

## Tamkang University Academic Year 113, 2nd Semester Course Syllabus

Course Title	SYSTEM ANALYSIS AND DESIGN	Instructor	LIN HUI
Course Class	TEIDB2A DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 2A	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Selective</li> <li>◆ One Semester</li> <li>◆ 3 Credits</li> </ul>
Relevance to SDGs	SDG9 Industry, Innovation, and Infrastructure		
Departmental Aim of Education			
<ul style="list-style-type: none"> <li>I. Comprehend professional knowledge.</li> <li>II. Acquire mastery of Practical Skills.</li> <li>III. Establish creative achievement.</li> </ul>			
Subject Departmental core competences			
<ul style="list-style-type: none"> <li>A. Programming and application ability.(ratio:15.00)</li> <li>B. Mathematical reasoning ability.(ratio:15.00)</li> <li>C. Implementing computer systems ability.(ratio:40.00)</li> <li>D. Computer networking application skills.(ratio:15.00)</li> <li>E. Professional skills for information technology (IT) industry.(ratio:15.00)</li> </ul>			
Subject Schoolwide essential virtues			
<ul style="list-style-type: none"> <li>1. A global perspective. (ratio:10.00)</li> <li>2. Information literacy. (ratio:20.00)</li> <li>3. A vision for the future. (ratio:10.00)</li> <li>4. Moral integrity. (ratio:10.00)</li> <li>5. Independent thinking. (ratio:20.00)</li> <li>6. A cheerful attitude and healthy lifestyle. (ratio:5.00)</li> <li>7. A spirit of teamwork and dedication. (ratio:15.00)</li> <li>8. A sense of aesthetic appreciation. (ratio:10.00)</li> </ul>			

Course Introduction	Start to learn with fundamental concepts, philosophies, and trends that provide the context of systems analysis and design methods. Then introduce systems analysis and its overall importance in a project. Those are specific systems analysis skills with an emphasis on logical system modeling.
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**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	Students will be able to summarize concepts covered in the following topics: the Components of Information System, Project Management, Systems Analysis Methods, and Unified Modeling Language(UML). Students will be able to implement a new project of systems analysis and design using the UML.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	12345678	Lecture, Discussion, Experience	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written), Activity Participation

**Course Schedule**

Week	Date	Course Contents	Note
1	114/02/17 ~ 114/02/23	syllbus/Wisdom property rights guidance/Introduction to Systems Analysis and Design	

2	114/02/24 ~ 114/03/02	Introduction to Systems Analysis and Design	
3	114/03/03 ~ 114/03/09	Introduction to Systems Analysis and Design/Analyzing the Business Case	
4	114/03/10 ~ 114/03/16	Analyzing the Business Case	
5	114/03/17 ~ 114/03/23	Analyzing the Business Case	
6	114/03/24 ~ 114/03/30	Managing System Projects	
7	114/03/31 ~ 114/04/06	Teaching and administrative observation week (教學行政觀摩週)	
8	114/04/07 ~ 114/04/13	Managing System Projects	
9	114/04/14 ~ 114/04/20	Midterm Exam/Midterm Assessment Week (teachers can adjust the week as needed)	
10	114/04/21 ~ 114/04/27	Requirements Modeling	
11	114/04/28 ~ 114/05/04	Data and Process Modeling/Object Modeling	
12	114/05/05 ~ 114/05/11	Object Modeling	
13	114/05/12 ~ 114/05/18	Object Modeling/Development Strategies	
14	114/05/19 ~ 114/05/25	Development Strategies/Output and User Interface Design	
15	114/05/26 ~ 114/06/01	Output and User Interface Design	
16	114/06/02 ~ 114/06/08	Data Design	
17	114/06/09 ~ 114/06/15	Final Exam/Final Assessment Week (teachers can adjust the week as needed)	
18	114/06/16 ~ 114/06/22	Flexible Teaching Week: Generally, no in-person classes; teachers may arrange teaching activities or final assessments, among other options.	
Key capabilities	Information Technology		
Interdisciplinary	STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)		

Distinctive teaching	Special/Problem-Based(PBL) Courses
Course Content	Logical Thinking IT application
Requirement	Score will include attendance, the ratio may be slightly adjusted!
Textbooks and Teaching Materials	Self-made teaching materials:Presentations, Handouts, Worksheets Using teaching materials from other writers:Textbooks, Videos
References	Introduction to System Analysis and Design, Whitten-Bentley System Analysis and Design in a changing world, Satzinger
Grading Policy	◆ Attendance : 10.0 %   ◆ Mark of Usual : 20.0 %   ◆ Midterm Exam : 25.0 % ◆ Final Exam : 25.0 % ◆ Other (project etc.) : 20.0 %
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>