Syllabus

GENERAL INFORMATION
Course Title: IT Fundamentals
Code: CCNA1000
Contact Hours: 37.5 Hours
Academic Term: January 25, 2021 – March 31, 2021
Professor: Joel Vargas Ramos
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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 FC0-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

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

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.* (2nd 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.