

Course Description

Department of Mathematics

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 type="checkbox"/> 分析 <input checked="" type="checkbox"/> 幾何與拓樸 <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	3
Course title	課程名稱：代數幾何專題, Topics in Algebraic Geometry				
Instructor	教授：陳榮凱				

I. * **Contents** :

1. Classical minimal model problem
2. Singularities in minimal model problem
3. Resolution of singularities

II. **Course prerequisite** :

Algebraic curves, algebraic surfaces, algebraic geometry.

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

Kollár & Mori: Birational Geometry of Algebraic Varieties

Kollár: Lectures on Resolution of Singularities

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%

Participation 10%

Term Paper 50%

Presentation 40%

V. * **Course Goal** :

We plan to introduce some advanced topics in algebraic geometry, which will lead student to current research interests. The topics includes minimal model program and its related topics and resolution of singularities.

1. *號為必填欄位

2. 大綱內容字數英文最少 200 字以上