

# **Syllabus**

#### **GENERAL INFORMATION**

Course Title: IT Fundamentals

Code: CCNA1000 Contact Hours: 43 Hours

Academic Term: Feb 7, 2022 to March 14, 2022

Professor: Joel Vargas Ramos E-Mail: jvargas@passwordpr.com

### **COURSE DESCRIPTION**

Successful students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices, PCs and software for end users, understand the basics of networking and security / forensics, property and safely diagnose, resolve and document common hardware and software issues, apply troubleshooting skills, provide appropriate customer support, and understand the basics of virtualization, desktop imaging, and deployment.

### **OBJECTIVES**

This course will teach the student the fundamental principles of installing, configuring, and troubleshooting PC, mobile, printer, and networking device hardware and help you to progress a career in PC support. It will prepare the student take the CompTIA FCO-U51 exam by providing 100 coverage of the objectives and content examples listed.

### THEMATIC CONTENT

The following concepts and operations are discussed below:

## I. Core Hardware Component (Introduction)

Unit 1.1 Introducing Internal Components

Unit 1.2 Exploring Motherboards, Processors and Memory

Unit 1.3 Exploring Storage and Expansion Devices

Unit 1.4 Exploring Power and Cooling

# II. Peripherals and Connectors

Unit 2.1 Audio, Video and Printers

Unit 2.2 Input Devices

Unit 2.3 External Storage and other Connectors\

### **III.** Troubleshooting Method and Operating Systems

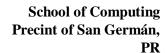
Unit 3.1 Operating System Fundamentals

Unit 3.2 Navigating an Operating System

PO Box 5000-462

14 Calle Carro Suite 2 San Germán, PR 00683

www.passwordtech.org Tel. (787) 892-7947





### IV. Networking Technologies and Wireless Routers

Unit 4.1 Connection Types and Features

Unit 4.2 Network Connectivity Essentials

Unit 4.3 Setting Up a SOHO Router

### V. Network Sharing and Storage

Unit 5.1 Local Network Sharing

Unit 5.2 Web Based Sharing and Access

# VI. Security Threats

Unit 6.1 Understanding Hacking

Unit 6.2 Understanding Security Threats

### VII. Software Applications

Unit 7.1 Common Software Applications and File Types

Unit 7.2 Software Management Best Practices

### VIII. Security Best Practices

Unit 8.1 Computer and Network Security Best Practices

Unit 8.2 Internet Security Best Practices

Unit 8.3 Exploring Storage and Expansion Devices

Unit 8.4 Exploring Power and Cooling

### IX. Computer Support and Backups

Unit 9.1 Basic Computer Support Concepts

Unit 9.2 Computer Backups

#### X. Environmental and Safety Concepts

Unit 10.1 Safe interactions with Computers

#### **Forums:**

- Forum 1: Prueba la velocidad y potencia de tu PC con UserBenchmark
- Forum 2: Los Peores y más curiosos Ataques a dispositivos IOT
- Forum 3: El Dilema de las Redes Sociales
- Forum 4: Trabajo Futuro con gafas de Realidad Virtual
- Forum 5: Vulnerabilidades en Google Chrome

PO Box 5000-462 14 Calle Carro Suite 2 San Germán, PR 00683 www.passwordtech.org Tel. (787) 892-7947



### **Evaluation Criteria**

CRITERIA	Grade total
1 Mid-Term Exam	100
1 Final Exam	100
Quizzes	100
Foros 1-5	100
Total	400

#### **EDUCATIONAL RESOURCES**

- Docter, Q. (2019). *CompTIA IT Fundamentals Study Guide: Exam FC0-U61*. (2<sup>nd</sup> Edition). Indianapolis, Indiana. Sybex.
- http://passwordtech.edu20.org

### **NOTES**

**Reasonable Accommodation:** Any student who requires reasonable accommodation must request them at the beginning of the course or as soon acquire the required knowledge that through the Professor in charge and be notifying the Academic Director.

**Honesty, fraud, plagiarism:** Dishonesty, fraud, plagiarism and any other inappropriate behavior about the student's academic performance, constitute violations of the catalog of the institution, its Rules of Conduct and Duties of Student. Major infractions, as provided in the catalog may result in the suspension of the institution for a defined time or permanent expulsion as stipulated in the Rules of Conduct and Duties of Student.