朝陽科技大學 097學年度第1學期教學大綱
Introduction to Digital Communications 數位通訊原理

當期課號	3790	Course Number	3790
授課教師	廖梨君	Instructor	LIAO,LI CHUN
中文課名	數位通訊原理	Course Name	Introduction to Digital Communications
開課單位	資訊工程系(四進)四A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	本課程主要講述數位通訊的基本原理。課程內容包括-數位通訊專有名詞及數位通訊的基本原理。學生在完成本課程後，將可了解以下之數位通訊基本原理：1. 帶通數位傳輸、2. 展頻調變、3. 多使用者輻射通訊、4. 消息理論、5. 改錯碼。	Objectives	The goal of this course is to provide the students with a basic knowledge of digital communications. The main topics include terminology of digital communications and the concept of digital communication basics. The students will realize the following digital communication basics after finishing this course: 1. the functions and operation of passband digital transmission, 2. the spread-spectrum modulation, 3. the multiuser radio communications, 4. the fundamental limits in information theory, and 5. error-control coding.
教材	“Introduction to Analog & Digital Communications”, SIMON HAYKIN and MICHAEL MOHER, 2nd edition, John Wiley & Sons, Inc., ISBN-13 978-0-471-43222-7	Teaching Materials	“Introduction to Analog & Digital Communications”, SIMON HAYKIN and MICHAEL MOHER, 2nd edition, John Wiley & Sons, Inc., ISBN-13 978-0-471-43222-7
成績評量方式	1. 平時測驗: 20% 2. 期中考: 30% 3. 期末考: 30% 4. 期末報告: 10% 5. 出席: 10%	Grading	1. Quiz: 20% 2. Midterm Exam: 30% 3. Final Exam: 30% 4. Final Project: 10% 5. Attendance: 10%
教師網頁	163.17.10.214		
教學內容	1. 脈波調變 2. 基頻資料傳輸 3. 數位調變技術 4. 數位通訊之雜訊	Syllabus	1. Pulse modulation 2. Baseband data transmission 3. Digital modulation techniques 4. Noise in digital communications