Tamkang University Academic Year 109, 1st Semester Course Syllabus

Course Title	DATA STRUCTURE & PROCESSING	Instructor	FENG-CHENG CHANG
Course Class	TQICB2A DIVISION OF SOFTWARE ENGINEERING, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), 2A	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:20.00)

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

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	258	Lecture	Testing
2	A	258	Lecture	Testing
3	A	258	Lecture	Testing

Course Schedule

Week	Date	Course Contents	Note
1	109/09/14 ~ 109/09/20	Structures	
2	109/09/21 ~ 109/09/27	Structures	
3	109/09/28 ~ 109/10/04	Pointers	
4	109/10/05 ~ 109/10/11	Linked Lists	
5	109/10/12 ~ 109/10/18	Linked Lists	
6	109/10/19 ~ 109/10/25	Stacks and Queues	
7	109/10/26 ~ 109/11/01	Stacks and Queues	
8	109/11/02 ~ 109/11/08	Introduction to Binary Trees	
9	109/11/09 ~ 109/11/15	Introduction to Binary Trees	

10	109/11/16 ~ 109/11/22	Midterm Exam Week	
11	109/11/23 ~ 109/11/29	Introduction to Binary Trees	
12	109/11/30 ~ 109/12/06	Sorting	
13	109/12/07 ~ 109/12/13	Sorting	
14	109/12/14 ~ 109/12/20	Graphs	
15	109/12/21 ~ 109/12/27	Graphs	
16	109/12/28 ~ 110/01/03	Hashing	
17	110/01/04 ~ 110/01/10	Hashing	
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
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.**