T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specification
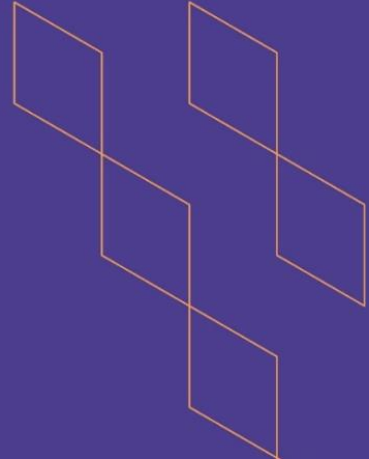
Course Title: **Introduction to Programming**	
Course Code: **1331 CIS**	
Program: **Information Systems**	
Department: **NA**	
College: **Applied College**	
Institution: **King Khalid University**	
Version: **1**	
Last Revision Date: **6 August 2023**	

Table of Contents:

A. General information about the course:

Course Identification	
1. Credit hours:	3
2. Course type	
a.	University ☐ College ☐ Department☐ Track☐ Others☒
b.	Required ☒ Elective☐
3. Level/year at which this course is offered:	1st Level
4. Course general Description:	
This course is designed for students with no prior programming experience. It introduces the fundamental concepts of JAVA programming Language.	
5. Pre-requirements for this course (if any):	
6. Co- requirements for this course (if any):	
7. Course Main Objective(s):	

- Learn the fundamental programming concepts and methodologies, which are essential to building good JAVA programs.
- practice the fundamental programming methodologies in JAVA programming language
- Code, document, test, and implement a well-structured, robust computer program using the JAVA programming language.

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	64	100
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours

1.	Lectures	5	32
2.	Laboratory/Studio		32
3.	Field		
4.	Tutorial		
5.	Others (specify)		
	Total		64

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recognize the Basic programming concepts	k2	Lectures	Exams, Quizzes, lab
1.2	Describe Object-Oriented Programming		Lectures	Exams, Assignments, Quizzes
2.0	Skills			
2.1	Develop, debug and test JAVA programs	s1	Lectures + Lab	Exams, Assignment and Labs
2.2	Use stepwise refinement to solve problems.	s2	Lectures + Lab	Exams, Assignment and Labs
3.0	Values, autonomy, and responsibility			
3.1	Design and develop computer programs using JAVA language.	v1	Lectures + Lab + Independent Work	Exams, Assignments and presentation
3.2	Communicate effectively as an individual and as a member of a team	v2	Lab, Independent Work, Groupwork	Exams, Assignments and presentation
3.3	Work effectively as an individual and as a member of a team	v3	Lab, Independent Work, Groupwork	

C. Course Content

No	List of Topics	Contact Hours
1.	**Introduction** ● Definition of Computer Program ● Definition of Programming Language ● Levels of Programming Languages ● Types of Translators	3 T
2.	**Basic Programming Concepts:** ● Structure of JAVA language program ● Basic Input/output ● Comments	5T +6P

	● Fundamental Data types ● Variables ● Operators	
3.	**Conditional Statements:** ● if ● if-else ● if else if ● switch	6T + 10P
4.	**Looping Statements** ● for loop ● while loop ● do-while loop	6T + 6P
5.	**Arrays** ● One-dimensional Array ● Two-dimensional Array	6T + 4P
6.	**Java-Object Oriented Programming**	6T + 6P
Total		64

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz 1	4	5
2.	Midterm Exam 1	7	10
3.	Practical Assessment	1 to 16	30
4.	Midterm Exam 2	12	10
5.	Quiz 2	14	5
6.	Final Exam	After week 16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	**The Complete Reference :JAVA 12th Edition** *by Herbert Schildt* ISBN: **978-1260463415** November - 2021
Supportive References	**Head First Java: A Brain-Friendly Guide** Publishing, Inc.
Electronic Materials	https://lms.kku.edu.sa/ https://www.coursera.org/
Other Learning Materials	https://www.java.com/en/about/oracleacademy.jsp Java Tutorial | Learn Java Programming - javatpoint

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	• Lecture Room with enough capacity Chairs Projector/Screen. • Laboratories with Computers
Technology equipment (projector, smart board, software)	• Laboratories computers with Java Programming Language Software. • Projectors, Computer for Theory Classes and Practical Sessions.
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect
Effectiveness of students assessment	Course Teacher	Direct
Quality of learning resources	Program Supervisor, Quality Unit	Direct
The extent to which CLOs have been achieved	Course Teacher	Direct
Other	Course Teacher, Quality Unit	Direct

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	