

Tamkang University Academic Year 110, 1st Semester Course Syllabus

Course Title	DATA STRUCTURE & PROCESSING	Instructor	FENG-CHENG CHANG
Course Class	TEIDB2P DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM)SCIENCE AND	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	INFORMATION ENGINEERING, 2P SDG4 Quality education		
Departmental Aim of Education			
<ul style="list-style-type: none"> I. Comprehend professional knowledge. II. Acquire mastery of Practical Skills. III. Establish creative achievement. 			
Subject Departmental core competences			
A. Programming and application ability.(ratio:100.00)			
Subject Schoolwide essential virtues			
2. Information literacy. (ratio:100.00)			
Course Introduction	This course focus on using C programming language to solve special problem for application and computer. It emphasizes data storage, fetch, algorithms design and complexity evaluation		

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	Understanding the basic concepts for data structure	Cognitive
2	Promoting programming ability.	Cognitive
3	To possess the ability for algorithms design and evaluation.	Cognitive

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	Testing
2	A	2	Lecture	Testing
3	A	2	Lecture	Testing

Course Schedule

Week	Date	Course Contents	Note
1	110/09/22~ 110/09/28	Structures	
2	110/09/29~ 110/10/05	Structures	
3	110/10/06~ 110/10/12	Pointers	
4	110/10/13~ 110/10/19	Linked Lists	
5	110/10/20~ 110/10/26	Linked Lists	
6	110/10/27~ 110/11/02	Stacks and Queues	
7	110/11/03~ 110/11/09	Stacks and Queues	
8	110/11/10~ 110/11/16	Introduction to Binary Trees	
9	110/11/17~ 110/11/23	Midterm Exam Week	

10	110/11/24 ~ 110/11/30	Introduction to Binary Trees	
11	110/12/01 ~ 110/12/07	Introduction to Binary Trees	
12	110/12/08 ~ 110/12/14	Sorting	
13	110/12/15 ~ 110/12/21	Sorting	
14	110/12/22 ~ 110/12/28	Graphs	
15	110/12/29 ~ 111/01/04	Graphs	
16	111/01/05 ~ 111/01/11	Hashing	
17	111/01/12 ~ 111/01/18	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		
Textbooks and Teaching Materials	Data Structures In C by Noel Kalicharan (Aug 11, 2008)		
References	C/C++/Java related materials		
Number of Assignment(s)	6 (Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : % ◆ Mark of Usual : 50.0 % ◆ Midterm Exam : 20.0 % ◆ Final Exam : 20.0 % ◆ Other <control points> : 10.0 %		
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.		