圓夢的生物科技已蔚為新世紀的主導型高科技。隨著政府允諾每年百億新資金的大跨步投入和科技發展計畫的開放民間參與，未來幾年上千的生物科技工作機會已隱然成形。</p> <p>整體來說，生物技術的基礎學科範圍極廣，涵蓋生物、化學與工程三大領域之綜合，互通有無；生物技術的應用方面所包括部份很廣，舉凡基於某些特定用途的前提下，以生物體整體或其部份進行合成、轉換等生化反應用以製造或改良產品，以開發或增進微生物、植物、動物的生產力，皆可曰生物技術。</p>	Syllabus	<p>After information technology, biotechnology (also called bio-engineering) is widely recognized as one of the most-promising hi-technology as it can largely improve the quality of our life. In general, this technology covers many fields of science in laboratory such as chemistry, microbiology, biochemistry, and genetics. For potential applications in industry, it is also strongly related to bio-chemical engineering. Above of all, the knowledge of biology can be viewed as the basic part for its development and applications in future. In short, biotechnology is defined to use the whole or parts of the cells thereof to produce chemicals and/or to supply services so as to improve the quality of human life.</p>