

Tamkang University Academic Year 113, 1st Semester Course Syllabus

Course Title	OBJECT-ORIENTED SOFTWARE DEVELOPING TECHNOLOGY	Instructor	TRAN, HUU KHOA
Course Class	TLMXB4P DEPARTMENT OF INFORMATION MANAGEMENT, 4P	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Selective ◆ One Semester ◆ 2 Credits
Relevance to SDGs	SDG9 Industry, Innovation, and Infrastructure		
Departmental Aim of Education			
<ul style="list-style-type: none"> I. Refining information management skills. II. Enhancing information technology capabilities. III. Thinking independently with logic analysis. IV. Reinforcing team-working spirit. V. Valuing business and information ethics. VI. Cultivating global view. 			
Subject Departmental core competences			
<ul style="list-style-type: none"> A. Problem analysis and critical thinking.(ratio:5.00) B. Functional business Areas and business practices.(ratio:5.00) C. Applications of information systems.(ratio:5.00) D. Computer programming.(ratio:35.00) E. Network system planning.(ratio:5.00) F. Database design and management.(ratio:5.00) G. Analysis, design and integration of information system.(ratio:35.00) H. Project management.(ratio:5.00) 			
Subject Schoolwide essential virtues			
<ul style="list-style-type: none"> 1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:30.00) 3. A vision for the future. (ratio:10.00) 4. Moral integrity. (ratio:5.00) 			

- 5. Independent thinking. (ratio:30.00)
- 6. A cheerful attitude and healthy lifestyle. (ratio:5.00)
- 7. A spirit of teamwork and dedication. (ratio:5.00)
- 8. A sense of aesthetic appreciation. (ratio:5.00)

Course Introduction	Concepts, principles, processes and methods for developing large software systems featuring a team project using object-oriented design.
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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 are able to get familiar with programming languages and practice in classes	Cognitive
2	Students are able to understand the software design process and practice.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEFGH	12345678	Lecture, Discussion, Practicum	Study Assignments, Report(including oral and written)
2	ABCDEFGH	12345678	Lecture, Discussion, Practicum	Discussion(including classroom and online), Report(including oral and written)

Course Schedule			
Week	Date	Course Contents	Note
1	113/09/09 ~ 113/09/15	Introduction Software Design	
2	113/09/16 ~ 113/09/22	Modeling the process and life cycle	
3	113/09/23 ~ 113/09/29	Planning and managing the project	
4	113/09/30 ~ 113/10/06	Capturing the requirements	
5	113/10/07 ~ 113/10/13	Designing the architecture	
6	113/10/14 ~ 113/10/20	Designing the modules	
7	113/10/21 ~ 113/10/27	Writing the programs	
8	113/10/28 ~ 113/11/03	Testing the programs	
9	113/11/04 ~ 113/11/10	Midterm Exam Week	
10	113/11/11 ~ 113/11/17	Testing the system	
11	113/11/18 ~ 113/11/24	Delivering the system	
12	113/11/25 ~ 113/12/01	Software requirements	
13	113/12/02 ~ 113/12/08	Managing the system	
14	113/12/09 ~ 113/12/15	Project presentations	
15	113/12/16 ~ 113/12/22	Project presentations	
16	113/12/23 ~ 113/12/29	Project presentations	
17	113/12/30 ~ 114/01/05	Final Exam Week	
18	114/01/06 ~ 114/01/12	Flex week, learning activities should be arranged.	
Key capabilities		self-directed learning International mobility Information Technology Problem solving	
Interdisciplinary		STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist) Competency-based education 'competency exploration' sustained competency or global issues STEEP (Society, Technology, Economy, Environment, and Politics)	

Distinctive teaching	Project implementation course
Course Content	Computer programming or Computer language (students have hands-on experience in related projects) Intellectual Property (learning intellectual property) AI application
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Handouts Using teaching materials from other writers:Handouts
References	
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : % ◆ Midterm Exam : 5.0 % ◆ Final Exam : 5.0 % ◆ Other (Presentation) : 80.0 %
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.