

朝陽科技大學 092學年度第1學期教學大綱  
Queueing Theory 排隊理論

當期課號	7293	Course Number	7293
授課教師	黃國安	Instructor	HWANG,KUO AN
中文課名	排隊理論	Course Name	Queueing Theory
開課單位	資訊工程系碩士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	<p>這門課的目標是提供學生網路排隊理論的知識，主題包括：機率簡介、排隊理論簡介、Markov process、各類Processes的定義與state 機率推導、Simulation modeling與Analysis。在完成這門課之後，學生將可以學習到下面幾點：1.瞭解排隊理論的功能；2.瞭解Discrete 與Continuous Markov chain；3.瞭解排隊理論的各Processes的state 機率與效能分析；4.建立Simulation modeling。</p>	Objectives	<p>The goal of this course is to provide students with a basic knowledge of the queueing theory. The main topics include Probability introduction, Queueing introduction, Markov processes, Various Markov process and the state probability determination, and Simulation modeling and analysis. Students will realize the following backgrounds of this course after completing the course: 1. The function of Queueing system; 2. Discrete and Continuous Markov chains; 3. The determination of state probability of each state of Markov processes; 4. Simulation modeling and analysis.</p>
教材	課堂講授	Teaching Materials	Lecture
成績評量方式	<p>期中考 20%            期末考 20%            上台講述 20%            系統實做 20%            期末報告 20%</p>	Grading	<p>Med-term Ex. 20%            Final Ex. 20%            Presentation 20%            Programming project 20%            Term Report 20%</p>
教師網頁	-		
教學內容	<ol style="list-style-type: none"> <li>1. 緒論</li> <li>2. 機率</li> <li>3. 隨機程序</li> <li>4. 馬可夫序隊</li> <li>5. 進階序隊</li> <li>6. 模擬</li> <li>7. 序隊網路</li> <li>8. 多群集序隊網路</li> <li>9. 近似方法</li> <li>10. 阻障問題</li> <li>11. 序隊設計</li> </ol>	Syllabus	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Probability Theory</li> <li>3. Stochastic Processes</li> <li>4. Markovian Queues</li> <li>5. Advanced Queues</li> <li>6. Simulation</li> <li>7. Queuing Networks</li> <li>8. Multi-class Queueing Networks</li> <li>9. Approximate Methods</li> <li>10. Blocking in Queues</li> <li>11. Queue Design</li> </ol>

尊重智慧財產權，請勿非法影印。