Tamkang University Academic Year 109, 1st Semester Course Syllabus

Course Title	PROGRAM DESIGN	Instructor	FENG-CHENG CHANG
Course Class	TQICB1A DIVISION OF SOFTWARE ENGINEERING, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ General Course ◆ Required ◆ One Semester

Departmental Aim of Education

Cultivate professional talents in developing and applying information system in various fields.

Subject Departmental core competences

A. Capability of computer program coding, process planning, and problem solving(ratio:100.00)

Subject Schoolwide essential virtues

2. Information literacy. (ratio:70.00)

5. Independent thinking. (ratio:10.00)

7. A spirit of teamwork and dedication. (ratio:10.00)

8. A sense of aesthetic appreciation. (ratio:10.00)

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	A	578	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
3	A	57	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

Course Schedule

Week	Date	Course Contents	Note
1	109/09/14 ~ 109/09/20	Introduction to Computer Programs	
2	109/09/21 ~ 109/09/27	Problem Solving by Procedural Approach (1)	
3	109/09/28 ~ 109/10/04	Problem Solving by Procedural Approach (2)	
4	109/10/05 ~ 109/10/11	Basic Programming Language Elements	
5	109/10/12 ~ 109/10/18	Introduction to C (1)	
6	109/10/19 ~ 109/10/25	Introduction to C (2)	

7	109/10/26 ~ 109/11/01	Lexical Structure of C (1)	
8	109/11/02 ~ 109/11/08	Lexical Structure of C (2)	
9	109/11/09 ~ 109/11/15	Lexical Structure of C (3)	
10	109/11/16 ~ 109/11/22	Midterm Exam Week	
11	109/11/23 ~ 109/11/29	Modules	
12	109/11/30 ~ 109/12/06	Realize Your Algorithm Using C (1)	
13	109/12/07 ~ 109/12/13	Realize Your Algorithm Using C (2)	
14	109/12/14 ~ 109/12/20	More on Pointers and Arrays	
15	109/12/21 ~ 109/12/27	More on formatted input/output	
16	109/12/28 ~ 110/01/03	Files (1)	
17	110/01/04 ~ 110/01/10	Files (2)	
18	110/01/11 ~ 110/01/17	Final Exam Week	

Requirement	There will be at least 6 assignments and 4 quizzes. Additional rules about the grading are: There is no make-up quiz and assignment if you miss the deadline 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 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.**