

## Tamkang University Academic Year 109, 2nd Semester Course Syllabus

Course Title	DATABASE SYSTEMS	Instructor	CHEN, DUEN-KAI
Course Class	TQIDB2R DIVISION OF APPLIED INFORMATICS, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), 2R	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG4 Quality education		
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.		

**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	2357	Lecture, Practicum	Testing, Study Assignments, Discussion(including classroom and online)
2	E	2357	Lecture, Experience	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written)
3	E	2357	Lecture, Experience	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written)
4	E	2357	Lecture	Testing, Study Assignments
5	E	2357	Lecture	Testing, Study Assignments

**Course Schedule**

Week	Date	Course Contents	Note

1	110/02/22 ~ 110/02/28	Course overview	
2	110/03/01 ~ 110/03/07	Preparation of a database environment and Database Fundamentals (1)	
3	110/03/08 ~ 110/03/14	Database Fundamentals (2)	
4	110/03/15 ~ 110/03/21	Basic Database Analysis (1)	
5	110/03/22 ~ 110/03/28	Basic Database Analysis (2)	
6	110/03/29 ~ 110/04/04	Teaching administration observation period & National holidays	
7	110/04/05 ~ 110/04/11	Advanced Database Analysis	
8	110/04/12 ~ 110/04/18	Relational Database Design (1)	
9	110/04/19 ~ 110/04/25	Relational Database Design (2)	
10	110/04/26 ~ 110/05/02	Midterm Exam Week	
11	110/05/03 ~ 110/05/09	Relational Database Design (3)	
12	110/05/10 ~ 110/05/16	Physical Database Design	
13	110/05/17 ~ 110/05/23	Basic SQL (1)	
14	110/05/24 ~ 110/05/30	Basic SQL (2)	
15	110/05/31 ~ 110/06/06	Basic SQL (3)	
16	110/06/07 ~ 110/06/13	Advanced SQL (1)	
17	110/06/14 ~ 110/06/20	Advanced SQL (2)	
18	110/06/21 ~ 110/06/27	Final Exam Week	
Requirement		Late submission of assignment is not allowed. No "make-up" exams or assignments, students will be evaluated based on midterm/final exam and assignments only.	
Teaching Facility		Computer, Projector	
Textbooks and Teaching Materials		Jeffery A. Hoffer et al., Modern Database Management, 12th ed., Pearson Education Limited, 2016.	
References			

Number of Assignment(s)	<b>8</b> (Filled in by assignment instructor only)
Grading Policy	◆ Attendance :                %    ◆ Mark of Usual : 30.0 %    ◆ Midterm Exam : 35.0 % ◆ Final Exam :    35.0 % ◆ Other (    ) :                %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> . <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>