Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	COMPUTER PROGRAMMING	Instructor	HO THI TRANG
Course Class	TEIDB1B DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 1B	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG4 Quality education SDG5 Gender equality SDG9 Industry, Innovation, and Infrastructure		

Departmental Aim of Education

Ⅰ. Comprehend professional knowledge.

Ⅱ. Acquire mastery of Practical Skills.

Ⅲ. Establish creative achievement.

Subject Departmental core competences

A. Programming and application ability.(ratio:40.00)

B. Mathematical reasoning ability.(ratio:15.00)

C. Implementing computer systems ability.(ratio:15.00)

D. Computer networking application skills.(ratio:15.00)

E. Professional skills for information technology (IT) industry.(ratio:15.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:5.00)

2. Information literacy. (ratio:30.00)

3. A vision for the future. (ratio:10.00)

4. Moral integrity. (ratio:10.00)

5. Independent thinking. (ratio:30.00)

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:5.00)

8. A sense of aesthetic appreciation. (ratio:5.00)

Course Introduction	Introduce the concepts of programs and flows, learn how to represent a solution in a procedural style, and finally implement in C language.

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Concepts of programming and execution flows	Cognitive
2	Analyze the execution of a program and illustrate it by a flow chart	Psychomotor
3	Implement a program flow by C language	Psychomotor

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	AB	125	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online)
2	BCDE	234567	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
3	ACE	2568	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

Course Schedule

Week	Date	Course Contents	Note

1	112/09/11 ~ 112/09/17	Introduction to Computers and Programming	
2	112/09/18 ~ 112/09/24	Algorithm Design	
3	112/09/25 ~ 112/10/01	Overview of C; Settings up a Development Environment	
4	112/10/02 ~ 112/10/08	C Fundamentals	
5	112/10/09 ~ 112/10/15	Formatted Input/Output	
6	112/10/16 ~ 112/10/22	Expressions	
7	112/10/23 ~ 112/10/29	Selection Statements	
8	112/10/30 ~ 112/11/05	Loops	
9	112/11/06 ~ 112/11/12	Midterm Exam Week	
10	112/11/13 ~ 112/11/19	Basic Types	
11	112/11/20 ~ 112/11/26	Arrays	
12	112/11/27 ~ 112/12/03	Functions	
13	112/12/04 ~ 112/12/10	Pointers	
14	112/12/11 ~ 112/12/17	More on Pointers and Arrays	
15	112/12/18 ~ 112/12/24	Strings	
16	112/12/25 ~ 112/12/31	Files	
17	113/01/01 ~ 113/01/07	Final Exam Week	
18	113/01/08 ~ 113/01/14	Flex week, learning activities should be arranged.	

Key capabilities	
Interdisciplinary	
Distinctive teaching	

Course Content	Computer programming or Computer language (students have hands-on experience in related projects) Gender Equality Education Sustainability issue
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Textbooks Name of teaching materials: K.N.King, C programming: A Modern Approach, 2nd Ed, W.W.Noron & Company, 2008.
References	
Grading Policy	◆ Attendance： 10.0 % ◆ Mark of Usual： % ◆ Midterm Exam： 30.0 % ◆ Final Exam： 40.0 % ◆ Other〈Assignment〉：20.0 %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php . **※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.**