朝陽科技大學 097學年度第1學期教學大綱
Structural Analysis(II) 結構學(一)

當期課號	1640	Course Number	1640
授課教師	余志鵬	Instructor	YU,CHIH PENG
中文課名	結構學(一)	Course Name	Structural Analysis(II)
開課單位	營建工程系(四日)二B	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。內容包含結構之穩定、靜定樑、桁架、鋼架與合成結構之分析、 結構之影響線與彈性變形、諧合變位法分析靜不定結構等。	Objectives	Analysis for member forces and deflections of statically determinate and indeterminate structures, including trusses, beams, and frames. Classification of structural design, equation of equilibrium. Stability and determinacy of structures. Analysis of statically determinate beams and trusses. Analysis of statically determinate rigid frames and composite structures. Influence lines of statically determinate structures. Development and use of theorems of moment area method, conjugate beam method, method of virtual work. Analysis of statically indeterminate beams, trusses, and rigid frames by the method of consistent deformations.
教材	教科書:Fundamentals of Structural Analsysis, Leet & Uang，高立書局 參考資料：“Hibbeler ，Structural Analysis， 第五版，高立書局 謝元裕，「通用結構學」，文笙書局	Teaching Materials	Fundamentals of Structural Analsysis, Leet & Uang.
成績評量方式	期中考 20%, 期末考 20%, 作業及小考 50%, 平時成績 10%	Grading	mid-term exams.: 20% final exam: 20% homework and quiz:50% Learning altitude:10%
教師網頁	http://www.cyut.edu.tw/~cpyu		
教學內容	本課程在介紹結構系統之基本概念及一般結構分析之計算方法。內容包括根據結構系統所受之外力，計算其支承反力、桿件內力及對應之變形等。	Syllabus	It provides students with knowledge of structural systems and their associated structural analysis methods for computing support reactions, member forces and the corresponding deflections.

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