朝陽科技大學 098學年度第2學期教學大綱
Digital Logic Design 數位邏輯設計

當期課號	3883	Course Number	3883
授課教師	梁新穎	Instructor	LIANG,HSIN YING
中文課名	數位邏輯設計	Course Name	Digital Logic Design
開課單位	資訊與通訊系(四進)一A	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	"本課程的目標有 1.使學生了解進制演算、邏輯閘、加法器與減法器、編碼與多工、正反器、序向邏輯及其應用(知識) 2.使學生了解並熟悉布林代數之運算，以達成邏輯運算之簡化，並降低邏輯閘的數目(能力) 3.使學生知道邏輯運算及其網路應用之重要性(態度) 4.使學生了解暫存器、計數器、記憶體及可程式邏輯與其在微處理器之應用及網路應用 (其他)"	Objectives	"The goals of this course are described as follows. 1. Enable students to understand the binary operations, logic gates, the Adder and Subtractor, coding and multiplexer, Flip-Flops and the applications, the sequential logic and the microprocessors applications. 2. Enable students to learn and to become familiar with the operation of Boolean algebra, with logical operations of simplification, and reduce the number of logic gates. 3. Make the students know that the logic design and its applications are important for the computer engineering and network applications. 4. Make the students understand registers, counters, the memory, the programable logic and its application in the microprocessors. "
教材	Donald D. Givone, Digital Principles and Design, McGraw-Hill, ISBN：0071195211.	Teaching Materials	Donald D. Givone, Digital Principles and Design, McGraw-Hill, ISBN：0071195211.
成績評量方式	1.期中考(30%) 2.期末考(30%) 3.小考(20%) 4.作業(10%) 5.出席率(10%)	Grading	1. Midterm Exam (30%) 2. Final Exam (30%) 3. Quiz (20%) 4. Homework (10%) 5. Attendance (10%)
教師網頁	http://www.cyut.edu.tw/~hyliang/		
教學內容	本課程將講述如下單元： 1. 二進制系統與各種數碼 2. 基本邏輯閘與布林代數 3. 組合邏輯 4. 序向電路	Syllabus	This course teaches techniques for the design and analysis of digital logic circuit. Topics covered include: Number Systems, Arithmetic, and Codes; Boolean Algebra and Combinational Networks;Combinational Logic;Synchronous Sequential Logic.