



University of Bahrain  
Quality Assurance and Accreditation Center

Course Syllabus Form

1. <b>Course code:</b>	ITCS114	2. <b>Course title:</b>	Computer Programming II			
3. <b>College:</b> Information Technology						
4. <b>Department:</b> Computer Science						
5. <b>Program:</b> B.Sc. in: Computer Science/Computer Engineering/Information Systems						
6. <b>Course credits:</b> 3-2-3						
7. <b>Course NQF Level:</b> 6						
8. <b>NQF Credits:</b> 12						
9. <b>Prerequisite:</b> ITCS113						
10. <b>Lectures Timing &amp; Location:</b> Sec 09: MW ( 13:00 - 14:15 ) -- S40-1047 Sec 10: MW ( 14:30 - 15:45 ) -- S40-1047 Sec 13: UTH ( 12:00 - 12:50 ) -- S40-2086						
11. <b>Course web page:</b> blackboard.uob.edu.bh						
12. <b>Course Instructor:</b> Alia AlKameli						
13. <b>Office Hours and Location:</b> MW ( 12:00 - 13:50 ) or upon request S40-2059						
14. <b>Course coordinator:</b> Dr. Amal Ghanem						
15. <b>Academic year:</b> 2023-2024						
16. <b>Semester:</b>		First	✓	Second		Summer
17. <b>Textbook(s):</b> Java, An Introduction to Problem Solving and Programming, 7 <sup>th</sup> Edition by Walter Savitch.						
18. <b>References:</b>						
19. <b>Other learning resources used (e.g. e-Learning, field visits, periodicals, software, etc.):</b> Blackboard (e-Learning), Java Software						

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**Note: Additional information could be added as required by the Instructor, (eg, Policies)**

**Note: Items shown underlined cannot be changed without the department consent.**

QF-20-rev.a.4

<b>20. Course description (as published):</b> This course covers key concepts of object-oriented programming. Topics include object-oriented design, encapsulation, event handlers, memory management, arrays, exception handlers, searching algorithms, programming applications.											
<b>21. Course Intended Learning Outcomes (CILOs):</b>											
	<i>Mapping to PILOs</i>										
<i>CILOs</i>	1	2	3	4	5	6	7	8	9	10	11
1. Analyze familiar and new problems, some of which are at the advanced level.	✓										
2. Design and implement a solution for a given problem of moderate complexity some of which are at the advanced level.		✓				✓					
3. Develop programs using classes, methods, objects, and arrays.		✓				✓					
4. Develop programs using event and exception handling.		✓				✓					
5. Develop GUI programs.		✓				✓					
6. Develop programs using streams, and File I/O.		✓				✓					
7. Solve problems using recursion.		✓									
8. Investigate and analyze IT Careers and entrepreneurship.				✓							
9. Investigate and plan for participating in professional societies and professional certification.				✓							
<b>22. Course assessment:</b>											
<i>Assessment Type</i>	<i>Details/ Explanation of Assessment in relation to CILOs</i>			<i>Number</i>	<i>Weight</i>	<i>Date(s)</i>					
Quizzes	Practical and written Quizzes, As shown in table 24/ CILOs:1,2,3,4,5,6			2 Practical quizzes (10%) + 2 Written Quizzes (10%)	20 %	As shown in Table 24					
Examinations	Midterm Test, CILOs:1,2,3,4			1	25 %	<b>TBA</b>					
Laboratory/Practical	As shown in table 24/ CILOs:1,2,3,4,5,6,7			5	10 %	As shown in Table 24					
Assignments	Soft Skills Assignments, CILOs: 8,9			2	5 %	As shown in Table 24					
Projects/Case Studies	-			-	-	-					
Final Examination	Written Final Exam CILOs:1,2,3,4,5,6,7			1	40%						
<b>Total</b>					100%						

<b>23. Description of Topics Covered</b>	
<i>Topic Title (e.g. chapter/experiment title)</i>	<i>Description</i>
<b>Chapter (6)</b>	Static Variables, Static Methods, Overloading Basics, and Information Hiding
<b>Chapter (7)</b>	Arrays in Classes and Methods, Programming with arrays and classes, searching and Sorting algorithms
<b>Chapter (9)</b>	Basic Exception Handling
<b>Chapter (10)</b>	Overview of stream and files, reading from text files and writing into text files.
<b>Chapter (11)</b>	The basics of recursion
<b>Graphical User Interface (GUI)</b>	Develop GUI programs: Buttons, text fields, radio buttons, checkboxes, combo box, images, containers

<b>24. Weekly Schedule</b>					
<i>Week</i>	<i>Date</i>	<i>Topics covered</i>	<i>CILOs</i>	<i>Teaching Method</i>	<i>Assessment</i>
1	11-Feb-24	Revision + Chapter 6 Objects and Methods 6.2-6.3: Static variables and static methods, writing methods.		Problem-Solving Learning, Practical and Laboratory Learning	Tutorial
2	18-Feb-24	Chapter 6 Objects and Methods 6.4-6.6: Overloading, Information hiding.	1,2,3	Problem-Solving Learning, Practical and Laboratory Learning	Assignment #1
3	25-Feb-24	Chapter 7 Arrays 7.2-7.3 : Arrays and Classes	1,2,3	Problem-Solving Learning, Practical and Laboratory Learning	Written Quiz(1) – Chapter 6 Tutorial
4	3-Mar-24	Chapter 7 Arrays 7.2-7.3 : Arrays and Classes	1,2,3	Problem-Solving Learning, Practical and Laboratory Learning	Assignment #2
5	10-Mar-24	Chapter 7 Arrays 7.2-7.3 : Arrays and Classes		Problem-Solving Learning, Practical and Laboratory Learning	Tutorial
6	17-Mar-24	7.4 : Searching and Sorting + [Soft Skills #1] Personal Goals/IT Careers/Entrepreneurship	1,2,3	Problem-Solving Learning, Practical and Laboratory Learning	Assignment #3
7	24-Mar-24	9 Exception Handling 9.1: Basic exception handling Chapter 10 Streams, File I/O 10.1-10.2 Overview, Text-File I/O	1,2,3	Problem-Solving Learning, Practical and Laboratory Learning	Practical Quiz#1 [Ch-7]

8	31-Mar-24	Mid-Semester Break			
9	7-Apr-24	Chapter 10 Streams, File I/O 10.3 techniques for any file, test files and arrays. + <b>[Soft Skills #2]</b> Develop a personal Program Plan including participating in professional societies and professional certification	1,2,3,4,5	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Assignment #4
10	14-Apr-24	Graphics Supplements-1	1,2,3,4,5	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Written Quiz (2) – Chapter (9.1)  Tutorial
11	21-Apr-24	Graphics Supplements-2	1,2,3,5,6	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Assignment #5
12	28-Apr-24	Graphics Supplements-3	1,2,3	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Tutorial
13	5-May-24	Chapter 11 Recursion	1,2,3	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Practical Quiz#2
14	12-May-24	Introduction to Data Structures and Abstract Data Types (ADTs); Composition; inheritance	1,2,3,7	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Tutorial
15	19-May-24	Inheritance (cont.), sub-typing, abstract base classes	1,2,3,7	<i>Problem-Solving Learning, Practical and Laboratory Learning</i>	Tutorial
16	26-May-24	Revision			

#### Academic Integrity Statement

Honesty and integrity are integral components of the academic process. Students are expected to be honest and ethical at all times in their pursuit of academic goals in accordance with the Regulations of Professional Conduct Violations for University of Bahrain Students, the UOB Plagiarism Policy and the UOB Guide to Students Rights and Duties. Any breach of academic integrity will be dealt according to the University Regulations for Professional Conduct Violations.

Prepared by:

Date: