اعتماد
NCAAA

T4

2020

Course Specifications

Course Title:	Computer Programming 1
Course Code:	CP31
Program:	Diploma in Programming and Computer Sciences
Department:	Technology department
College:	Applied College
Institution:	Taif University

Table of Contents

A. Course Identification

1. Credit hours: **4** (2 hours/week theoretical +1 hour/week practical)	

2. Course type

a. University ☐   College ☐   Department ☐   Program ☑

b. Required ☑   Elective ☐

3. Level/year at which this course is offered: First Year / Third Level

4. Pre-requisites for this course (if any):

Null

5. Co-requisites for this course (if any)**:**

Null

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	3 hours/week	50%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other (Lab)**	3 hours/week	50%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	30
3	**Tutorial**	
4	**Others** (specify)	
	Total	60

B. Course Objectives and Learning Outcomes

1. Course Description

In this course on computer programming students are taught basic programming concepts, such as, variables and constants, control structures, through programming in Java. They learn to write programs that use various data types, methods, arrays, and I/O from/ to console and files.

2. Course Main Objective

This course provides an introduction to computer programming. Students at the end of this course are able to write computer programs in Java to solve simple computing problems.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Understand the basic terminology used in Java Programming Language.	K2
1.2	Understand the use of basic control structures	K2
1.3	Define how to use arrays and handle files,	K2
2	**Skills :**	
2.1	Execute programs written in Java language (write, compile and debug).	S1
2.2	Use different data types in a computer program.	S2
2.3	Design programs involving decision structures and loops.	S2
3	**Values:**	
3.1	Null	

C. Course Content

No	List of Topics	Contact Hours
1	Introduction: Introduction Java Feature Programming	6 (3H theoretical + 3H practical)
2	I/O statement from/ to console, variables, data typesand naming conventions assignment.	6
3	Increment/decrement operations, type casting arithmetic operationsand operator precedence.	6
4	If statement, nested ifand if-else statement.	6
5	logical operationsand switch statement.	6
6	Loop statements: for, while and do-while statements.	6
7	Nested loops, break and continue statements.	6
8	Methods and signature .	6
9	Arrays handling.	6
10	Files Input/output handling.	6
Total		60

D. Teaching and Assessment
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	TeachingStrategies	AssessmentMethods
1.0	**Knowledge and Understanding**		
1.1	Understand the basic terminology used in computer programming.	Lectures	**Direct** Quizzes / Homework Exams **Indirect** Course Exit Survey
2.0	**Skills**		
2.1	Execute programs written in Java language (write, compile and debug).	Lectures Labs	**Direct** Quizzes / Homework Exams

Course Specifications

Code	Course Learning Outcomes	TeachingStrategies	AssessmentMethods
			Indirect Course Exit Survey
2.2	Use different data types in a computer program.	Lectures Labs	**Direct** Quizzes / Homework Exams **Indirect** Course Exit Survey
2.3	Design programs involving decision structures and loops.	Lectures Labs	**Direct** Quizzes / Homework Exams **Indirect** Course Exit Survey
3.0	**Values**		
	Null		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	HomeWorks/StudentParticipation-Attendance	Every Week	5%
2	Research/ Quizzes	3 →10	5%
3	Mid-Term	6	20%
4	Final Labs Exam	11	20%
5	Final Examination	12	50%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

✓ Providing a guide for each group of students, and distributing student lists electronically to faculty members.
✓ There is an academic advising guide that defines the role of the faculty member in the academic advising process.
✓ The program supervisor is available throughout the year to answer student inquiries.
✓ Availability of full information about the program and its members and ways to communicate with them.
✓ Use the Learning Management System (Black Board) to communicate with students
❖ Student Handbook, Deanship of Student Affairs.
  https://www.tu.edu.sa/Attachments/893d1c33-3156-44d7-b4b8-e203d4cca737_.pdf
❖ Student Handbook at Taif University.
  https://www.tu.edu.sa/Attachments/41dc8a24-22b7-4ae1-9b31-3608de8bcf8b_.pdf

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	❖ Paul Deitel, Harvey M. Deitel, Java How to Program, 9th Edition, Prentice Hall, 2011, ISBN-13: 9780132575669

Essential References Materials	❖ Y. Daniel, Introduction to Java Programming, Comprehensive Version Liang Publisher: Prentice Hall; 10th edition (January 6, 2014). ISBN-10: 0133761312 ISBN-13: 978-0133761313 ❖ Walter Savitch, Java: An Introduction to Problem Solving and Programming, (6Th Edition) ❖ S. Reges& M. Stepp, Building Java Programs (3rd Edition) Publisher, Pearson. ISBN-13: 978-0133360905, 2013
Electronic Materials	❖ Browsing and searching sites on the Internet Google. ❖ Saudi Digital Library: https://sdl.edu.sa/SDLPortal/Publishers.aspx ❖ The digital repository of Taif University: http://applications/eLibrary
Other Learning Materials	❖ Course presentation slides submitted by the course coordinator (if any).

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	❖ Classroom with 50 chairs ❖ Lab with 25 chairs
Technology Resources (AV, data show, Smart Board, software, etc.)	❖ Availability of a Data Show ❖ Provides a smart board. ❖ Provide a whiteboard and colored whiteboard pens.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	❖ Null

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching	• Students • Faculty members • Coordinator • Council • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees
Effectiveness of assessment	• Students • Faculty members • Coordinator • Council • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees
Extent of course achievement	• Students • Faculty members • Coordinator	• Course exit survey • Feedback from Faculty members • Feedback from Course

Evaluation Areas/Issues	Evaluators	Evaluation Methods
	• Council • Curriculum Committees	Coordinator • Feedback from council • Feedback from Curriculum Committees
Extent of course learning outcomes	• Students • Faculty members • Coordinator • Council • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees
Quality oflearning resources	• Students • Faculty members • Coordinator • Council • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	