Tamkang University Academic Year 106, 2nd Semester Course Syllabus

Course Title	SYSTEM ANALYSIS AND DESIGN	Instructor	LIN HUI
Course Class	TQIDB2A DIVISION OF APPLIED INFORMATICS, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), 2A	Details	◆ Required ◆ One Semester ◆ 3 Credits

Departmental Aim of Education

Cultivate professional talents in developing and applying information system in various fields.

Departmental core competences

A. Capability of computer program coding, process planning, and problem solving

B. Capability of applying basic mathematics and information technology related mathematics

C. Capability of applying knowledge of internet structure and protocol in communication system

D. Capability of developing information system

E. Capability of integrating information system

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.

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I.Objective Levels (select applicable ones) :

(i) Cognitive Domain : C1-Remembering, C2-Understanding, C3-Applying, C4-Analyzing, C5-Evaluating, C6-Creating

(ii) Psychomotor Domain : P1-Imitation, P2-Mechanism, P3-Independent Operation, P4-Linked Operation, P5-Automation, P6-Origination

(iii) Affective Domain : A1-Receiving, A2-Responding, A3-Valuing, A4-Organizing, A5-Charaterizing, A6-Implementing

II.The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

(i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.

(ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3,C5,and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)

(iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A,AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
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.	P4	D

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
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.	Lecture, Discussion, Practicum, Problem solving	Written test, Practicum, Report, Participation

This course has been designed to cultivate the following essential qualities in TKU students	
Essential Qualities of TKU Students	Description
◇ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◆ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◇ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◇ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◆ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◇ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

Course Schedule

Week	Date	Subject/Topics	Note
1	107/02/26 ~ 107/03/04	syllbus/Wisdom property rights guidance/Introduction to Systems Analysis and Design	
2	107/03/05 ~ 107/03/11	Introduction to Systems Analysis and Design	
3	107/03/12 ~ 107/03/18	Introduction to Systems Analysis and Design/Analyzing the Business Case	
4	107/03/19 ~ 107/03/25	Analyzing the Business Case	
5	107/03/26 ~ 107/04/01	Analyzing the Business Case/Managing SystemProjects	
6	107/04/02 ~ 107/04/08	Managing SystemProjects	
7	107/04/09 ~ 107/04/15	Requirements Modeling	
8	107/04/16 ~ 107/04/22	Requirements Modeling	
9	107/04/23 ~ 107/04/29	Data and Process Modeling	
10	107/04/30 ~ 107/05/06	Midterm Exam Week	
11	107/05/07 ~ 107/05/13	Data and Process Modeling/Object Modeling	
12	107/05/14 ~ 107/05/20	Object Modeling	

13	107/05/21～ 107/05/27	Object Modeling/Development Strategies	
14	107/05/28～ 107/06/03	Development Strategies/Output and User Interface Design	
15	107/06/04～ 107/06/10	Output and User Interface Design	
16	107/06/11～ 107/06/17	Data Design	
17	107/06/18～ 107/06/24	System Architecture	
18	107/06/25～ 107/07/01	Final Exam Week	

Requirement	Score will include attendance, the ratio may be slightly adjusted!
Teaching Facility	Computer, Projector
Textbook(s)	Systems Analysis and Design 9e, Shelly · Rosenblatt(歐亞)
Reference(s)	Introduction to System Analysis & Design, Whitten·Bentley(高立) System Analysis & Design for the Global Enterprise, Bentley·Whitten(滄海)
Number of Assignment(s)	**20** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： % ◆ Mark of Usual：20.0 % ◆ Midterm Exam： 30.0 % ◆ Final Exam： 30.0 % ◆ Other〈實作〉：20.0 %
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.**