

朝陽科技大學 095學年度第2學期教學大綱
Introduction to Algorithm 演算法概論

當期課號	3813	Course Number	3813
授課教師	王能中	Instructor	WANG,NENG CHUNG
中文課名	演算法概論	Course Name	Introduction to Algorithm
開課單位	資訊工程系(四進)四A	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	<p>本課程主要介紹演算法的設計與觀念，學生在完成本課程後，將可了解關於演算法的設計理念，其主要涵蓋的範圍有：</p> <ol style="list-style-type: none"> 1. 演算法的複雜度與計算下限的方法 2. NP-Complete的問題 3. 貪婪方法的介紹 4. Divide-and-conquer的方法 5. 搜尋的方法 6. Prune-and-search的策略 7. 動態規劃 	Objectives	<p>The goal of this course is to provide the students with a basic knowledge of computer algorithm. The students will realize the following important algorithm topics after finishing this course:</p> <ol style="list-style-type: none"> 1. Complexity of algorithms and lower bounds of problems 2. NP-complete 3. Greedy method 4. Divide-and-conquer 5. Tree searching strategies 6. Prune-and-search strategy 7. Dynamic programming
教材	R. C. T. Lee, "Introduction to the Design and Analysis of Algorithms", 旗標圖書有限公司出版, 2005 (書號: E7824)	Teaching Materials	R. C. T. Lee, "Introduction to the Design and Analysis of Algorithms", 旗標圖書有限公司出版, 2005 (書號: E7824)
成績評量方式	Attendance, Homework, and Quiz (40%); Midterm Exam (30%); Final Exam (30%)	Grading	Attendance, Homework, and Quiz (40%); Midterm Exam (30%); Final Exam (30%)
教師網頁	http://www.csie.nyu.edu.tw/~ncwang		
教學內容	<p>This course is aimed at introducing the concepts of algorithms.</p> <ol style="list-style-type: none"> 1. The Complexity of Algorithms 2. The Greedy Method 3. The Divide-and-Conquer Strategy 4. The Searching Strategy 5. Prune-and-Search 6. The Theory of NP-Completeness 	Syllabus	<p>This course is aimed at introducing the concepts of algorithms.</p> <ol style="list-style-type: none"> 1. The Complexity of Algorithms 2. The Greedy Method 3. The Divide-and-Conquer Strategy 4. The Searching Strategy 5. Prune-and-Search 6. The Theory of NP-Completeness

尊重智慧財產權，請勿非法影印。