## Tamkang University Academic Year 107, 2nd Semester Course Syllabus

Course Title	OBJECT ORIENTED PROGRAMMING	Instructor	FENG-CHENG CHANG
Course Class	TQICB1A DIVISION OF SOFTWARE ENGINEERING, DEPARTMENT OF INNOVATIVE INFORMATION	Details	<ul> <li>Required</li> <li>One Semester</li> <li>3 Credits</li> </ul>
	AND TECHNOLOGY (ENGLISH-TAUGHT PROGRAM), <sup>1A</sup> Departmental Aim of Educ	ation	
Cultivate pro	ofessional talents in developing and applying information system	m in various fie	elds.
	Departmental core compet	ences	
A. Capabili	ty of computer program coding, process planning, and problem	n solving	
B. Capabili	ty of applying basic mathematics and information technology re	elated mathem	natics
C. Capabili system	ty of applying knowledge of internet structure and protocol in c	communication	1
D. Capabili	ty of developing information system		
E. Capabili	ty of integrating information system		
Course Introduction	The object oriented analysis/design/programming is the mai develop large software systems. Java is one of the popular ob programming languages. In this course, we will learn object o programming with Java.	oject oriented	

## The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I.Objective Levels (select	applicable ones)	:	
(i) Cognitive Domain :	C1-Remembering,	C2-Understanding,	C3-Applying,
	C4-Analyzing,	C5-Evaluating,	C6-Creating
(ii) Psychomotor Domain :	Pl-Imitation,	P2-Mechanism,	P3-Independent Operation,
	P4-Linked Operati	on, P5-Automation,	P6-Origination
(iii) Affective Domain :	Al-Receiving,	A2-Responding,	A3-Valuing,
	A4-Organizing,	A5-Charaterizing,	A6-Implementing

II. The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

(i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.

(ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3,C5, and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)

(iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time.(For example, if one objective corresponds to three Departmental core competences: A,AD, and BEF, list all of the three in the box.)

	Relevance		
Teaching Objectives			Departmental core competences
Java syntax			A
Java programming			А
Object oriented concepts		C6	А
Teaching Ob	jectives, Teaching Methods and Asses	ssment	
Teaching Objectives	Teaching Methods		Assessment
Java syntax	Lecture	Written te	est
Java programming	Lecture, Practicum	Written te Participat	est, Practicum, ion
Object oriented concepts	Lecture, Discussion, Practicum, Problem solving	Written te Participat	est, Practicum, ion
	Java syntax Java programming Object oriented concepts Teaching Objectives Java syntax Java programming	Java syntax Java programming Object oriented concepts Teaching Objectives, Teaching Methods and Asses Teaching Objectives Teaching Methods Java syntax Java programming Dbject oriented concepts Lecture, Practicum	Java syntaxC1Java syntaxC1Java programmingP4Object oriented conceptsC6Teaching Objectives, Teaching Methods and AssessmentTeaching ObjectivesTeaching MethodsTeaching ObjectivesTeaching MethodsJava syntaxLectureJava programmingLecture, PracticumObject oriented conceptsLecture, Discussion, Practicum,Object oriented conceptsLecture, Discussion, Practicum,

	Essential	Qualities of TKU Students	Descripti	on	
$\bigcirc$ A global perspective		pective	Helping students develop a broader perspective from which to understand international affairs and global development.		
٠	Information li	teracy	Becoming adept at using information tech the proper way to process information.	Becoming adept at using information technology and learning the proper way to process information.	
$\diamond$	A vision for th	e future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.		
$\bigcirc$ Moral integrity		У	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.		
$\diamond$	Independent	thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.		
$\diamondsuit$ A cheerful attitude and healthy lifestyle		itude and healthy lifestyle	Raising an awareness of the fine balance b and soul and the environment; helping stu meaningful life.	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.	
$\diamondsuit$ A spirit of teamwork and dedication		mwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.		
$\diamondsuit$ A sense of aesthetic appreciation		sthetic appreciation		Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.	
			Course Schedule		
Week	Date	s	Subject/Topics	Note	
1	108/02/18 ~ 108/02/24	Introduction to programming and the Java language			
2	108/02/25 ~ 108/03/03	Java basics			
3	108/03/04 ~ 108/03/10	Using classes			
4	108/03/11~ 108/03/17	Introduction to graphical ap	pplications		
5	108/03/18 ~ 108/03/24	Flow of control: selection			
6	108/03/25 ~ 108/03/31	Flow of control: loop			
7	108/04/01 ~ 108/04/07	User-defined classes (1)			
8	108/04/08 ~ 108/04/14	User-defined classes (2)			
9	108/04/15 ~ 108/04/21	One-dimensional array			
10	108/04/22 ~ 108/04/28	Midterm Exam Week			
11	108/04/29 ~ 108/05/05	Multudimensional array			
	108/05/06~	Inheritance, polymorphism, and interfaces (1)			

13     108/05/13- 108/05/19     Inheritance, polymorphism, and interfaces (2)       14     108/05/19- 108/05/20     Exceptions and input/output operations (1)       15     108/05/20- 108/05/20     Exceptions and input/output operations (2)       16     108/05/20- 108/05/20- 108/05/20- 108/05/20- 108/05/20- 108/05/20- 108/05/20- 108/05/20- Recursion     Graphical user interfaces       17     108/05/20- 108/05/20- 108/05/20- 108/05/20- Recursion     Recursion       18     108/05/20- 108/05/20- 108/05/20- Recursion     Recursion       18     108/05/20- 108/05/20- 108/05/20- Recursion     Final Exam Week       18     108/05/20- 108/05/20- 108/05/20- Recursion     There is no make-up quiz and assignment if you miss the deadline without a reason.       Requirement     There is no make-up quiz and assignment if you miss the deadline without a reason.     There is no make-up quiz and assignment if you miss the deadline without a reason.       Reference(s)     J.Anderson and H. Franceschi. "Java Illuminated - An Active Learning Approach." Sth ed., jones & Bartlett Learning LLC, 2019.       Reference(s)     10     (Filled in by assignment instructor only)       Assignment(c)     10     (Filled in by assignment instructor only)       Seried     Seried     Seried       Instructional Police     % Mark of Usual : 10.0 % Midterm Exam : 20.0 % % Other (labs) : 50.0 %       Note     Site Jubit Site Learnic Affairs at http://wwa.acad tkue du tw//S/main.pip.			
14       184,05/25       Exceptions and input/output operations (1)         15       108,05/27~       Exceptions and input/output operations (2)         16       108,06/09       Graphical user interfaces         17       184,06/02       Recursion         18       108,06/03-       Recursion         18       108,06/02-       Interestion         18       108,06/02-       Final Exam Week         18       108,06/02-       Final Exam Week         Requirement       There is no make-up quiz and assignment if you miss the deadline without a reason.         Teaching Facility       Computer, Projector         Textbook(s)       J. Anderson and H. Franceschi, "Java Illuminated - An Active Learning Approach," 5th ed., jones & Bartlett Learning LLC, 2019.         Reference(s)       I.0       (Filled in by assignment instructor only)         §rading Policy <ul> <li>Attendance : %  Mark of Usual : 10.0 %  Midterm Exam : 20.0 %</li> <li>Other (Tabs) : 50.0 %</li> <li>Other (Tabs) : 50.0 %</li> <li>This syllabus may be uploaded at the website of Course Syllabus Management System at http://man.edu as thttp://www.acad.tku.edu/wCS/main.php.         Note       This syllabus may be uploaded at the thit of Course Syllabus Management System at http://main.php.         Note       This syllabus may be uploaded at the thit of Course Syllabus Upload posted on the home page of TKU Office of Academic Affai</li></ul>	13		Inheritance, polymorphism, and interfaces (2)
15       108,06,02       Exceptions and input/output operations (2)         16       108,06,03	14		Exceptions and input/output operations (1)
16       108,06/09       Graphical user interfaces         17       108,06/10       Recursion         18       108,06/17       Final Exam Week         18       108,06/17       Final Exam Week         Requirement       There is no make-up quiz and assignment if you miss the deadline without a reason.         Teaching Facility       Computer, Projector         Textbook(s)       J. Anderson and H. Franceschi, "Java Illuminated - An Active Learning Approach, " 5th ed., jones & Bartlett Learning LLC, 2019.         Reference(s)       Iourber of Assignment (structure only)         Grading Policy       • Attendance : % • Mark of Usual : 10,0 % • Midterm Exam : 20,0 %         Ørading Policy       • Other < Labs > : 50, 0 %         Note       This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/cSp">http://info.ais.tku.edu.tw/cSp</a> or through the link of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/cSp">http://info.ais.tku.edu.tw/cSp</a> or through the link of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/cSp">http://info.ais.tku.edu.tw/cSp</a> or through the link of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/cSp">http://info.ais.tku.edu.tw/cSp</a> or through the link of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/cSp">http://info.ais.tku.edu.tw/cSp</a> or through the link of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/cSp">http://info.ais.tku.edu.tw/cSp</a> or through the link of Course	15	<sup>108/05/27 ~</sup> Exceptions and input/output operations (2)	
17       108/06/16       Recursion         18       108/06/17~ 108/06/23       Final Exam Week         Requirement       There is no make-up quiz and assignment if you miss the deadline without a reason.         Teaching Facility       Computer, Projector         Textbook(s)       J. Anderson and H. Franceschi, "Java Illuminated - An Active Learning Approach," 5th ed., jones & Bartlett Learning LLC, 2019.         Reference(s)       Ion (Filled in by assignment instructor only)         Number of Assignment(s)       • Attendance : % ◆ Mark of Usual : 10.0 % ◆ Midterm Exam : 20.0 % • Other (1abs) : 50.0 %         Reference(s)       This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Management System at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Management System at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Management System at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Management System at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Management System at <a href="http://infc.ais.tku.edu.tw/csg">http://infc.ais.tku.edu.tw/csg or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a< td=""><td>16</td><td></td><td>Graphical user interfaces</td></a<></a></a></a></a></a></a></a>	16		Graphical user interfaces
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