

Tamkang University Academic Year 108, 1st Semester Course Syllabus

Course Title	PROGRAM DESIGN	Instructor	LIN IN-HO
Course Class	TQIDB1A DIVISION OF APPLIED INFORMATICS, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH TAUGHT PROGRAM), 1A	Details	<ul style="list-style-type: none"> ◆ 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	The primary purpose of this course is to help students to learn and develop their understanding of the theory and practice of computer programming, focusing on techniques of program development using the C programming language. Upon satisfactory completion of this course, students will: <ul style="list-style-type: none"> •know the syntax and Semantics, program development process, proper use of control structures, input/output, looping, functions, and arrays in the C programming language. •be familiar with problem solving techniques commonly used in beginning programming 		

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	Basic Concept of computer programming language and syntax	Cognitive
2	To understand how C++ program is composed of one or more subprograms To understand the concept of a data type	Cognitive
3	know debugging and testing techniques for software development	Affective
4	be familiar with problem solving techniques commonly used in beginning programming	Psychomotor

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	A	2	Lecture, Discussion, Practicum, Experience	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
2	A	25	Lecture, Discussion, Practicum, Experience	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
3	A	25	Lecture, Discussion, Practicum, Experience	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)

4	A	25	Lecture, Discussion, Practicum, Experience	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
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Course Schedule

Week	Date	Course Contents	Note
1	108/09/09 ~ 108/09/15	Syllabus and Instruction · Preliminary, the Introduction of C Program	
2	108/09/16 ~ 108/09/22	C Fundamentals (1) Introduction to C Language Development Platform,	Lab.1
3	108/09/23 ~ 108/09/29	C Fundamentals (2), Introduction to C Language Development Platform,	HW.#1
4	108/09/30 ~ 108/10/06	Formatted Input/Output	Lab.2
5	108/10/07 ~ 108/10/13	Expressions, Quiz 1	Lab.3
6	108/10/14 ~ 108/10/20	Selection Ststaments(1),	HW.#2, Lab.4
7	108/10/21 ~ 108/10/27	Selection Ststaments(2) , Quiz 2	Lab.5
8	108/10/28 ~ 108/11/03	Loops (1)	HW.#3
9	108/11/04 ~ 108/11/10	Loops (2)	Lab.6
10	108/11/11 ~ 108/11/17	Midterm Exam Week	
11	108/11/18 ~ 108/11/24	Basic Types	Lab.7
12	108/11/25 ~ 108/12/01	Arrays	HW.#4
13	108/12/02 ~ 108/12/08	Functions (1), Quiz 3	
14	108/12/09 ~ 108/12/15	Functions (2)	HW.#5, Lab.8
15	108/12/16 ~ 108/12/22	Pointers, , Quiz 4	Lab.9
16	108/12/23 ~ 108/12/29	Pointers and Arrays	HW.#6, Lab.10
17	108/12/30 ~ 109/01/05	Strings	Lab.11
18	109/01/06 ~ 109/01/12	Final Exam Week (Date:109/1/3-109/1/9)	

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Requirement	<p>1.English as Teaching Language(本課程採英語授課)</p> <p>2.「iclass系統」網址：http://iclass.tku.edu.tw</p> <p>3.If a student's class absence reaches one-third of the total hours(in a semester) for a particular course, the course instructor will notify the Office of Academic Affairs, and the student will not be allowed to take part in the remaining course examinations and will be receive a semester grade(for that course) of zero.</p> <p>4.非法影印是違法的行為。請使用正版教科書。勿非法影印他人著作。以免觸法。</p>
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	C Programming, A Mordern Approach (2nd Ed.) by K.N. King (開發圖書)
References	<p>Problem Solving and Program Design in C (Eight Ed.) by Jeri R. Hanly (歐亞圖書)</p> <p>http://www.cppreference.com/wiki/http://www.cplusplus.com/reference/</p> <p>http://moodle.learning.tku.edu.tw</p>
Number of Assignment(s)	6 (Filled in by assignment instructor only)
Grading Policy	<p>◆ Attendance : 20.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 20.0 %</p> <p>◆ Final Exam : 20.0 %</p> <p>◆ Other (Quizzes) : 20.0 %</p>
Note	<p>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.</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>