朝陽科技大學 092學年度第2學期教學大綱
Engineering Geology 工程地質

當期課號	1021	Course Number	1021
授課教師	徐松圻	Instructor	HSU,SUNG CHI
中文課名	工程地質	Course Name	Engineering Geology
開課單位	營建工程系(四日)二A	Department	
修習別	必修	Required/Elective	Required
學分數	2	Credits	2
課程目標	認識礦物及岩石的種類和形成過程、地質年代、構造地質、台灣地質特性介紹、工程地質中的環境因素、工程地質在邊坡、水庫、壩工和隧道工程的應用及台灣案例介紹、工程地質圖的判讀繪製。	Objectives	This course will cover types of minerals and rocks and their formations, geological times, structural geology, plate tectonics, geology in Taiwan, environmental factors for engineering geology, applications of engineering geology on slopes, dams and tunnels, and cases in Taiwan.
教材	每週授課三小時，學生選擇野外地質參觀及製作期末報告，並佐以小組報告及地質研習來學習。	Teaching Materials	There are 3 class hours per week. Homework or reading assignments will be assigned every week. Students are required to visit the in situ geological sites and to prepare the final report.
成績評量方式	出席及作業 報告及討論 10%； 小考 30% (含隨堂小考)；期中考 30%；期末考 30%	Grading	Homework, Report & Attendence 10% Quizs 30% Midterm 30% Final Exam 30%
教師網頁	_		
教學內容	使學生瞭解土木工程相關的地質知識及問題，並將其應用在土木工程上。相關的地質知識包括: 認識礦物及岩石的種類和形成過程、地質年代、構造地質、台灣地質特性介紹、 工程地質中的環境因素、工程地質在邊坡、水庫、壩工和隧道工程的應用、 台灣案例介紹及工程地質圖的判讀。	Syllabus	This course will teach students to have some background on geology and related problems with civil engineering, and they will be able to apply the knowledge to civil engineering application. This course will cover formation of the earth crust, material factors of engineering geology including formation and types of minerals and rocks, weak planes and geological structures in rock masses, geological times, reading of geological maps, plate tectonic, geology of Taiwan, geological characteristics and formations in Taiwan, environmental factors for geological engineering, rock mass classifications, types of slope failures and monitoring of slopes, and application of engineering geology on slopes, water reservoir, dams, and tunnels.

尊重智慧財產權，請勿非法影印。