Course: CSCI1540  Course ID: 010473  Eff Date: 2022-07-01  Crse Status: Active  Apprv. Status: Approved

Fundamental Computing with C++ 基本計算學（C++語言）

This course introduces fundamental computing principles, problem-solving methods and algorithm development, simple data structures, illustrative applications. The C++ programming language will be used.

本科介紹基本計算學原理、問題求解方法及算法開發、簡單數據結構、應用示例。本科使用高級程序設計語言“C++”講授。

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.

有關等級說明的資料，請參閱英文版本。

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.

有關等級說明的資料，請參閱英文版本。

C
FAIR – adequate performance and meeting expectation in all course learning outcomes; demonstration of adequate understanding of the subject matter and the ability to solve simple problems.

有關等級說明的資料，請參閱英文版本。

D
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.
有关等级说明的资料，请参阅英文版本。

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。

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Equivalent Offering:  
Units: 3 (Min) / 3 (Max) / 3 (Acad Progress)  
Grading Basis: Graded  
Repeat for Credit: N  
Multiple Enroll: N  
Course Attributes:

Topics:

COURSE OUTCOMES

Learning Outcomes:  
At the end of the course of studies, students will have acquired the ability to  
1. write, understand, compile and debug C++ programs;  
2. write programs using the basic programming elements such as variables, data types, selection and looping control structures, functions, and arrays;  
3. understand the basic concepts of call-by-value, call-by-reference and function overloading;  
4. perform dynamic memory allocation and manage pointers;  
5. write applications using elementary data structures such as 2-D array and strings, etc.;

Course Syllabus:  
This course introduces fundamental computing principles, problem-solving methods and algorithm development, simple data structures, illustrative applications. The C++ programming language will be used.

Assessment Type:  
Essay test or exam : 60%  
Others : 40%
Feedback for Evaluation:

1. Midterm and final course evaluation
2. Exam
3. In class informal survey

Required Readings:

nil

Recommended Readings:


OFFERINGS

1. CSCI1540  
   Acad Organization=CSD; Acad Career=UG

COMPONENTS

LEC : Size=30; Final Exam=Y; Contact=3
TUT : Size=30; Final Exam=N; Contact=1

ENROLMENT REQUIREMENTS

1. CSCI1540
   Enrollment Requirement Group:
   Not for students who have taken AIST1110 or CSCI1020 or CSCI1110 or CSCI1120 or CSCI1130 or CSCI1510 or CSCI1520 or CSCI1530 or ESTR1100 or ESTR1102

New Enrollment Requirement(s):
   Exclusion = no change

CAF

  eLearning hrs for blended cls  0
  No. of micro-modules  0
  Research components (UG)  0%

<END OF REPORT>