

ADVANCED PROGRAMMING1 COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Baghdad University / College of Science for Women
2. University Department/Centre	Computer Science Department
3. Course title/code	Advanced Programming / 305 CAP1
4. Programme(s) to which it contributes	For intermediate level programmer
5. Modes of Attendance offered	Actual and Internal Mode of Attendance and there is no study remotely by the laws in force.

6. Semester/Year	first semester / Third Year
7. Number of hours tuition (total)	60 hours (30 hours a theoretical , 30 an hour practical)
8. Date of production/revision of this specification	11/4/2016
9. Aims of the Course	
<p>This course is training on Java programming language for the students who completed the course programming concepts or have some experience in the field of programming. Students will create Java applications with a focus on the correct object-oriented programming techniques, which will become subsequently familiar with object-oriented design, including the establishment of classes in Java and use the existing categories as set out in the current version of the Java programming interface applications.</p>	
<p>Acquire the necessary programming skills in one of the modern high-level languages.</p>	
<p>This course aims to familiarize the student to write object-oriented programs by learning a language object-oriented.</p>	

10· Learning Outcomes, Teaching ,Learning and Assessment Method
DD- Knowledge and Understanding A1.Writing object-oriented programs through the Java language.
EE-B. Subject-specific skills B1. Learning the high-level object-oriented programming language such as (JAVA).
Teaching and Learning Methods

- Learning: provide printed lectures and modern, diverse and rich sources of examples.
- Learning: to use the blackboard to the goal of teaching students and explain the steps the solution and extraction results.
- Education: resolving some questions.
- Learning: asking questions and inquiries and make the student turn into a teaching explanation and solution on the blackboard at that stage.
- Learning: direct questions and each student is experimenting to see how interaction and the rest to pay attention to.
- Learning: give a group of questions as a duty to students to encourage them to follow up article where by solving those questions to know whether he has been absorbing material or not.

Assessment methods

- Questions sudden and overlapping put up with to explain the article.
- daily and quarterly tests.

C. Thinking Skills

C1. ask for the same problem Solutions Group and discussed both individually and determine the appropriate method of solution to the problem at hand with a stand on the disadvantages of the rest of the methods.

C2. provides a set of basic skills and topics that cover the basics of the work of loops and the use of arrays and functions and programmable objects taking it to the subject of classes, such as building a software encapsulates data and software processed in a unified format is easy to use, and touch on the subject of classes to achieve by the Organization of the re-use of optimized software that has been built. As The course covers how the graphical user interfaces.

planned for the semester involves the study of an integrated project in which all the above tools employed add to the experience gained in the relevant training courses.

Teaching and Learning Methods

Discussions that arise in the course of the lecture and try to involve the largest possible number of students, and touched on the details of things and discussed objectively and targeted discussion.

Assessment methods

- Oral evaluated by involving students in discussions.
- quizzes.
- daily, quarterly exams.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1- give duties to students and ask them to solve them to know where their strengths and weaknesses.

D2- alert on errors in the oral answers of students and discussed to see their mistake.

D3- alert on errors in the answers written by students and notation to clarify the student.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Learn the concept of the class and object	Concept of Class and Object	According to above point 10 and as needed	According to above point 10 and as needed
2	2	Learn the concept of the class and object	Concept of Class and Object	According to above point 10 and as needed	According to above point 10 and as needed
3	2	Overview of the Java language	An Overview of Java	According to above point 10 and as needed	According to above point 10 and as needed
4	2	Learning data types, variables and arrays	Data Types, Variables, and Arrays	According to above point 10 and as needed	According to above point 10 and as needed
5	2	Learning operations	Operators	According to above point 10 and as needed	According to above point 10 and as needed
6	2	Learning tools and control statements	Control Statements	According to above point 10 and as needed	According to above point 10 and as needed
7	2	Learning Methods and Classes	A Closer Look at Methods and Classes	According to above point 10 and as needed	According to above point 10 and as needed
8	2	first semester exam	First examination		
9	2	Learn the concept of inheritance	Inheritance	According to above point 10	According to above point 10

				and as needed	and as needed
10	2	Learn methods of Overriding	Method Overriding	According to above point 10 and as needed	According to above point 10 and as needed
11	2	Learning the concept of Packages and Interfaces	Packages and Interfaces	According to above point 10 and as needed	According to above point 10 and as needed
12	2	Learn how to use Abstract Classes	Using Abstract Classes	According to above point 10 and as needed	According to above point 10 and as needed
13	2	use of the concept of inheritance	Using final with Inheritance	According to above point 10 and as needed	According to above point 10 and as needed
14	2	Learning Object Class	Object Class	According to above point 10 and as needed	According to above point 10 and as needed
15	2	final exam	Final examination		

12. Infrastructure

Required reading:

- CORE TEXTS
- COURSE MATERIALS
- OTHER

1. Java: The Complete Reference, Seventh Edition, Herbert Schildt, MC Graw Hill 2007.
2. Java 2: The Complete Reference, Fifth Edition, Herbert Schildt, MC Graw Hill 2002.

13. Admissions	
Pre-requisites	Programming language ((C++))
Minimum number of students	25
Maximum number of students	35
Lectures , internship , field studies)	