uCertify

Course Outline

CompTIA A+ Core 1 (220-1101) and Core 2 (220-1102)



28 Mar 2024

1. Pre-Assessment
2. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons

   Syllabus

   Chapter 1: Introduction

   Chapter 2: Mobile Devices

   Chapter 3: Networking

   Chapter 4: Hardware

   Chapter 5: Virtualization and Cloud Computing

   Chapter 6: Hardware and Network Troubleshooting

   Chapter 7: Operating Systems

   Chapter 8: Security

   Chapter 9: Software Troubleshooting

   Chapter 10: Operational Procedures

   Chapter 11: Final Preparation

   Videos and How To
8. Practice Test

   Here's what you get

   Features
9. Live labs

   Lab Tasks

   Here's what you get
10. Post-Assessment

1. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

2. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.



3. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



4. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



5. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



6. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

7. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

8. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

9. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
    1. Best Postsecondary Learning Solution

- **2015**
    1. Best Education Solution

2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**
    1. Best Virtual Learning Solution
    2. Best Education Cloud-based Solution
    3. Best College and Career Readiness Solution
    4. Best Corporate / Workforce Learning Solution
    5. Best Postsecondary Learning Content Solution
    6. Best Postsecondary LMS or Learning Platform
    7. Best Learning Relationship Management Solution

- **2017**
    1. Best Overall Education Solution
    2. Best Student Assessment Solution
    3. Best Corporate/Workforce Learning Solution
    4. Best Higher Education LMS or Learning Platform

- **2018**
    1. Best Higher Education LMS or Learning Platform
    2. Best Instructional Solution in Other Curriculum Areas
    3. Best Learning Relationship Management Solution

- **2019**
    1. Best Virtual Learning Solution
    2. Best Content Authoring Development or Curation Solution
    3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

10. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

- Goals and Methods
- How the Course Is Organized
- What’s New?
- Who Should Read This Course?
- Strategies for Exam Preparation
- Pearson Test Prep Practice Test Software
- Accessing the Pearson Test Prep Software Online

- Accessing the Pearson Test Prep Software Offline
- Customizing Your Exams
- Updating Your Exams

Chapter 2: Mobile Devices

- Installing and Configuring Laptop Hardware and Components
- Display Components of Mobile Devices
- Setting Up and Configuring Accessories and Ports of Mobile Devices
- Configuring Basic Mobile Device Network Connectivity and Application Support
- Review All the Key Topics

Chapter 3: Networking

- TCP and UDP Ports, Protocols, and Their Purposes
- Networking Hardware
- Compare and Contrast Wireless Networking Protocols
- Services Provided by Networked Hosts
- Install and Configure a Basic Wired/Wireless SOHO Network
- Network Configuration Concepts
- Internet Connection Types, Network Types, and Their Features

- Using Networking Tools
- Review All the Key Topics

Chapter 4: Hardware

- Basic Cable Types
- Installing RAM Types
- Installing Storage Devices
- Installing Motherboards, CPUs, and Add-on Cards
- Power Supplies
- Multifunction Devices/Printers and Settings
- Print Technologies
- Review All the Key Topics

Chapter 5: Virtualization and Cloud Computing

- Common Cloud Models
- Client-Side Virtualization Overview
- Review All the Key Topics

Chapter 6: Hardware and Network Troubleshooting

- Troubleshooting Methodology
- Troubleshooting Motherboard, RAM, CPU, and Power Issues
- Troubleshooting Storage Drives and RAID Arrays
- Troubleshooting Video, Projector, and Display Issues
- Mobile Device Troubleshooting
- Printer Troubleshooting
- Network Troubleshooting
- Review All the Key Topics

Chapter 7: Operating Systems

- Basic Features of Microsoft Windows Editions
- Microsoft Command-Line Tools
- Microsoft Windows 10 Operating System (OS) Features and Tools
- Windows 10 Control Panel Utilities
- Windows Settings
- Microsoft Windows Networking Features on a Client/Desktop
- Installation and Configuration Concepts
- Understanding Common OS Types

- OS Installations and Upgrades in a Diverse OS Environment
- Common Features and Tools of the macOS/Desktop OS
- Common Features and Tools of the Linux Client/Desktop OS
- Review All the Key Topics

Chapter 8: Security

- Security Measures
- Wireless Security Protocols and Authentication
- Malware Removal and Prevention
- Social Engineering Threats and Vulnerabilities
- Microsoft Windows OS Security Settings
- Security Best Practices to Secure a Workstation
- Securing Mobile Devices
- Data Destruction and Disposal
- Configuring Security on SOHO Networks
- Configuring Browser and Relevant Security Settings
- Review All the Key Topics

Chapter 9: Software Troubleshooting

- Troubleshooting Common Windows OS Problems
- Troubleshooting Common PC Security Issues
- Best Practice Procedures for Malware Removal
- Troubleshoot Common Mobile OS and Application Issues
- Troubleshoot Common Mobile OS and Application Security Issues
- Review All the Key Topics

Chapter 10: Operational Procedures

- Best Practices and Documentation
- Change Management
- Workstation Backup and Recovery Methods
- Explain Common Safety Procedures
- Environmental Impacts and Appropriate Controls
- Addressing Prohibited Content/Activity and Privacy, Licensing, and Policy Concepts
- Communication Techniques and Professionalism
- Scripting Basics
- Remote Access Technologies
- Review All the Key Topics

Chapter 11: Final Preparation

- Exam Information
- Getting Ready
- Tools for Final Preparation
- Summary

11. Practice Test

Here's what you get

180	4	180
PRE-ASSESSMENTS QUESTIONS	FULL LENGTH TESTS	POST-ASSESSMENTS QUESTIONS

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

12. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

Lab Tasks

Mobile Devices

- Installing the NIC
- Connecting a Router to a Laptop
- Installing Laptop Components
- Adding a Keyboard Layout
- Installing Memory Modules
- Turning On the Airplane Mode of an iPhone
- Viewing the iOS Version of an iPhone
- Locking an iPhone With a Password

- Configuring Email in Android
- Removing an Account in Android
- Setting Up a VPN on Android

Networking

- Setting Up a Boot Device Priority
- Accessing the BIOS Setup in Windows 10
- Configuring Network Address Translation
- Disabling a Device Driver
- Enabling a Device Driver
- Connecting Systems to the Internet Through a Firewall Router
- Identifying Clients and Servers
- Connecting Devices in a Peer to Peer Architecture
- Installing and Configuring a Temporary Server
- Connecting a New Workstation to the Internet
- Configuring a Router
- Configuring Port Security on an Access Port
- Creating a Dial-up Connection
- Configuring a DHCP Server
- Adding a DNS Server
- Installing the Proxy Server Feature
- Configuring an IPv4 Address and a DNS Server
- Configuring an IPv6 Address
- Understanding the IPv4 Header
- Establishing a VPN Connection
- Creating a VLAN and Viewing its Assignment to Port Mapping

Hardware

- Configuring the Mouse Settings
- Installing a USB 3.0 PCI Express Card (2.0 x4)
- Installing Firewire Cards
- Inserting a Pen Drive into the Laptop's USB Port
- Connecting Speakers to a Computer

- Connecting the Hub with Different Devices Using USB Cables
- Connecting the Cable Modem to Access the Internet
- Verifying the RAM Usage
- Supplying Power to a SATA Hard Disk Drive
- Copying Files to a Disc Using File Explorer
- Connecting the Motherboard to the Internal Hard Drive
- Viewing the Processor Information
- Installing a PCI Sound Card
- Identifying a PCI Bus Slot
- Providing Cooling and Ventilation to a Motherboard
- Identifying the CPU Socket (Slot)
- Installing a Processor
- Installing an Optical Drive and a PCI Sound Card
- Installing Expansion Cards on a Motherboard
- Replacing the Power Supply
- Installing SMPS and Connecting it to the Motherboard
- Installing a Printer
- Connecting a USB Printer to a Computer
- Inserting Ink Cartridges into a Printer

Virtualization and Cloud Computing

- Enabling Hardware Virtualization

Hardware and Network Troubleshooting

- Configuring Screen Savers
- Configuring the Screen Resolution Setting

Operating Systems

- Working With the Command Prompt
- Viewing the Status of a Disk
- Using the netstat Command
- Using the nslookup Command
- Using the ping Command

- Tracing Route Using the tracert Command
- Adding an MMC Snap-in
- Displaying Windows PowerShell Snap-ins
- Using Windows Event Viewer
- Disabling a Service
- Configuring Computer Management Services
- Using the Task Manager to Start an Application
- Converting a Basic Disk to a Dynamic Disk
- Working with the Task Manager
- Using the Task Scheduler
- Backing Up the Windows Registry
- Configuring a Power Plan
- Observing the Control Panel Options from Different Views
- Setting Automatic Windows Updates
- Uninstalling a Program
- Converting a FAT32 Partition to NTFS
- Managing NTFS Permissions
- Creating a Swap Partition
- Mounting a Drive to a Folder
- Editing a Drive Letter
- Backing Up Files
- Restoring Files
- Using Basic Linux Commands
- Listing Files in a Directory
- Verifying the Working Directory
- Working with Directories
- Performing a Text Search

Security

- Configuring Windows Defender Firewall
- Conducting a DoS Attack Using Smurf Attack
- Conducting IP Spoofing
- Implementing EFS File Sharing
- Stopping Permission Inheritance

- Propagating Permissions
- Creating a New User
- Using BitLocker
- Using Windows Security in Windows Defender Settings
- Disabling the AutoPlay Feature
- Configuring an Audit Group Policy
- Configuring a Default Domain Password Policy

Software Troubleshooting

- Creating a Restore Point

Operational Procedures

- Using a UPS to Power the Computer Components and Ensure Network Connectivity
- Setting Up a Surge-Protected Computer System
- Creating a Loop in PowerShell
- Executing the Basic Commands Through a ps1 File
- Creating and Running a ps1 File

Here's what you get

109	103	01:51
LIVE LABS	VIDEO TUTORIALS	HOURS

13. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

GET IN TOUCH:

3187 Independence Drive
Livermore, CA 94551,
United States

+1-415-763-6300

support@ucertify.com

www.ucertify.com