

## Tamkang University Academic Year 110, 1st Semester Course Syllabus

Course Title	COMPUTER PROGRAMMING	Instructor	FENG-CHENG CHANG
Course Class	TEIDB1A DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM)SCIENCE AND	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	INFORMATION ENGINEERING, 1A SDG4 Quality education		
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:80.00)  C. Implementing computer systems ability.(ratio:10.00)  E. Professional skills for information technology (IT) industry.(ratio:10.00)			
Subject Schoolwide essential virtues			
2.Information literacy. (ratio:70.00)  5.Independent thinking. (ratio:30.00)			
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 the 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	A	25	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
2	ACE	25	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
3	ACE	25	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

**Course Schedule**

Week	Date	Course Contents	Note
1	110/09/22 ~ 110/09/28	Introduction to Computer Programs	
2	110/09/29 ~ 110/10/05	Problem Solving by Procedural Approach (1)	
3	110/10/06 ~ 110/10/12	Problem Solving by Procedural Approach (2)	
4	110/10/13 ~ 110/10/19	Basic Programming Language Elements	
5	110/10/20 ~ 110/10/26	Introduction to C (1)	
6	110/10/27 ~ 110/11/02	Introduction to C (2)	

7	110/11/03 ~ 110/11/09	Lexical Structure of C (1)	
8	110/11/10 ~ 110/11/16	Lexical Structure of C (2)	
9	110/11/17 ~ 110/11/23	Midterm Exam Week	
10	110/11/24 ~ 110/11/30	Lexical Structure of C (3)	
11	110/12/01 ~ 110/12/07	Modules	
12	110/12/08 ~ 110/12/14	Realize Your Algorithm Using C (1)	
13	110/12/15 ~ 110/12/21	Realize Your Algorithm Using C (2)	
14	110/12/22 ~ 110/12/28	More on Pointers and Arrays	
15	110/12/29 ~ 111/01/04	More on formatted input/output	
16	111/01/05 ~ 111/01/11	Files (1)	
17	111/01/12 ~ 111/01/18	Files (2) and Final Evaluation	
18	111/01/19 ~ 111/01/25	Supplementary Topics	
Requirement	The assignments include homework and quizzes/exams. There is no make-up assignment if you miss it without a reason.		
Teaching Facility	Computer, Projector		
Textbooks and Teaching Materials	K. N. King, C Programming - A Modern Approach, 2nd Ed., W. W. Norton & Company, Inc., 2008.		
References	W. Savitch, Problem Solving with C++, 8th Ed., Pearson International Edition, Addison Wesley, 2012.		
Number of Assignment(s)	10 (Filled in by assignment instructor only)		
Grading Policy	◆ Attendance :                    %    ◆ Mark of Usual : 10.0 %    ◆ Midterm Exam : 20.0 % ◆ Final Exam :    20.0 % ◆ Other <assignment and quiz> : 50.0 %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> . <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>		