

課程大綱及進度表

開課系所	應數所
開課學年	101
開課學期	1
課程名稱(中文)	分析通論一
課程名稱(英文)	GENERAL ANALYSIS (1)
課程碼	L150310
分班碼	
先修科目或先備能力	Advanced Calculus
學分數	3
開課教師	林育竹
e-mail	z10108033@email.ncku.edu.tw
電話	65152
Office Hours	By Appointment
課程概述	We will cover the following subjects: outer measure, measure, measurable functions, integrals, Fatou's lemma, Fubini's theorem, Lebesgue's differentiation theorem, L^p spaces.
教學目標	The purpose of this course is to introduce the Lebesgue measure on \mathbb{R}^n and the Lebesgue integral.
授課課程大綱明細	Chapter 3~8 in the textbook: 1. Lebesgue Measure and Outer Measure (Ch3) 2. Lebesgue Measurable Functions (Ch4) 3. The Lebesgue Integral (Ch5) 4. Repeated Integration (Ch6) 5. Differentiation (Ch7) 6. L^p Classes (Ch8)

<p>參考書目</p>	<p>Textbook: R. L. Wheeden and A. Zygmund: <i>Measure and Integral - An introduction to Real Analysis</i>, Marcel Dekker, 1977.</p> <p>References: 1. W. Rudin: "Real and Complex Analysis." 2. Jones: "Lebesgue integration on Euclidean space."</p>
<p>課程要求</p>	<p>課程包涵課堂講授部分及習題部分。 作業請準時繳交。</p>
<p>評量方式</p>	<p>期中考：40% 期末考：40% 作業：20%</p>
<p>課程網址</p>	
<p>助教資訊</p>	
<p>備註</p>	