朝陽科技大學 099學年度第2學期教學大綱
lifescience 生命科學概論

當期課號	0133	Course Number	0133
授課教師	李孟真	Instructor	LEE,MENG JEN
中文課名	生命科學概論	Course Name	lifescience
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	由於對生命的日愈重視，因此生命科學的探討聚集了更多人的注意。本門課主要是經由生命起源及滅絕的過程來探討，進而了解生命的來源，尊重生命，並進一步了解目前國內對生物科技發展的情形和其在未來生活上的應用。	Objectives	In Life Science, students are introduced to the scientific study of living things. They should develop their understanding of the way a single species functions in its environment as well as how communities of species live in their environment and interact with one another. Students should be able to recognize genes, to understand biotechnology, to develop their conscience and to have respect to all things in the world.
教材	教師自編教材	Teaching Materials	teachers own material plus video CD
成績評量方式	口頭報告+考試	Grading	oral presentation and written examination
教師網頁	_		
教學內容	1.生物的化學基礎 2.細胞：生命的積木 (1)細胞的構造 (2)訊息傳遞練 3.生命的藍圖 (1)遺傳學和遺傳 (2)基因的分子生物學 (3)DNA技術與人類基因體 4.人體：完美的機器 5. 身體的防禦系統--免疫學 (1) 免疫細胞 (2) 抗體 (3) HIV 及其他病毒 6. 生物多樣性的理論基礎－演化學 (1)微生物的演化 (2)動物的演化 (3)植物和真菌的演化 5.生物與環境－生態學 (1)生命之網：生產者與掠食者 (2)世界的生態群落：從沙漠到雨林	Syllabus	1. The chemistry aspect of all organism 2. the building block for life: the cell 1) the structure of the cell 2) signal transduction 3. blueprint of life 1) basic genetics 2) molecular genetics 3) DNA technology and human genome 4. human body: the perfect machine 5. defense mechanism of the body: immunology 1) cells of the immune system 2) antibodies 3) HIV and other viruses 6. The fundamental theory of biodiversity: ecology 1) the producer and predator 2) the world ecology: from desert to rainforest

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