T-104
2022

Course Specification

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission
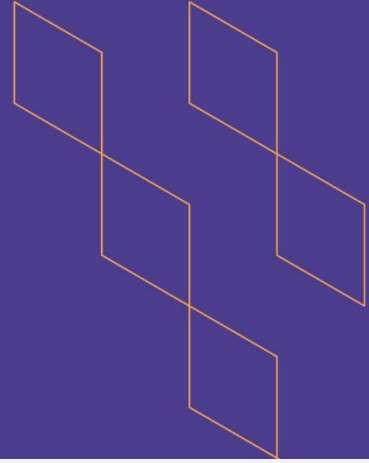
Course Title:	**Introduction to Computer**
Course Code:	**1301 CIS**
Program:	**Information Systems**
Department:	**NA**
College:	**Applied College**
Institution:	**King Khalid University**
Version:	**1**
Last Revision Date:	**6 August 2023**

Table of Contents:

A. General information about the course:

Course Identification

1. Credit hours:	

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 an introduction to the core concepts of computers and an overview of current computing technologies, including data representation and storage, hardware and software organization, networking and communications technologies, and fundamental problem solving and programming skills. Moreover, the course aims to introduce students to foundational knowledge about artificial intelligence.

5. Pre-requirements for this course (if any):

6. Co- requirements for this course (if any):

7. Course Main Objective(s):

- The course aims to address the importance of computers and its uses.
- Computer fundamentals, hardware and software uses.
- Computer system organization and numbering systems.
- Usage of MS Office packages and utility programs.
- Solve simple problems by using algorithms, flow chart and programming skills.
- Foundational Knowledge about AI and its Applications

1. Teaching mode (mark all that apply)

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

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	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	Define Computer Science basics		Lectures	Exams, Quizzes, lab
1.2	Explain the concepts of Computer System Organization		Lectures	Exams, Assignments, Quizzes
1.3	Describe the principles of Computer Networks and operating systems	k1	Lectures	Exams, Assignments, Quizzes
1.4	Describe the Algorithmic Foundations of Computer Science.	k2	Lectures + Lab	Exams, Lab, Quizzes
1.5	Explain the concepts of the High-Level Python Programming Language		Lectures	Exams, Lab, Quizzes
1.6	Explain the concepts of Artificial Intelligence		Lectures	Exams, Quizzes
2.0	Skills			
2.1	Differentiate software types and functions		Lectures + Lab	Exams, Assignment and Labs
2.2	Recognize various network types and components	S1	Lectures + Lab	Exams, Assignment and Labs
2.3	Design algorithms using pseudo code	S3	Lectures + Lab	Exams, Assignment and Labs
2.4	Acquire basic programming skills in Python		Lectures + Lab	Exams, Assignment
3.0	Values, autonomy, and responsibility			
3.1	Participate in projects using Microsoft Office packages and Programming Language	v1	Lectures + Lab	Exams, Assignments and presentation
3.2	Practice and work professionally using hardware & software	v2	Lab	Exams, Assignments and presentation

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Computer Science	4
2.	Computer System Organization	5
3.	Operating System Basics	4
4.	Computer Networking and Internet	4
5.	Numbering System	4
6.	Overview of Algorithms	4
7.	Python Programming Language	4
8.	Introduction to Artificial Intelligence and its Applications	3
	Total	32
1	Practical: Microsoft Office – MS Word and MS Excel	16
2	Operating System – Windows, Network Devices and configuration.	8
3.	Fundamentals of Python Programming Language	8
	Total	32
	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	▪ ISE Computing Essentials 2023, Timothy J. O'Leary, Linda I. O'Leary and Daniel O'Leary, 29th Edition, ISBN-13: 978-1265263218 ▪ Python 3: The Comprehensive Guide to Hands-On Python Programming Paperback (1st Edition), by Johannes Ernesti, Peter Kaiser, ISBN-13: 978-1493223022, Publisher: Rheinwerk Computing (2022). ▪ Artificial Intelligence & Generative AI for Beginners, The Complete Guide (2023), by David Patel, ISBN-13: 979-8850705527
Supportive References	Introduction to Computers 8th edition (Shelly Cashman Series) ISBN-13: 978-1439081310
Electronic Materials	https://lms.kku.edu.sa/ https://www.coursera.org/
Other Learning Materials	All other materials will be made available via course's Blackboard page

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 computer with Microsoft office package and Python 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

Assessment Areas/Issues	Assessor	Assessment Methods
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	