University / Academy: Menoufia University

College / Institute: Faculty of Electronic Engineering

Department: Computer Science and Engineering

Course Specification

1- Course basic information:		
Course Code: CSE 365	**Course Title:** **Selected Topic (1) - Java and applications**	**Academic year: 2011/2012** **Level (3) – Semester : 1**
Faculty requirement	**Teaching hours: Lecture** $\boxed{3}$ **Tutorial** $\boxed{1}$ **Lab** $\boxed{-}$	

2- Aim of the course	_ To understand the basics of object oriented programming (OOP). _ To understand how to design and write a complete program. _ To understand the fundamental of Java programming Language. _ To understand the fundamental of windows programming.
3- Intended Learning Outcomes:	
A- Knowledge and Understanding:	a1. Concepts and theories of mathematics and sciences, appropriate to the computer science and engineering. a5. Methodologies of solving engineering problems, data collection and interpretation a16. Related research and current advances in the field of computer software and hardware.
B- Intellectual Skills	b1. Select appropriate mathematical and computer-based methods for modeling and analyzing problems. b3. Think in a creative and innovative way in problem solving and design. b8. Select and appraise appropriate ICT tools to a variety of

	engineering problems.
	b15. Select, synthesize, and apply suitable IT tools to computer engineering problems.
	b16. Proposing various computer-based solutions to business system problems.
C- Professional Skills	c9. Demonstrate basic organizational and project management skills.
	c11. Exchange knowledge and skills with engineering community and industry.
	c12. Prepare and present technical reports.
	c13. Design and operate computer-based systems specifically designed for business applications.
	c14. Use appropriate specialized computer software, computational tools and design packages throughout the phases of the life cycle of system development.
	c15. Write computer programs on professional levels achieving acceptable quality measures in software development.
D- General Skills	d1. Collaborate effectively within multidisciplinary team.
	d3. Communicate effectively.
	d4. Demonstrate efficient IT capabilities.
	d5. Lead and motivate individuals.
	d6. Effectively manage tasks, time, and resources
	d7. Search for information and engage in life-long self learning computer science and engineering.
4- Course Contents	**Introduction to Object Oriented Programming - Introduction to java applications - Control structure - Methods - Arrays - Applets - Graphical User Interface components - Exception handling - Multithreading - Files and streams - Database connectivity.**
5- Teaching and Learning Methods	- **Lectures.** - **Exercises and tutorials.** - **Research assignments.**

6- Teaching and Learning Methods for disable students	N/A

7- Student Assessment

a- Assessment Methods	- **Reports, assignments, exercises, and midterm and final written exams to assess knowledge and understanding.** - **Regular oral and written quizzes to assess intellectual skills** - **Oral exams to assess professional skills.** - **Reports, assignments, and discussions to assess general and transferable skills.**
b- Assessment Schedule	- **Quizz-1:** **Week <u>no</u> 5** - **Mid-Term exam:** **Week <u>no</u> 8** - **Quizz-2:** **Week <u>no</u> 11** - **Quizz-3:** **Week <u>no</u> 14** - **Final – term examination:** **Week <u>no</u> 15**
c- Weighting of Assessment	- **Class tutorial and quizzes :** **5 %** - **Mid-term examination:** **10 %** - **Case study and/or practical exam:** **10 %** - **Final – term examination:** **70 %** - **Other types of assessment:** **5 %** **Total 100 %**

8- List of text books and references:

a- Course notes	- There are lectures notes prepared in the form of a book authorized by the department.
b- Text books	- **H. M. Deitel**, "**Java™ How to Program, Sixth Edition**", 2005.
c- Recommended books	- None.
d- Periodicals, Web sites ………etc	- None.

Course Contents - ILOs Matrix

Content Topics	Week	A- Knowledge & Understanding	B- Intellectual skills	C- Professional and practical skills	D- General and transferable skills
Introduction to Object Oriented Programming	1	a1, a5	b1, b3	c12, c14	d1, d3, d4, d5
Introduction to java applications	2	a1, a5	b1, b3	c12, c14	d1, d3, d4, d5
Control structure	3	a1, a5	b1, b3	c12, c14	d1, d3, d4, d5
Methods	4	a1, a5	b1, b3	c12, c14	d1, d3, d4, d5
Arrays	5	a1, a5	b1, b3	c12, c14	d1, d3, d4, d5
Applets	6	a1, a5, a16	b1, b3, b8, b15, b16	c9, c11, c12, c13, c14, c15	d1, d3, d4, d5, d6, d7
Graphical User Interface components	7, 8	a1, a5, a16	b1, b3, b8, b15, b16	c9, c11, c12, c13, c14, c15	d1, d3, d4, d5, d6, d7
Exception handling	9	a1, a5, a16	b1, b3, b8, b15, b16	c9, c11, c12, c13, c14, c15	d1, d3, d4, d5, d6, d7
Multithreading	10, 11	a1, a5, a16	b1, b3, b8, b15, b16	c9, c11, c12, c13, c14, c15	d1, d3, d4, d5, d6, d7
Files and streams	12	a1, a5, a16	b1, b3, b8, b15, b16	c9, c11, c12, c13, c14, c15	d1, d3, d4, d5, d6, d7
Database connectivity	13, 14	a1, a5, a16	b1, b3, b8, b15, b16	c9, c11, c12, c13, c14, c15	d1, d3, d4, d5, d6, d7

Course coordinator: **Head of Department:**

Dr. Osama Elshakankiry   **Prof. Nawal Ahmed El-Fishawy**

Date: / /

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