

Tamkang University Academic Year 114, 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 ♦ 3 Credits
Relevance to SDGs	SDG5 Gender equality SDG9 Industry, Innovation, and Infrastructure		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
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.			
<p>The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.</p> <p>Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.</p> <p>I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.</p> <p>II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.</p> <p>III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.</p>				
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			Cognitive
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, Practicum	Testing, Discussion(including classroom and online), Practicum
3	ACE	2568	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online)
Course Schedule				
Week	Date	Course Contents		Note

1	114/09/15 ~ 114/09/21	Introduction to Computers and Programming	
2	114/09/22 ~ 114/09/28	Algorithm Design	
3	114/09/29 ~ 114/10/05	Overview of C; Settings up a Development Environment	
4	114/10/06 ~ 114/10/12	C Fundamentals	
5	114/10/13 ~ 114/10/19	Formatted Input/Output	
6	114/10/20 ~ 114/10/26	Expressions	
7	114/10/27 ~ 114/11/02	Selection Statements	
8	114/11/03 ~ 114/11/09	Loops	
9	114/11/10 ~ 114/11/16	Midterm Exam Week	
10	114/11/17 ~ 114/11/23	Basic Types	
11	114/11/24 ~ 114/11/30	Arrays	
12	114/12/01 ~ 114/12/07	Functions	
13	114/12/08 ~ 114/12/14	Pointers	
14	114/12/15 ~ 114/12/21	Strings	
15	114/12/22 ~ 114/12/28	Files	
16	114/12/29 ~ 115/01/04	Final Week of Diverse Assessments	
17	115/01/05 ~ 115/01/11	Final Week of Diverse Assessments/Flexible Teaching Week for Teachers	
18	115/01/12 ~ 115/01/18	Flexible Teaching Week for Teachers	
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	Using teaching materials from other writers:Textbooks Name of teaching materials: K.N.King, C programming: A Modern Approach, 2nd Ed, W.W.Noron & Company, 2008.
References	
Grading Policy	<p>◆ Attendance : 10.0 % ◆ Mark of Usual : % ◆ Midterm Exam : 30.0 %</p> <p>◆ Final Exam : 40.0 %</p> <p>◆ Other 〈Assignment〉 : 20.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.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.</p> <p>※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>