

Academic Org: Dept of Computer Sci & Engg – Subject: Computer Science

**Course:** CSCI1040      **Course ID:** 002556      **Eff Date:** 2024-07-01      **Crse Status:** Active      **Apprv. Status:** Approved      **[Course Rev]**  
Hands-on Introduction to Python Python 程序語言實用介紹

This course aims to provide an intensive hands-on introduction to the Python scripting language. Topics include the basic Python language syntax, variable declaration, basic operators, programme flow and control, defining and using functions, file and operating system interface. Specific key features of the Python scripting language such as object-oriented support, high level dynamic data types, embedding within applications etc. will be highlighted.

本科旨在密集介紹高階程序設計語言 Python。內容包括基本高階程序設計語言Python 的語法、變數申明、基本運算符、程序編寫流程及控制、函數定義及應用、文件及操作系統接口。本科亦會介紹高階程序設計語言 Python 的特性，例如面向對象支援方法、高階動態資料型式，嵌入於應用程式等。

**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.

有關等級說明的資料，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 Python programs;
2. Be able to make use of Python's object-oriented methodology;
3. Be able to design and create applications using Python modules;
4. Be able to develop embedded applications using Python.

**Course Syllabus:**

This course aims to provide an intensive hands-on introduction to the Python scripting language. Topics include the basic Python language syntax, variable declaration, basic operators, programme flow and control, defining and using functions, file and operating system interface. Specific key features of the Python scripting language such as object-oriented support, high level

dynamic data types, embedding within applications 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:**  
1. Official Python web site <http://www.python.org>;  
2. Beginners' guide to Python <http://wiki.python.org/moin/BeginnersGuide>.

**Recommended Readings:**

**OFFERINGS**

1. CSCI1040 Acad Organization=CSD; Acad Career=UG

**COMPONENTS**

LAB : Size=30; Final Exam=N; Contact=0  
LEC : Size=30; Final Exam=Y; Contact=0

**ENROLMENT REQUIREMENTS**

1. CSCI1040 **Enrollment Requirement Group:**  
Not for students who have taken AIST1110 or CSCI1550

**New Enrollment Requirement(s):**  
Exclusion = Change from "AIST1110" to "AIST1110 or CSCI1550"

**Additional Information**

eLearning hrs for blended cls 0  
VTL-Onsite face-to-face hrs 0

VTL-Online synch. hrs 0  
VTL-Online asynch. hrs 0  
No. of micro-modules 0  
Research components (UG) 0%

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