

Tamkang University Academic Year 109, 1st Semester Course Syllabus

Course Title	SOFTWARE ENGINEERING	Instructor	FENG-CHENG CHANG
Course Class	TQICB4A DIVISION OF SOFTWARE ENGINEERING, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH- TAUGHT PROGRAM), 4A	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Required ◆ One Semester
Departmental Aim of Education			
Cultivate professional talents in developing and applying information system in various fields.			
Subject Departmental core competences			
D. Capability of developing information system(ratio:100.00)			
Subject Schoolwide essential virtues			
<p>2. Information literacy. (ratio:70.00)</p> <p>5. Independent thinking. (ratio:10.00)</p> <p>7. A spirit of teamwork and dedication. (ratio:10.00)</p> <p>8. A sense of aesthetic appreciation. (ratio:10.00)</p>			
Course Introduction	<p>Combining the fundamental knowledge of information systems and the experiences of programming, learn how to develop high quality software by engineering approaches.</p> <p>Due to the diversity of program development capability, the actual learning schedule of each student is different. The listed topics are for reference.</p> <p>Note that this course comes with extra 18 service-learning hours.</p>		

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	Learn what is software engineering	Cognitive
2	Learn the related software engineering methodologies and tools	Psychomotor
3	Develop software by a certain process, including the analysis/design techniques	Psychomotor

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	D	257	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
2	D	2578	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
3	D	2578	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

Course Schedule

Week	Date	Course Contents	Note
1	109/09/14 ~ 109/09/20	Introduction	
2	109/09/21 ~ 109/09/27	Software Life Cycle	
3	109/09/28 ~ 109/10/04	Software Development Process	
4	109/10/05 ~ 109/10/11	Software Modeling	
5	109/10/12 ~ 109/10/18	Requirement Analysis	
6	109/10/19 ~ 109/10/25	Object Oriented Analysis	

7	109/10/26 ~ 109/11/01	Object Oriented Design	
8	109/11/02 ~ 109/11/08	Design Patterns (1)	
9	109/11/09 ~ 109/11/15	Design Patterns (2)	
10	109/11/16 ~ 109/11/22	Midterm Exam Week	
11	109/11/23 ~ 109/11/29	Design Patterns (3)	
12	109/11/30 ~ 109/12/06	Implementation Techniques (1)	
13	109/12/07 ~ 109/12/13	Implementation Techniques (2)	
14	109/12/14 ~ 109/12/20	Implementation Techniques (3)	
15	109/12/21 ~ 109/12/27	Case Study (1)	
16	109/12/28 ~ 110/01/03	Case Study (2)	
17	110/01/04 ~ 110/01/10	Case Study (3)	
18	110/01/11 ~ 110/01/17	Final Exam Week	
Requirement	<p>There will be at least 6 assignments and 4 quizzes. Additional rules about the grading are: (1) There is no make-up quiz and assignment if you miss the deadline without a reason. (2) If the periods are the campus-wide roll-calling periods, you will be excluded from the course when the "absence hours" reaches 18. (Article 38.2 of TKU Study Regulations) (2.1) Please note that the "exclusion from the course" is not part of the evaluation of your learning outcome. We consider the "participation" or the "contribution" in the evaluation. However, the administrative team enforces that the campus rule overrides the evaluation method. The staff will submit the exclusion list on behalf of the teacher when you violate the regulation.</p>		
Teaching Facility	Computer, Projector		
Textbooks and Teaching Materials	R. S. Pressman, Software Engineering: A Practitioner's Approach, 7th Ed., International Edition 2010, McGraw-Hill. I. Sommerville, Software Engineering, 9th Ed., International Edition, 2011, Pearson.		
References	D. A. Gustafson, Schaum's Outline of Theory and Problems of Software Engineering, McGraw-Hill, 2002. E. Gamma et al., Design Patterns: Elements of Reusable Object-Oriented Software, Addison Wesley Longman, Inc., 1994.		
Number of Assignment(s)	10 (Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : % ◆ Mark of Usual : 60.0 % ◆ Midterm Exam : 15.0 % ◆ Final Exam : 15.0 % ◆ Other (service learning) : 10.0 %		

Note	<p>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 .</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>
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