Tamkang University Academic Year 109, 2nd Semester Course Syllabus

Course Title	OBJECT ORIENTED PROGRAMMING	Instructor	FENG-CHENG CHANG
Course Class	TQICB1A DIVISION OF SOFTWARE ENGINEERING, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG4 Quality education		

Departmental Aim of Education
Cultivate professional talents in developing and applying information system in various fields.

Subject Departmental core competences
A. Capability of computer program coding, process planning, and problem solving(ratio:100.00)

Subject Schoolwide essential virtues
2. Information literacy. (ratio:70.00) 5. Independent thinking. (ratio:10.00) 7. A spirit of teamwork and dedication. (ratio:10.00) 8. A sense of aesthetic appreciation. (ratio:10.00)

Course Introduction	The object oriented analysis/design/programming is the mainstream approach to develop large software systems. Java is one of the popular object oriented programming languages. In this course, we will learn object oriented concepts by programming with Java.

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	Java syntax	Cognitive
2	Java programming	Psychomotor
3	Object oriented concepts	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	A	2	Lecture	Testing, Study Assignments, Discussion(including classroom and online)
2	A	2578	Lecture, Discussion, Experience	Testing, Study Assignments, Discussion(including classroom and online)
3	A	2578	Lecture, Discussion, Experience	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written)

Course Schedule

Week	Date	Course Contents	Note
1	110/02/22 ~ 110/02/28	Introduction to programming and the Java language	
2	110/03/01 ~ 110/03/07	Review C and learn Java basics	
3	110/03/08 ~ 110/03/14	Java basics and using classes (1)	
4	110/03/15 ~ 110/03/21	Java basics and using classes (2)	
5	110/03/22 ~ 110/03/28	Flow of control: selection and loop	

6	110/03/29～110/04/04	Flow of control: selection and loop	
7	110/04/05～110/04/11	User-defined classes (1)	
8	110/04/12～110/04/18	User-defined classes (2)	
9	110/04/19～110/04/25	One-dimensional array	
10	110/04/26～110/05/02	Midterm Exam Week	
11	110/05/03～110/05/09	Multidimensional array	
12	110/05/10～110/05/16	Inheritance, polymorphism, and interfaces (1)	
13	110/05/17～110/05/23	Inheritance, polymorphism, and interfaces (2)	
14	110/05/24～110/05/30	Exceptions and input/output operations (1)	
15	110/05/31～110/06/06	Exceptions and input/output operations (2)	
16	110/06/07～110/06/13	Java Collection Framework	
17	110/06/14～110/06/20	Selected topics: recursion etc	
18	110/06/21～110/06/27	Final Exam Week	

Requirement	There is no make-up quiz and assignment if you miss the deadline without a reason.
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	J. Anderson and H. Franceschi, "Java Illuminated - An Active Learning Approach, " 5th ed., jones & Bartlett Learning LLC, 2019.
References	
Number of Assignment(s)	**6** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 　　 % 　 ◆ Mark of Usual：10.0 % 　 ◆ Midterm Exam： 20.0 % ◆ Final Exam： 20.0 % ◆ Other〈labs〉：50.0 %
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.**