Handson Introduction to C++

This course aims to provide an intensive hands-on introduction to the C++ programming language. Topics include the basic C++ language syntax, variable declaration, basic operators, program flow and control, defining and using functions, file and operating system interface. Specific key features of the C++ programming language such as object-oriented methodology, class templates, encapsulation, inheritance, polymorphism, etc. will be highlighted.

Grade Descriptor:

A
EXCELLENT - exceptionally good performance and far exceeding expectation in all or most of the course learning outcomes; demonstration of superior understanding of the subject matter, the ability to analyze problems and apply extensive knowledge, and skillful use of concepts and materials to derive proper solutions.

B
GOOD - good performance in all course learning outcomes and exceeding expectation in some of them; demonstration of good understanding of the subject matter and the ability to use proper concepts and materials to solve most of the problems encountered.
MARGINAL – performance barely meets the expectation in the essential course learning outcomes; demonstration of partial understanding of the subject matter and the ability to solve simple problems.

有关等級說明的資料，請參閱英文版本。

F

FAILURE – performance does not meet the expectation in the essential course learning outcomes; demonstration of serious deficiencies and the need to retake the course.

有關等級說明的資料，請參閱英文版本。

Equivalent Offering:
Units: 1 (Min) / 1 (Max) / 1 (Acad Progress)
Grading Basis: Graded
Repeat for Credit: N
Multiple Enroll: N
Course Attributes:

Topics:

COURSE OUTCOMES

Learning Outcomes:
1. Be able to write, compile and execute Standard C++ programs
2. Be able to make use of C++’s object-oriented methodology
3. Be able to develop object-oriented program using classes, inheritance, encapsulation, and polymorphism

Course Syllabus:
This course aims to provide an intensive hands-on introduction to the C++ programming language. Topics include the basic C++ language syntax, variable declaration, basic operators, program flow and control, defining and using functions, file and operating system interface. Specific key features of the C++ programming language such as object-oriented methodology, class templates, encapsulation, inheritance, polymorphism, etc. will be highlighted.

Assessment Type:
Others : 50%
Short answer test or exam : 50%
Feedback for Evaluation:

1. Course evaluation and questionnaire
2. Results of assignments and examination
3. Question-and-Answer sessions during class
4. Student consultation during office hours or online

Required Readings:

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Recommended Readings:

2. The C++ Programming Language (3rd Edition), Bjarne Stroustrup, Addison-Wesley
3. C++ Primer Plus (5th Edition), Stephen Prata, Sams

OFFERINGS

1. CSCI1020  
   Acad Organization=CSD; Acad Career=UG

COMPONENTS

LAB : Size=30; Final Exam=N; Contact=2
LEC : Size=30; Final Exam=Y; Contact=1

ENROLMENT REQUIREMENTS

1. CSCI1020  
   Enrollment Requirement Group:
   Not for students who have taken CSCI1120 or 1520 or 1540 or ESTR1100.

   New Enrollment Requirement(s):
   Exclusion = no change

CAF

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