Tamkang University Academic Year 102, 2nd Semester Course Syllabus

Course Title	SYSTEM ANALYSIS AND DESIGN	Instructor	LIN HUI
Course Class	TPIBB2A DIVISION OF COMMUNICATION TECHNOLOGY, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY, 2A	Details	◆ Required ◆ One Semester ◆ 3 Credits

Departmental Aim of Education

Cultivate professional talents in software engineering and communication technology.

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 data collecting and analyzing, and organizing software and hardware.

E. Capability of understanding and integrating system structure for problem solving.

F. Capability of system analyzing, modeling, and designing.

G. Capability of management utilizing information technology 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.	P6	DEFG

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	103/02/17 ~ 103/02/23	syllbus/Wisdom property rights guidance/Introduction to Systems Analysis and Design	
2	103/02/24 ~ 103/03/02	Introduction to Systems Analysis and Design	
3	103/03/03 ~ 103/03/09	Introduction to Systems Analysis and Design/Analyzing the Business Case	
4	103/03/10 ~ 103/03/16	Analyzing the Business Case	
5	103/03/17 ~ 103/03/23	Analyzing the Business Case/Managing SystemProjects	
6	103/03/24 ~ 103/03/30	Managing SystemProjects	
7	103/03/31 ~ 103/04/06	Requirements Modeling	
8	103/04/07 ~ 103/04/13	Requirements Modeling	
9	103/04/14 ~ 103/04/20	Data and Process Modeling	
10	103/04/21 ~ 103/04/27	Midterm Exam Week	
11	103/04/28 ~ 103/05/04	Data and Process Modeling/Object Modeling	
12	103/05/05 ~ 103/05/11	Object Modeling	

13	103/05/12~103/05/18	Object Modeling/Development Strategies	
14	103/05/19~103/05/25	Development Strategies/Output and User Interface Design	
15	103/05/26~103/06/01	Output and User Interface Design	
16	103/06/02~103/06/08	Data Design	
17	103/06/09~103/06/15	System Architecture	
18	103/06/16~103/06/22	Final Exam Week	

Requirement	Score will include attendance, the ratio may be slightly adjusted!
Teaching Facility	Computer, Projector
Textbook(s)	Systems Analysis and Design 8e, 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.**