

朝陽科技大學 096學年度第2學期教學大綱  
Science and Technology in human life 科技與人生

當期課號	0154	Course Number	0154
授課教師	鄧雅靜	Instructor	Teng, Ya Ching
中文課名	科技與人生	Course Name	Science and Technology in human life
開課單位	自然與科技發展課群(日)	Department	
修習別	選擇必修	Required/Elective	Topics in Natural and the? Development of Sciences
學分數	2	Credits	2
課程目標	介紹科技發展對人類生活的影響,首先說明物質變化的物理與化學基本觀念,再逐步引述化學工業,材料工業,環境科學,地球科學,生命科學的進步,對人類生活的衝擊與生活方式的改變。	Objectives	Impacts of scientific and technological developments on human life will be discussed. Basic physical and chemical concepts which related to the change of matters will be introduced first. Changing of human life due to progresses of chemical industry, materials industry, environmental science, earth science, and life science will be presented.
教材	1.生物科技產業概論 2.基因工程與生物技術概論-基因選殖及DNA分析 3.Powerpoint 4.video CD	Teaching Materials	1.Textbook of Understanding Biotechnology Industry 2.Textbook of Gene Cloning and DNA analysis An introduction 4/e 3.Powerpoint 4.video CD
成績評量方式	1.平時成績(25%) 2.指定作業(25%) 3.考試(50%)	Grading	1.Participation (25%) 2.Assignment of homework(25%) 3.examination(50%)
教師網頁	-		
教學內容	1.緒論 2.生物科技的發展簡史 3.生物科技在生活上的應用 4.生物科技在環境上的應用 5.生物科技在醫學上的應用 6.單株抗體藥物的發展 7.新藥研發與生物製劑 8.桃莉羊與複製動物 9.人類基因體計畫 10.生物科技在農業上的應用 11.Flavr Savr 番茄與基因改造食品 12.生物科技在刑事科學上的應用 13.現代生技公司的發展	Syllabus	1.Introduction 2.The brief histories of advances in biotechnology 3.The application of biotechnology in life 4.The application of biotechnology in environment 5.The application of biotechnology in medicine 6.Monoclonal antibodies 7.New drug development and biopharmaceuticals 8.Dolly the sheep and animal cloning 9.Human genome project, HGP 10.The application of biotechnology in agriculture 11.Flavr Savr tomato and genetically Modified foods 12.The application of biotechnology in forensic science 13.The modern biotechnology companies

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