朝陽科技大學 093學年度第2學期教學大綱
Structural Analysis(II) 結構學(二)

當期課號	1020	Course Number	1020
授課教師	余志鵬	Instructor	YU,CHIH PENG
中文課名	結構學(二)	Course Name	Structural Analysis(II)
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	3	Credits	3
課程目標	本課程在探討結構分析理論，根據靜定或靜不定結構體所受之外力，計算其結構物之支承反力、桿件所受之內力與結構之變位。內容包含以最小功法、撓角變位法與彎矩分配法等方法分析靜不定結構，另靜不定結構之影響線亦爲探討之範圍。	Objectives	Analysis for member forces and deflections of statically determinate and indeterminate structures, including trusses, beams, and frames. Analysis of statically indeterminate beams, trusses, and rigid frames by the method of least work. Analysis of Statically Indeterminate beams and rigid frames by the slope-deflection method. Analysis of statically indeterminate beams and rigid frames by the moment distribution method. Influence lines of statically indeterminate structures.
教材	Textbook : Fundmentals of Structural Analysis; Leet & Uang, 2002, McGraw-Hill. Reference books : many other textbooks are fine for the class 1. Elementary Theory of Structures, 4th ed., Hsieh, Y. Y., 1995. 2. Structural Analysis by R. C. Hibbeler, Fourth Edition, Prentice Hall, 1999.	Teaching Materials	
成績評量方式	作業 20% 隨堂測驗 10% 期中考三次(取較佳兩次) 40% 期末考 30%課堂表現 ±5%	Grading	homework 20% quizzes 10% midterm(3 times count the best 2) 40% final 30% participation +5%
教師網頁	_		
教學內容	主要內容將概括； Ø Review of deformation of beams Ø method of using consistent deformation Ø virtual work Ø slope-deflection method Ø moment distribution Ø influence line Ø introduction to matrix methods(optional)	Syllabus	Ø Review of deformation of beams Ø method of using consistent deformation Ø virtual work Ø slope-deflection method Ø moment distribution Ø influence line Ø introduction to matrix methods(optional)

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