

逢甲大學 資訊工程學系

教學計畫表

科目名稱：計算機概論暨實習(二)
開課班級：資訊一甲

授課老師：黃秋煌 教授 (chh@fcu.edu.tw)
授課時數：3小時 + 3小時實習

I. Course Description and Objectives

Basic Computer Concepts:

The goal of this course is to teach C and C++ programming language and program design. The course subjects include issues of pointers, file processing, objected-oriented programming, encapsulation, modularization, reusability, inheritance, template, and exception handling. Students are required to do programming practice in class and take-home program assignments.

Objectives:

1. To learn pointers in C and programming in C++.
2. To learn file operations.
3. To learn the concepts of object-oriented programming.
4. To learn problem solving and program design with the object-oriented programming model.

II. Course Web Site: <http://rfidlab.iecs.fcu.edu.tw/CC/>

III. Textbooks:

1. C.-H. Huang, [*Basic Computing Concepts and Programming in C*](#), Web Book.
2. W. B. Kernighan and D. M. Ritchie, [*The C Programming Language*](#), the second edition Prentice Hall, 1988.
3. P. Deitel and H. Deitel, [*C++ How to Program*](#), 7th edition, Prentice Hall, 2010.

IV. Grade Evaluation:

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| 1. 平時考試成績 (含小考及上機小考) | 40% |
| 2. 期中考試成績 (含上機考試) | 30% |
| 3. 期末考試成績 (含上機考試) | 30% |

V. Course Outlines

The following schedule will be adjusted according to the actual progress in the class.

Week	Course	Course Subjects
1	計算機概論	Pointers
2	計算機概論實習	Dynamic memory allocation
	計算機概論	Pointers
3	計算機概論實習	Stacks and queues using dynamic array
	計算機概論	Pointers
4	計算機概論實習	Stacks and queues using linked list
	計算機概論	Input/Output with Files
5	計算機概論實習	File operations
	計算機概論	Input/Output with Files
6	計算機概論實習	Image file processing
	計算機概論	Input/Output with Files
7	計算機概論實習	期中上機考試
	計算機概論	期中考試
8	計算機概論實習	清明節放假
	計算機概論	期中考試週
9	計算機概論實習	期中考試週
	計算機概論	Abstract Data Type, Object-Oriented Programming
10	計算機概論實習	Classes 1
	計算機概論	Object-Oriented Programming
11	計算機概論實習	Classes 2
	計算機概論	Operator Overloading
12	計算機概論實習	Operator Overloading
	計算機概論	Inheritance
13	計算機概論實習	Inheritance
	計算機概論	Virtual Function and Polymorphism
14	計算機概論實習	Virtual Function and Polymorphism
	計算機概論	Virtual Function and Polymorphism
15	計算機概論實習	Virtual Function and Polymorphism
	計算機概論	Function and Class Templates
16	計算機概論實習	Function and Class Templates
	計算機概論	Function and Class Templates, 期末考試
17	計算機概論實習	期末上機考試
	計算機概論	Function and Class Templates, 端午節放假
18	計算機概論實習	期末考試週
	計算機概論	