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	2258	Course Number	2258
授課教師	曾怜玉	Instructor	TSENG,LIN YU
中文課名	演算法概論	Course Name	Introduction to Algorithm
開課單位	資訊管理系(四日)二A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	演算法概論主要探討排序、遞迴、動態規劃、貪婪演算法、... 等等問題，同時也延續資料結構的課程，探討運作於平衡樹及圖等進階資料結構的演算法，如尋訪、最短路徑等等。教學內容包括 1. 演算法概論 2. Divide-and-Conquer 3. 動態規劃 4. 貪婪演算法 5. 回溯 6. Branch-and-Bound 7. 複雜度計算 8. NP Theory。	Objectives	In this course, we study methods for sorting, recursion,dynamic programming, greedy algorithms, ...etc. In continuation of the data structures course, we also study algorithms for balanced trees and graphs. The contents of the course are as follows: 1.Introduction 2.Divide-and-Conquer 3.Dynamic Programming 4.Greedy Algorithm 5.Backtracking 6.Branch-and-Bound 7.Complexity Computation 8.NP Theory.
教材	Textbook : Introduction to Algorithms Second Edition By T.H. Cormen, C.E. Leiserson, R.L. Rivest and C. Stein 2001, The MIT Press	Teaching Materials	Textbook : Introduction to Algorithms Second Edition By T.H. Cormen, C.E. Leiserson, R.L. Rivest and C. Stein 2001, The MIT Press
成績評量方式	期中考 35% 期末考 35% 平時成績 30%	Grading	期中考 35% 期末考 35% 平時成績 30%
教師網頁	http://oblab.cs.nchu.edu.tw/OurBoss.htm		
教學內容	Chapter 1. Introduction Chapter 2. The Time Complexities of Algorithms and the Lower Bounds of Problems Chapter 3. Prune-and-Search Chapter 4. Dynamic Programming Chapter 5. Greedy Algorithms Chapter 6. Tree Searching Chapter 7. Divide-and-Conquer Chapter 8. NP-Completeness Chapter 9. Selected Topics	Syllabus	Chapter 1. Introduction Chapter 2. The Time Complexities of Algorithms and the Lower Bounds of Problems Chapter 3. Prune-and-Search Chapter 4. Dynamic Programming Chapter 5. Greedy Algorithms Chapter 6. Tree Searching Chapter 7. Divide-and-Conquer Chapter 8. NP-Completeness Chapter 9. Selected Topics

尊重智慧財產權，請勿非法影印。