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②国玄東華大學

課 網 Course Outline

應用數學系統計碩士班

中文課程名稱 Course Name in Chinese		應用隨機過程					
英文課程名稱 Course Name in English		Applied Stochastic Processes					
科目代碼 Course Code		AM50800	班 別 Degree	碩士班 Master's			
修別 Type		選修 Elective	學分數 Credit(s)	3. 0	時 數 Hour(s)	3. 0	
先修課程 Prerequisite		應用機率模式 Applied probability models					
課程目標 Course Objectives							
此為應用機率模型的後續課程 介紹較為深入的隨機過程模式 A continuation of applied probability models. Selected topics on stochastic processes.							
系教育目標 Dept.'s Education Objectives							
1	訓練嚴謹思考與推理能力。 To provide a solid training in rigorous thinking and reasoning ability.						
2	奠定理論與應用數學的基礎知識。 To establish well-founded background knowledge in pure and applied mathematics.						
3	具備跨領域學習能力。 To prepare the students for interdisciplinary study in the future.						
系專業能力 Basic Learning Outcomes					力相關性 Correlat between Objectiv Dept.'s	課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives	
A	具備專業機率、統計知識與應用分析能力。 Have well-founded expertise in probability and statistics, and good analytical ability in solving real problems.						
В	具備程式設計與統計計算能力。 Have the computer programming and statistical computing skills.					0	
С	具備學習其它學科的能力,以期能邁向跨領域研究。 Be able to study other fields of science so as to conduct interdisciplinary research in the future.						
圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated							
課程大綱 Course Outline							

本課程依師生興趣針對特殊類型之隨機過程做較深入討論 如

- 1. Poisson隨機過程 (Stochastic processes)
- 2. 更新過程 (Renewal processes)
- 3. 排隊過程
- 4. 平穩過程

Selected topics on stochastic processes. Some examples are,

- 1. Poisson process
- 2. Renewal process
- 3. Queuing process
- 4. Stationary process

資源需求評估(師資專長之聘任、儀器設備的配合・・・等)

Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

本系 (所) 專任或兼任教師。

Taught by department's faculty member

課程要求和教學方式之建議

Course Requirements and Suggested Teaching Methods

講課、習題、考試

Lectures, problem sets and examinations.

其他

Miscellaneous

撰寫人:應用數學系 謝思民

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