

重新查詢

友善列印

### 0982學期 課程基本資料

系所 / 年級	生資系碩士班 1年級	課號 / 班別	69M00006 / A
學分數	3學分	選 / 必修	選修
科目中文名稱	仿生計算	科目英文名稱	Biologically inspired computing
主要授課老師	蕭震緯	開課期間	一學年之下學期
人數上限	20 人	已選人數	8 人

### 起始週 / 結束週 / 上課地點 / 上課時間

第1週 / 第18週 / I528 / 星期4第07節  
第1週 / 第18週 / I528 / 星期4第08節  
第1週 / 第18週 / I528 / 星期4第09節

請各位同學遵守智慧財產權觀念；請勿非法影印。

### 教學綱要

- 一、教學目標(Objective) Students will be introduced to fundamental topics in bio-inspired computing, and build up their proficiency in the application of various algorithms in real-world problems.
- 二、先修科目(Pre Course) Calculus, Statistics, Probability, Linear Algebra
- 三、教材內容(Outline) Biological organisms cope with the demands of their environments using solutions quite unlike the traditional mathematical approaches to problem solving. Biological systems tend to be adaptive, reactive, and distributed. Bio-inspired computing is a field devoted to tackling complex problems using computational methods modeled after design principles encountered in nature. The goal is to produce informatics tools with enhanced robustness, scalability, flexibility and which can interface more effectively with humans.
- 四、教學方式(Teaching Method) Lecture, Discussion
- 五、參考書目(Reference) 群智能優化解法理論與應用 (簡體書)  
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2010/2/25	Introduction	蕭震緯
2010/3/4	Genetic Algorithms	蕭震緯
2010/3/11	Genetic Algorithms	蕭震緯
2010/3/18	Genetic Algorithms	蕭震緯
2010/3/25	Particle Swarm Optimization	蕭震緯
2010/4/1	Particle Swarm Optimization	蕭震緯
2010/4/8	Particle Swarm Optimization	蕭震緯

六、教學進度(Syllabi)	2010/4/15	Ant Colony Optimization	蕭震緯
	2010/4/22	Ant Colony Optimization	蕭震緯
	2010/4/29	Ant Colony Optimization	蕭震緯
	2010/5/6	Artificial Immune Systems	蕭震緯
	2010/5/13	Artificial Immune Systems	蕭震緯
	2010/5/20	Artificial Immune Systems	蕭震緯
	2010/5/27	student presentation	蕭震緯
	2010/6/3	student presentation	蕭震緯
	2010/6/10	student presentation	蕭震緯
	2010/6/17	student presentation	蕭震緯
	2010/6/24	student presentation	蕭震緯

七、評量方式(Evaluation)      Course Participation Midterm Exam Paper Presentation

八、講義位址(http://)

九、教育目標

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