Tamkang University Academic Year 108, 2nd Semester Course Syllabus

Course Title	OBJECT ORIENTED PROGRAMMING	Instructor	LIN IN-HO
Course Class	TQIDB1A DIVISION OF APPLIED INFORMATICS, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ 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

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	This course presents an advanced view of computer programming, mainly using Java and Python. The use of current operating systems and Eclipse develop platform will also be presented. Object Oriented Programming is quite different than functional or procedural programming, and it is difficult to learn on your own. Hands-on programming will be a key part of the course. Outcomes: Students who successfully complete this course will be able to: *Apply and develop object oriented code. *Develop software for a variety of architectures *Demonstrate basic knowledge of software engineering concepts

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	To learn the basic concept of software development platform for problem solving using Java computer languages	Cognitive
2	Familiar with the processes of the computer program design and applications for solving the computer problems	Affective
3	using Computer language and Software Engineering to solve Computer Problems	Psychomotor

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, Discussion, Experience	Testing, Study Assignments
2	A	25	Lecture, Discussion, Experience	Testing, Study Assignments
3	A	2578	Lecture, Discussion, Experience	Testing, Study Assignments

Course Schedule

Week	Date	Course Contents	Note
1	109/03/02～109/03/08	Course overview, about the advanced computer programming Introduction to Eclipse project development Platform for Java	
2	109/03/09～109/03/15	1、Introduction to Programming and the Java Language	Lab.1
3	109/03/16～109/03/22	Ch.2:Programming Building Blocks -- Java Basics	HW.#1, Lab.2
4	109/03/23～109/03/29	Ch.3: Decisions, Ch.4:Loops, Ch.5:Methods	Quiz 1, Lab.3
5	109/03/30～109/04/05	Ch.6:Arrays and Array Lists	HW.#2, Lab.4
6	109/04/06～109/04/12	Ch.7:Input/Output and Exception Handling	Lab.5

7	109/04/13~ 109/04/19	Ch.8:Objects and Classes(1)	HW.#3,Quiz2,Lab.6
8	109/04/20~ 109/04/26	Ch.8:Objects and Classes(2)	
9	109/04/27~ 109/05/03	Midterm Exam Week	
10	109/05/04~ 109/05/10	Ch.9:Inheritance and Interfaces(1)	Lab.7
11	109/05/11~ 109/05/17	Ch.10:Graphical User Interfaces	HW.#4, Lab.8
12	109/05/18~ 109/05/24	Ch.12:Object-Oriented Design(1)	Quiz 3, Lab.9
13	109/05/25~ 109/05/31	Ch.12:Object-Oriented Design(2)	HW.#5, Lab.10
14	109/06/01~ 109/06/07	Introduction to Python Programming and Development	Lab.11
15	109/06/08~ 109/06/14	Introduction to Python Collections	Quiz4,HW.#6
16	109/06/15~ 109/06/21	Fundamentals of Python Applications (File I/O)、Image	Lab.12
17	109/06/22~ 109/06/28	Final Exam Week (Date:109/6/18-109/6/24)	
18	109/06/29~ 109/07/05	Supplementary teaching: Object-Oriented Programming and Development	

Requirement	Registration on TKU iClass website: http://iclass.tku.edu.tw
Teaching Facility	Computer, Projector, Other (Compters)
Textbooks and Teaching Materials	1、Python Programming in Contexts 3 rd. Edtion by Bradley N. Miller 2、Java Illuminated An Active Learning Approach (Fifth Edition) Julie Anderson
References	1、 Big Java Late Objects by Cay Horstmann，歐亞書局
Number of Assignment(s)	**6** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 20.0 % ◆ Mark of Usual：20.0 % ◆ Midterm Exam： 20.0 % ◆ Final Exam： 20.0 % ◆ Other〈Lab., Proj &Homework〉：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.**