課程大綱及進度表

開課系所: 數學系
開課學年: 98學年度
開課學期: 2

課程名稱(中文): 動態系統
課程名稱（英文): Dynamical Systems
課程碼: C134300

先修科目或先備能力: 微積分，微分方程導論
學分數: 3

開課教師: 方永富 (Yung-fu Fang)
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電話: 275-7575 轉 65131
Office: Math Building 210
Office Hours: Tue Wed Fri: 12:10~13:00  Plus Appointments
Lecture Hours: Tue: 15:10~17:00，Fri: 15:10~16:00
Classroom: Math Building 3173

課程概述: We want to study Systems of first order equations which is the beginning of the dynamical systems. Also We investigate numerical methods, stability, Fourier series, and Boundary value problems.

教學目標: We expect to learn the basic knowledge of the Differential equations and dynamical systems.

授課課程大綱明細:
Ch7: Systems of Linear Equations
Ch8: Numerical Methods
Ch9: Nonlinear Differential Equations
Ch10: Partial Differential Equations and Fourier Series
Ch11: Boundary Value Problem and Sturm-Liouville Theory

教科書: Elementary Differential Equations and Boundary Value Problem, by: Boyce & Diprima (9th edition)

課程要求: Introduction of Differential Equations; Calculus

評量方式: Homework: 37%  Midterm: 20%  Final: 40%  TA: 3%

課程網址: http://math.ncku.edu.tw/~fang
助教資訊:
備註: