朝陽科技大學 099學年度第2學期教學大綱
Electronic Circuits(II) 電子電路(二)

當期課號	3699	Course Number	3699
授課教師		Instructor	
中文課名	電子電路(二)	Course Name	Electronic Circuits(II)
開課單位	資訊與通訊系(四進)二A	Department	
修習別	必修	Required/Elective	Required
學分數	2	Credits	2
課程目標	"本課程是教導學生進階的電子電路原理。要達成這目標，學生將學習：1. 場效電晶體結構與設計。 2. 場效電晶體交流分析。 3. 差動放大器原理。 4. 運算放大器介紹與應用。 5. 正回授與負回授。 6. 頻率響應"	Objectives	"The goal of this course is to provide students with an advanced knowledge of the electronic circuits. To achieve the goal, students will learn 1. Introduction to FET structure and basic operation. 2. FET characteristics and parameters 3. Differential amplifier. 4. OP amplifier (OPA) applications. 5. Positive feedback / negative feedback. 6. Frequency response."
教材	基礎電子學 , 高銘盛 , 2003, 滄海書局	Teaching Materials	Text book: 基礎電子學 , 高銘盛 , 2003, 滄海書局
成績評量方式	期中考30% 期末考30% 小考及出席成績 40%	Grading	Midterm 30% Final 30% Quiz/Attandance 40%
教師網頁			
教學內容	介紹由場效電晶體所構成及由雙極性接面電晶體所構成的數位邏輯閘，並比較這此邏輯閘的電氣特性如雜訊邊距、傳輸延遲、功率損耗。介紹運算放大器電路如比例器、微分器、積分器、加法器、減法器。本課程以講述、示範、編序教學方式，使學生能分析、設計及應用半導體元件電路。	Syllabus	Introduce the digital logic gates that composed by the FET, and the BJT, and compared the electrical characteristics of this logic gate, such as noise margins, propagation delay, power-loss. Introduce the principle of OP-amp and its applications such as, differentiator, integrator, adder, and subtractor. In this class, teacher will explain, demonstrate in order to train the students analyzing, designing and application of semiconductor device circuit.