Tamkang University Academic Year 108, 2nd Semester Course Syllabus

Course Title	DATABASE SYSTEMS	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

E. Capability of integrating information system(ratio:100.00)

Subject Schoolwide essential virtues

2. Information literacy. (ratio:70.00)

3. A vision for the future. (ratio:10.00)

5. Independent thinking. (ratio:10.00)

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

Course Introduction	In this course, we will learn the fundamentals of a database. Two major concepts, the relational model and the design method, will be discussed throughout the course. In addition, we will also learn how to programmatically access a database.

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	How to use relational model to describe a collection of data	Psychomotor
2	How to use SQL to manipulate the data in the database	Cognitive
3	How to design the proper relational data model according to the given application	Psychomotor
4	The role of a data base in a modern information system	Cognitive
5	How to connect and operate a database by programming APIs	Psychomotor

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	E	257	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
2	E	25	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation
3	E	257	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation
4	E	23	Lecture, Discussion	Discussion(including classroom and online), Report(including oral and written)
5	E	257	Lecture, Discussion	Testing, Discussion(including classroom and online), Report(including oral and written)

		Course Schedule	
Week	Date	Course Contents	Note
1	109/03/02 ~ 109/03/08	Course Overview and Introduction	
2	109/03/09 ~ 109/03/15	File-based & Simple SQLite-based Data Management Examples	
3	109/03/16 ~ 109/03/22	Database Fundamentals	
4	109/03/23 ~ 109/03/29	Basic SQL (1)	
5	109/03/30 ~ 109/04/05	Basic SQL (2)	
6	109/04/06 ~ 109/04/12	Relational Database Design (1)	
7	109/04/13 ~ 109/04/19	Relational Database Design (2)	
8	109/04/20 ~ 109/04/26	Simple Database Application Practices	
9	109/04/27 ~ 109/05/03	Midterm Exam Week	
10	109/05/04 ~ 109/05/10	Advanced SQL (1)	
11	109/05/11 ~ 109/05/17	Advanced SQL (2)	
12	109/05/18 ~ 109/05/24	Basic Database Analysis (1)	
13	109/05/25 ~ 109/05/31	Basic Database Analysis (2)	
14	109/06/01 ~ 109/06/07	Advanced Database Analysis (1)	
15	109/06/08 ~ 109/06/14	Advanced Database Analysis (2)	
16	109/06/15 ~ 109/06/21	Simple Web-based Database Application Examples	
17	109/06/22 ~ 109/06/28	Final Exam Week (Date:109/6/18-109/6/24)	
18	109/06/29 ~ 109/07/05	Supplementary teaching:Considerations on Practical Database Applications	

Requirement	There is no make-up quiz and assignment if you miss the deadline without a reason.
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	Jeffery A. Hoffer et al., Modern Database Management, 13rd ed., Pearson Education Limited, 2020.

References	
Number of Assignment(s)	**10** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： % ◆ Mark of Usual：10.0 % ◆ Midterm Exam： 25.0 % ◆ Final Exam： 25.0 % ◆ Other〈labs〉：40.0 %
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.**