

壹、科目名稱：微分方程 (上)

貳、授課老師：謝忠村

參、開課系所班級：數學系二年級

肆、必選修：選修

伍、學分數：2/2

陸、先修科目：

柒、教學內容及進度：

1. First Oder Differential Equations
 - a. Method of Integrating factors
 - b. Separable Equations
 - c. Autonomous Equations
 - d. Exact Equations and Integrating Factors
 - e. Euler and Runge-Kutta Methods
2. Systems of Two First Order Equations
 - a. System of two linear algebraic Equations
 - b. Systems of Two First Order Equations
 - c. Homogeneous Linear systems with constant Coefficients
 - d. Nonlinear Systems
3. Second Order Linear Equations.
 - a. Homogeneous Linear Equation with constant Coefficients
 - b. Nonhomogeneous Linear equations

捌、授課方式：黑板講述配合投影片

玖、教學設備：黑板和多媒體設備

拾、教材課本：Brannan & Boyce, Differential Equations, John Wiley & Sons, 2007

拾壹、參考書籍：

拾貳、成績考核方式：

	平時成績：	30	%
	期中考成績：	30	%
	期末考成績：	30	%
	讀書報告：	%	
	其他 (實習課助教成績)	10	%

拾參、備考：