朝陽科技大學 095學年度第1學期教學大綱
Remote Sensing of the Environment 環境遙測學

當期課號	7207	Course Number	7207
授課教師	張迪惠	Instructor	CHANG,DYI HUEY
中文課名	環境遙測學	Course Name	Remote Sensing of the Environment
開課單位	環境工程與管理系碩士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	"遙測"是利用雷達與電磁原理將地表資訊轉換爲數位影像。藉由對於遙測影像的收集與製造原理的了解，我們可將這些影像應用於一系列的地表科學上，包括環境影響評估和監控、地形與地表圖的製造、以及水文與氣象學。學生經由這門課可(1)了解遙測在地表科學的重要與其應用，(2) 探討當代遙測以及感測器的基本原理，(3)以遙測軟體 (Erdas Imagine) 來練習影像的處理與實際上的應用。	Objectives	Remote sensing (RS) involves measurement of electromagnetic radiation from the earth's surface to produce digital images. With knowledge of how such images are collected and processed it is possible to use them in a range of geographical applications, including environmental assessment and monitoring, geological and land cover mapping, hydrology and climatology. The main objectives of this course is 1. to introduce RS as an important enabling tool for earth-surface research problems and applications, 2. to examine the basics of RS and the main sensor systems that are in use, and 3.to provide practical experiences of image processing and interpretation.
教材	Erdas Imagine: tour guide Erdas Imagine: field guide	Teaching Materials	Erdas Imagine: tour guide Erdas Imagine: field guide
成績評量方式	1. 作業 (80%) 2. 上機操作表現 (20%)	Grading	1.Homework (80%) 2.Computer-based practices (20%)
教師網頁			
教學內容	"遙測"是利用雷達與電磁原理將地表資訊轉換爲數位影像。藉由對於遙測影像的收集與製造原理的了解，我們可將這些影像應用於一系列的地表科學上，包括環境影響評估和監控、地形與地表圖的製造、以及水文與氣象學。學生經由這門課可： 1.了解遙測在地表科學的重要與其應用， 2.探討當代遙測以及感測器的基本原理， 3.以遙測軟體 (Erdas Imagine) 來練習影像的處理與實際上的應用。	Syllabus	Remote sensing (RS) involves measurement of electromagnetic radiation from the earth's surface to produce digital images. With knowledge of how such images are collected and processed it is possible to use them in a range of geographical applications, including environmental assessment and monitoring, geological and land cover mapping, hydrology and climatology. The main objectives of this course is (1) to introduce RS as an important enabling tool for earth-surface research problems and applications, (2) to examine the basics of RS and the main sensor systems that are in use, and (3) to provide practical experiences of image processing and interpretation.