

計算機程式設計(Computer Programming)

課程教學大綱

授課教師		課程名稱		部別		學制		是否全英文上課	
溫演福		計算機程式設計(Computer Programming)		日間部		大學部		否	
年級	一	班級		學分	3	時數	3 小時	必選修	選修
課程目標	<p>This is a course focus on how to program in C# that will introduce several programming concepts. These concepts include:</p> <ul style="list-style-type: none"> · Basic data types · Operator and expression · Program flow control · Modulation with functions. · Arrays and structure · Pointer · Standard I/O library and file processing <p>Even though this course is an introductory course of computer programming that a good number of homework will be assigned to help students learn how to write programs. Some tool and tips will also teach in this course.</p>								
教學內容及進度	週次	上課章節或內容						Assignment	
	1	Course Introduction Introduction to Computers, the Internet and the Web							
	2	Introduction to C# Programming							
	3	Structured Program Development in C#							
	4	Program Control (part I) Introduction, Repetition Essentials, Counter-Controlled Repetition, for Repetition Statement, for Statement: Notes and Observations, Examples Using the "For" Statement.						Account checksum	
	5	Program Control (part II) switch Multiple-Selection Statement, do...while Repetition Statement, break and continue Statements, Logical Operators, Confusing Equality (==) and Assignment (=) Operators							

	6	C# Functions (Part I) Introduction, Program Modules in C#, Math Library Functions, Functions, Function Definitions, Function Prototypes, Function Call Stack and Activation Records, Headers, Calling Functions: Call-by-Value and Call-by-Reference	Guess number
	7	C# Functions (Part II) Random Number Generation, Example: A Game of Chance, Storage Classes, Scope Rules, Recursion, Example Using Recursion: Fibonacci Series, Recursion vs. Iteration	
	8	C Arrays	Errand assignment
	9	Midterm Exam	
	10	Pointers (Part I) Pointer Variable Definitions and Initialization, Pointer Operators, Passing Arguments to Functions by Reference, Using the const Qualifier with Pointers, Sizeof Operator	String operation
	11	Pointers (Part II) Pointer Expressions and Pointer Arithmetic, Relationship between Pointers and Arrays, Arrays of Pointers, Case Study: Card Shuffling and Dealing Simulation, Pointers to Functions	
	12	Characters and Strings (Part I)	
	13	Characters and Strings (Part II)	TBD
	14	C# Formatted Input/output (Part I) Streams, Formatting Output with printf, Printing Integers, Printing Floating-Point Numbers, Printing Strings and Characters	
	15	C# Formatted Input/output (Part II) Other Conversion Specifiers, Printing with Field Widths and Precision, Using Flags in the printf Format Control String, Printing Literals and Escape Sequences, Reading Formatted Input with scanf	TBD
	16	File Processing (Part I)	
	17	File Processing (Part II)	
	18	Final Exam (Program contest)	Programming contest
教學活動	<input checked="" type="checkbox"/> 口頭講授 <input type="checkbox"/> 放錄影帶 <input type="checkbox"/> 田野調查 <input checked="" type="checkbox"/> 其他 (上課講義之補充) <input type="checkbox"/> 放幻燈機 <input checked="" type="checkbox"/> 分組討論 <input checked="" type="checkbox"/> 上機實習 (含各項教學活動之說明) <input type="checkbox"/> 放投影機 <input type="checkbox"/> 實地參觀 <input checked="" type="checkbox"/> 實務演練		

教材	“Visual C# 2008 how to program (3rd)”, by Harvey & Paul) Deitel & Associates, Prentice Hall
參考書籍	“Visual C# 2008 How to Program Solution Manual CSDN”, by Deitel&Deitel, Prentice Hall
補救教學	本課程容入線上教學，學生除了可以透過討論區、E-Mail 之外，也可以透過 Skype 直接討論。
作業繳交	
評量方式	<input checked="" type="checkbox"/> 出缺席 (%) <input checked="" type="checkbox"/> 平時作業 (60%) <input type="checkbox"/> 平時考 (%) <input checked="" type="checkbox"/> 期中考 (20%) <input type="checkbox"/> 期中報告 (%) <input type="checkbox"/> 其他 (%) <input type="checkbox"/> 期末考 (%) <input checked="" type="checkbox"/> 期末報告 (20%) (請填寫百分比)
教材數位化格式與比例	<input checked="" type="checkbox"/> 有 <input checked="" type="checkbox"/> ppt (簡報檔) (65%) <input checked="" type="checkbox"/> AVI (影音檔) (10%) <input checked="" type="checkbox"/> htm (網頁檔) (20%) <input checked="" type="checkbox"/> 前三項合計 (100%) <input type="checkbox"/> 其他 (%) (請填寫百分比)
	<input type="checkbox"/> 無

制定日期： 99 年 1 月 12 日