

Course Description

Department of Mathematics

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|--|--|--|----|---|--|
| Nature of the course <input type="checkbox"/> required <input checked="" type="checkbox"/> elective | | Area 麻煩老師勾選類別，或直接填寫_____。 <input type="checkbox"/> 代數與數論 <input checked="" type="checkbox"/> 分析 <input type="checkbox"/> 幾何與拓撲 <input type="checkbox"/> 計算與應用數學 <input type="checkbox"/> 機率 <input type="checkbox"/> 統計 <input type="checkbox"/> 離散數學 <input type="checkbox"/> 其他 <input type="checkbox"/> 論文研討、獨立研究 | | | |
| Calculus <input type="checkbox"/> Calculus A <input type="checkbox"/> Calculus B | | | | | |
| Course number | | Section number | 免填 | Number of credits | |
| Course title | 課程名稱：準線性橢圓偏微方 Quasi-linear elliptic differential equations | | | | |
| Instructor | 教授：王藹農 | | | | |
| 開設學期： <input checked="" type="checkbox"/> 上學期 <input type="checkbox"/> 下學期 <input type="checkbox"/> 全學年 | | 上課時間： 星期 一 節次 234 | | 開課對象： <input type="checkbox"/> 大學生 <input type="checkbox"/> 研究生 <input checked="" type="checkbox"/> 皆可 | |

I. * Contents :

- 1. Generalized Solutions and Regularity.
- 2. Strong Solutions.
- 3. Maximum and Comparison Principles
- 4. Topological Fixed Point Theorems and Their Application.
- 5. Equations in Two Variables.
- 6. Holder Estimates for the Gradient.
- 7. Boundary Gradient Estimates.
- 8. Global and Interior Gradient Bounds.

II. Course prerequisite :

III. * Reference material (textbook(s)) :

IV. * Grading scheme : 請填寫各項計分之百分比，例如：期中 30% 期末 40% 作業 10% 報告 20%，總計 100%

V. * Course Goal :

- 1. *號為必填欄位
- 2. 大綱內容字數英文最少 200 字以上

新增课程

非线性椭圆偏微方

星期 - 2, 3, 4, ⑤,

王浩农

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