朝陽科技大學 096學年度第1學期教學大綱
Advanced Operations Research(1) 高等作業研究(一)

當期課號	7160	**Course Number**	7160
授課教師	廖經芳	**Instructor**	LIAW,CHING FANG
中文課名	高等作業研究(一)	**Course Name**	Advanced Operations Research(1)
開課單位	工業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	本課程旨在教授學生以數學模式與數量方法分析及求解複雜之問題,並訓練學生發展有效方法求解相關最佳化問題之能力。	**Objectives**	This course aims to study the planning, management, and evaluation of complex problems with mathematical models. Through learning different operation research techniques, the graduate students are trained to understand the state of the art of methodologies in operations research and to develop efficient methods for solving and analyzing relevant problems.
教材	Operations research: models and methods, Paul A. Jensen & Jonathan F. Bard Website: http://www.cyut.edu.tw/~cfliaw/course_1.htm	**Teaching Materials**	Operations research: models and methods, Paul A. Jensen & Jonathan F. Bard 網頁：http://www.cyut.edu.tw/~cfliaw/course_1.htm
成績評量方式	作業(20%), 期中考(40%), 期末考(40%)	**Grading**	Midterm 40%, Final 40%, Homework 20%
教師網頁	https://www.cyut.edu.tw/~cfliaw		
教學內容	線性規劃模式、線性規劃求解方法、敏感度分析與對偶理論、網路流量模式、網路流量求解方法、整數規劃模式、整數規劃求解方法、非線性規劃模式、非線性規劃求解方法。	**Syllabus**	Linear programming formulations, Linear programming solution methods, Sensitivity analysis and duality, Network flow models, Network flow methods, Integer programming models, Integer programming solution methods, Nonlinear programming models, Nonlinear programming solution methods.

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