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	1619	Course Number	1619
授課教師	潘吉齡	Instructor	PAN,CHI LING
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	書名：Fundamentals of Structural Analysis, 2nd Edition 作者：Kenneth M. Leet & Chia-Ming Uang 譯者：余志鵬 出版公司：美商麥格羅 希爾 書名：Structural Analysis 作者：R. C. Hibbeler 出版公司：高立圖書	Teaching Materials	書名：Fundamentals of Structural Analysis, 2nd Edition 作者：Kenneth M. Leet & Chia-Ming Uang 譯者：余志鵬 出版公司：美商麥格羅 希爾 書名：Structural Analysis 作者：R. C. Hibbeler 出版公司：高立圖書
成績評量方式	Midterm Examination (期中考)－30% Final Examination (期末考)－30% Quiz (小考) and Assignment (作業)－40% (彈性調整)	Grading	Midterm Examination－30% Final Examination－30% Quiz and Assignment－40%
教師網頁			
教學內容	1.Types of Structures and Loads 2.Analysis of Statically Determinate 3.Analysis of Statically Determinate Trusses 4.Internal Loadings Developed in Structural Members 5.Influence Lines for Statically Determinate Structures 6.Deflections of Statically Determinate Structures 7.Method of Virtual Work	Syllabus	1.Types of Structures and Loads 2.Analysis of Statically Determinate 3.Analysis of Statically Determinate Trusses 4.Internal Loadings Developed in Structural Members 5.Influence Lines for Statically Determinate Structures 6.Deflections of Statically Determinate Structures 7.Method of Virtual Work

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