

Nature of the course 必開選修		Area : 代數與數論			
Course number		Section number	免填	Number of credits	
Course title	課程名稱：Commutative algebra				
Instructor	教授：康明昌				
開設學期： 上學期	上課時間： 星期 5 節次 234		開課對象：		
<p>I. *Contents :</p> <p>Basic notions of commutative algebra, algebraic geometry and algebraic number theory.</p> <p>II. Course prerequisite :</p> <p>大學部線性代數與代數導論</p> <p>III. *Reference material (textbook(s)) :</p> <p>1. Atiyah and MacDonald, Introduction to commutative algebra</p> <p>2. Shafarevich, Basic algebraic geometry</p> <p>3. Neukirch, Algebraic number theory</p> <p>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%</p> <p>Homeworks: 40%</p> <p>Final examination: 50%</p> <p>Attendance: 10%</p> <p>V. *Course Goal :</p> <p>To understand the basic notions and techniques, such as, localization, completions, normalization, dimension theory, algebraic curves, elliptic curves, coverings of algebraic varieties, ramification theory in number theory, etc.</p>					