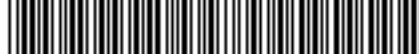


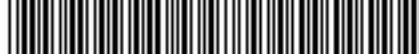
## Course Specifications

|               |                                              |
|---------------|----------------------------------------------|
| Course Title: | Computer Fundamentals                        |
| Course Code:  | IT 112                                       |
| Program:      | Computer Science/ Information Technology     |
| Department:   | Information Technology                       |
| College:      | College of Computer and Information Sciences |
| Institution:  | Majmaah University                           |



## Table of Contents

|                                                                                                |          |
|------------------------------------------------------------------------------------------------|----------|
| <b>A. Course Identification.....</b>                                                           | <b>3</b> |
| 6. Mode of Instruction (mark all that apply) .....                                             | 3        |
| <b>B. Course Objectives and Learning Outcomes.....</b>                                         | <b>3</b> |
| 1. Course Description .....                                                                    | 3        |
| 2. Course Main Objective.....                                                                  | 3        |
| 3. Course Learning Outcomes .....                                                              | 4        |
| <b>C. Course Content .....</b>                                                                 | <b>4</b> |
| <b>D. Teaching and Assessment .....</b>                                                        | <b>4</b> |
| 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods ..... | 4        |
| 2. Assessment Tasks for Students .....                                                         | 5        |
| <b>E. Student Academic Counseling and Support .....</b>                                        | <b>5</b> |
| <b>F. Learning Resources and Facilities.....</b>                                               | <b>5</b> |
| 1. Learning Resources .....                                                                    | 5        |
| 2. Facilities Required.....                                                                    | 6        |
| <b>G. Course Quality Evaluation .....</b>                                                      | <b>6</b> |
| <b>H. Specification Approval Data .....</b>                                                    | <b>6</b> |



## A. Course Identification

|                                                               |                                              |                                             |                                     |
|---------------------------------------------------------------|----------------------------------------------|---------------------------------------------|-------------------------------------|
| <b>1. Credit hours:</b> 3(4,1,0)                              |                                              |                                             |                                     |
| <b>2. Course type</b>                                         |                                              |                                             |                                     |
| a.                                                            | University <input type="checkbox"/>          | College <input checked="" type="checkbox"/> | Department <input type="checkbox"/> |
| b.                                                            | Required <input checked="" type="checkbox"/> | Elective <input type="checkbox"/>           | Others <input type="checkbox"/>     |
| <b>3. Level/year at which this course is offered:</b> Level 1 |                                              |                                             |                                     |
| <b>4. Pre-requisites for this course (if any):</b> NA         |                                              |                                             |                                     |
| <b>5. Co-requisites for this course (if any):</b> NA          |                                              |                                             |                                     |

## 6. Mode of Instruction (mark all that apply)

| No | Mode of Instruction   | Contact Hours | Percentage |
|----|-----------------------|---------------|------------|
| 1  | Traditional classroom | 55            | 100%       |
| 2  | Blended               |               |            |
| 3  | E-learning            |               |            |
| 4  | Distance learning     |               |            |
| 5  | Other                 |               |            |

## 7. Contact Hours (based on academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1  | Lecture           | 44            |
| 2  | Laboratory/Studio | 11            |
| 3  | Tutorial          |               |
| 4  | Others (specify)  |               |
|    | <b>Total</b>      | <b>55</b>     |

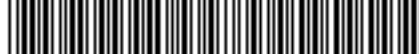
## B. Course Objectives and Learning Outcomes

### 1. Course Description

This course introduces the overview of the fundamentals of computers. Course coverage will include both theoretical and practical understanding of computer fundamentals. The course will teach all kinds of computing devices (like PCs and Macs, tablets, and phones) as well as how to configure and troubleshoot issues related to network or internet. It will teach, how to work with applications and files. Students will also learn about security, safety, and preventative maintenance, along with basics of databases and programming skills.

### 2. Course Main Objective

1. Identify and understand the basic computer components.
2. Understand various operating systems, virtualization, data storage, and sharing.
3. Understand setup, software installation and configuration and troubleshooting devices.
4. Learn how to work with applications and files.
5. Learn to connect to networks and the Internet.
6. Identify security issues affecting the use of computers and networks.



7. Understand some principles of software and database development.

### 3. Course Learning Outcomes

| CLOs |                                                                                                       | Aligned PLOs |
|------|-------------------------------------------------------------------------------------------------------|--------------|
| 1    | <b>Knowledge and Understanding</b>                                                                    |              |
| 1.1  | CLO1: Identify and understand the basic computer components.                                          | K1           |
| 1.2  | CLO5: Understand some principles of software and database development.                                | K1           |
| 1.3  |                                                                                                       |              |
| 1.4  |                                                                                                       |              |
| 2    | <b>Skills :</b>                                                                                       |              |
| 2.1  | CLO2: Understand setup, software installation and configuration, security, and basic troubleshooting. | S2           |
| 2.2  | CLO3: Learn to connect to networks and the Internet                                                   | S2           |
| 2.3  | CLO4: Identify security issues affecting the use of computers and networks.                           | S2           |
| 2... |                                                                                                       |              |
| 3    | <b>Values:</b>                                                                                        |              |
| 3.1  |                                                                                                       |              |
| 3.2  |                                                                                                       |              |
| 3.3  |                                                                                                       |              |
| 3... |                                                                                                       |              |

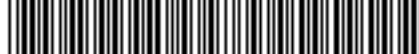
### C. Course Content

| No           | List of Topics                                                 | Contact Hours |
|--------------|----------------------------------------------------------------|---------------|
| 1            | Common computing devices, using a workstation                  | 4             |
| 2            | Use and manage an OS, system troubleshooting                   | 6             |
| 3            | System components, using device interfaces, peripheral devices | 6             |
| 4            | Storage devices, file systems                                  | 4             |
| 5            | Connecting to a network, secure web browsing                   | 6             |
| 6            | Shared storage and mobile devices                              | 4             |
| 7            | Application and databases: Data types, using applications      | 8             |
| 8            | Application development and databases                          | 7             |
| 9            | Systems Security, securing devices,                            | 4             |
| 10           | Access control systems                                         | 3             |
| 11           | Security policies and procedures                               | 3             |
| <b>Total</b> |                                                                | <b>55</b>     |

### D. Teaching and Assessment

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

| Code | Course Learning Outcomes                                     | Teaching Strategies | Assessment Methods                |
|------|--------------------------------------------------------------|---------------------|-----------------------------------|
| 1.0  | <b>Knowledge and Understanding</b>                           |                     |                                   |
| 1.1  | CLO1: Identify and understand the basic computer components. | Classroom Teaching  | Midterm Exam, Quizzes, Final Exam |



| Code       | Course Learning Outcomes                                                                              | Teaching Strategies                        | Assessment Methods                             |
|------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|
| 1.2        | CLO5: Understand some principles of software and database development.                                | Classroom Teaching and Laboratory practice | Midterm Exam, Quizzes, Final Exam              |
| ...        |                                                                                                       |                                            |                                                |
| <b>2.0</b> | <b>Skills</b>                                                                                         |                                            |                                                |
| 2.1        | CLO2: Understand setup, software installation and configuration, security, and basic troubleshooting. | Classroom Teaching and Laboratory practice | Lab Exercise                                   |
| 2.2        | CLO3: Learn to connect to networks and the Internet                                                   | Classroom Teaching and Laboratory practice | Lab Exercise                                   |
| 2.3        | CLO4: Identify security issues affecting the use of computers and networks.                           | Classroom Teaching and Laboratory practice | Midterm Exam, Quizzes, Final Exam, Assignments |
| <b>3.0</b> | <b>Values</b>                                                                                         |                                            |                                                |
| 3.1        |                                                                                                       |                                            |                                                |
| 3.2        |                                                                                                       |                                            |                                                |
| ...        |                                                                                                       |                                            |                                                |

## 2. Assessment Tasks for Students

| # | Assessment task* | Week Due | Percentage of Total Assessment Score |
|---|------------------|----------|--------------------------------------|
| 1 | Quiz 1           | Week 3   | 10%                                  |
| 2 | Assignment 1     | Week 3   | 10%                                  |
| 3 | Midterm          | Week 6   | 20%                                  |
| 4 | Assignment 2     | Week 7   | 10%                                  |
| 5 | Quiz 2           | Week 9   | 10%                                  |
| 6 | Final Exam       | Week 12  | 40%                                  |
| 7 |                  |          |                                      |
| 8 |                  |          |                                      |

\*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 :**

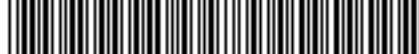
Students can meet the faculty during advising hours or whenever the faculty is in the office.

Office Hours: 4 Hours/Week

## F. Learning Resources and Facilities

### 1. Learning Resources

|                           |                                                                                                                    |
|---------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Required Textbooks</b> | CompTIA IT Fundamentals+ FC0-U61 Cert Guide (Certification Guide) 1 <sup>st</sup> Edition. ISBN-13: 978-0789760418 |
|---------------------------|--------------------------------------------------------------------------------------------------------------------|



|                                       |                       |
|---------------------------------------|-----------------------|
| <b>Essential References Materials</b> |                       |
| <b>Electronic Materials</b>           | Saudi Digital Library |
| <b>Other Learning Materials</b>       |                       |

## 2. Facilities Required

| Item                                                                                                                       | Resources                                          |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <b>Accommodation</b><br>(Classrooms, laboratories, demonstration rooms/labs, etc.)                                         | Laboratory- Capacity for 20 students to be seated. |
| <b>Technology Resources</b><br>(AV, data show, Smart Board, software, etc.)                                                | PC - Smart board - Computers in the Lab room       |
| <b>Other Resources</b><br>(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | Internet Connection                                |

## G. Course Quality Evaluation

| Evaluation Areas/Issues    | Evaluators          | Evaluation Methods    |
|----------------------------|---------------------|-----------------------|
| Final Exam Evaluation      | Peers               | Verification of Marks |
| Course Report Verification | Quality Coordinator | Check List            |
|                            |                     |                       |
|                            |                     |                       |
|                            |                     |                       |
|                            |                     |                       |

**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

|                            |  |
|----------------------------|--|
| <b>Council / Committee</b> |  |
| <b>Reference No.</b>       |  |
| <b>Date</b>                |  |