Tamkang University Academic Year 110, 2nd Semester Course Syllabus

Course Title	OBJECT ORIENTED PROGRAMMING	Instructor	HUANG-WEN HUANG
Course Class	TEIDB1A DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG4 Quality education SDG9 Industry, Innovation, and Infrastructure		

Departmental Aim of Education

Ⅰ. Comprehend professional knowledge.

Ⅱ. Acquire mastery of Practical Skills.

Ⅲ. Establish creative achievement.

Subject Departmental core competences

A. Programming and application ability.(ratio:100.00)

Subject Schoolwide essential virtues

2. Information literacy. (ratio:20.00)

3. A vision for the future. (ratio:10.00)

4. Moral integrity. (ratio:20.00)

5. Independent thinking. (ratio:20.00)

6. A cheerful attitude and healthy lifestyle. (ratio:10.00)

7. A spirit of teamwork and dedication. (ratio:20.00)

	Course Introduction	The purpose of this course is to introduce Java programming language, which is an another high level programming language. This course contents include Java basic, class and object, Java applet and graphics, control statements, array and some important object-oriented concepts such as inheritance, polymorphism and interface. In lectures, we will do many examples and exercises to illustrate the 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	Students are able to get familiar with Java programming language.	Cognitive
2	Students are able to understand Java operators, basics and statements. Particularly it is based on object-oriented methodology.	Cognitive
3	Students are able to learn Java Applet which is used in webpage design.	Cognitive
4	Students are able to understand Java control statements in programs.	Cognitive
5	Students are able to understand Java graphics and user interface design.	Cognitive
6	Students are able to practically write Java programs in classes.	Cognitive
7	Enhancing students' ability to write read and speak technical English especially in Java programming language.	Psychomotor

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment

1	A		234567	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
2	A		234567	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Practicum
3	A		234567	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
4	A		234567	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written)
5	A		234567	Lecture, Discussion, Practicum	Testing, Discussion(including classroom and online), Report(including oral and written)
6	A		234567	Lecture	Testing
7	A		23457	Lecture	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written)

Course Schedule			
Week	Date	Course Contents	Note
1	111/02/21 ~ 111/02/25	Introduction to programming and the Java language (1);	
2	111/02/28 ~ 111/03/04	Programming building blocks – Java Basics (2);	Shown in the Parentheses are corresponding sections in the textbook.
3	111/03/07 ~ 111/03/11	Object-Oriented programming, part 1: using classes (3);	
4	111/03/14 ~ 111/03/18	The string class (3.7);Math class (3.13);JoptionPane Dialog boxes (3.16);	
5	111/03/21 ~ 111/03/25	Introduction Applets and Graphics (4)	

6	111/03/28～ 111/04/01	Flow of control: selection (5)	
7	111/04/04～ 111/04/08	Flow of control: looping (6)	
8	111/04/11～ 111/04/15	Object-oriented programming: user-defined classes (7)	
9	111/04/18～ 111/04/22	In-Class Exercises	
10	111/04/25～ 111/04/29	Midterm Exam Week	
11	111/05/02～ 111/05/06	Single-Dimensional arrays (8)	
12	111/05/09～ 111/05/13	Multidimensional arrays (9)	
13	111/05/16～ 111/05/20	Object-oriented programming: inheritance, polymorphism and interfaces (10)	
14	111/05/23～ 111/05/27	Exceptions and input/output operations (11)	
15	111/05/30～ 111/06/03	Graphical user interfaces (12)	
16	111/06/06～ 111/06/10	Graphical user interface making up (12.1)	
17	111/06/13～ 111/06/17	In-Class exercises	
18	111/06/20～ 111/06/24	Final Exam Week	

Requirement	Grading policy may vary according to circumstances when school starts.
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	Julie Anderson, Herve Franceschi, "Java 6 Illuminated An Active Learning Approach" 2nd ,Jones and Bartlett Publications Inc.2008
References	1. Walter Savitch," Absolute Java" 3rd, Pearson International Edition 2008. 2. Gary J. Bronson "Object-Oriented program development using Java" ,2006, Thomson course technology, enhanced edition.
Number of Assignment(s)	**6** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 10.0 % ◆ Mark of Usual：10.0 % ◆ Midterm Exam： 25.0 % ◆ Final Exam： 25.0 % ◆ Other〈Homework and project〉：30.0 %

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.**