

uCertify

Course Outline

**LO CompTIA A+ : A Comprehensive
Approach - Exams 220-901 & 220-902
(Course & Lab)**



Lesson



Practice test



Lab



Live-Lab

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1. Course Objective

Gain hands-on expertise in CompTIA A+ certification exam by LO CompTIA A+ course and performance based labs. Performance based labs simulate real-world, hardware, software & command line interface environments and can be mapped to any text-book, course & training. LO CompTIA A+ course and performance based labs covers all the objectives of 220-901 & 220-902 exams and provides the technical knowledge required to install, configure, and maintain devices, PCs and software for end users; properly and safely diagnose, resolve and document common hardware and software issues; assemble components based on customer requirements; provide appropriate customer support; apply troubleshooting skills; and understand the basics of networking and security/forensics.

2. 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.

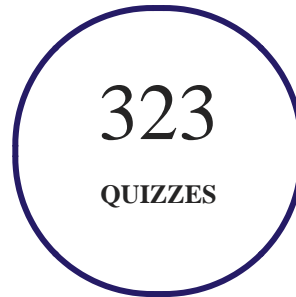
3. Exercises

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.

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EXERCISES

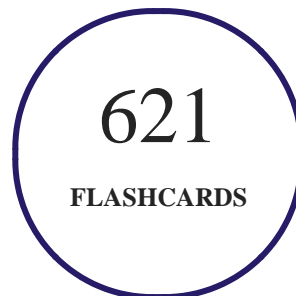
4. Quizzes

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.



5. 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.



6. 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.



7. 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.

8. 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.

9. 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 assignments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

10. 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

11. 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: Hardware Fundamentals

- TOPIC A: Personal Computer Components
- TOPIC B: Storage Devices

- TOPIC C: Mobile Digital Devices
- TOPIC D: Connection Interfaces
- Summary

Chapter 2: Operating System Fundamentals

- TOPIC A: PC and Mobile Operating Systems
- TOPIC B: PC Operating System Tools and Utilities
- Summary

Chapter 3: Networking and Security Fundamentals

- TOPIC A: Network Types
- TOPIC B: Network Components
- TOPIC C: Common Network Services
- TOPIC D: Cloud Concepts
- TOPIC E: Security Fundamentals
- Summary

Chapter 4: Safety and Operational Procedures

- TOPIC A: Basic Maintenance Tools and Techniques

- TOPIC B: Personal and Electrical Safety
- TOPIC C: Environmental Safety and Materials Handling
- TOPIC D: Professionalism and Communication
- TOPIC E: Organizational Policies and Procedures
- TOPIC F: Troubleshooting Theory
- Summary

Chapter 5: Supporting Display Devices

- TOPIC A: Install Display Devices
- TOPIC B: Configure Display Devices
- TOPIC C: Troubleshoot Video and Display Devices
- Summary

Chapter 6: Installing and Configuring Peripheral Components

- TOPIC A: Install and Configure Input Devices
- TOPIC B: Install and Configure Output Devices
- TOPIC C: Install and Configure Input/Output Devices
- TOPIC D: Install and Configure Expansion Cards

- Summary

Chapter 7: Managing System Components

- TOPIC A: Identify Motherboard Components and Features
- TOPIC B: Install and Configure CPUs and Cooling Systems
- TOPIC C: Install Power Supplies
- TOPIC D: Troubleshoot System Components
- Summary

Chapter 8: Managing Data Storage

- TOPIC A: Identify RAM Types and Features
- TOPIC B: Troubleshoot RAM Issues
- TOPIC C: Install and Configure Storage Devices
- TOPIC D: Configure the System Firmware
- TOPIC E: Troubleshoot Hard Drives and RAID Arrays
- Summary

Chapter 9: Installing and Configuring Microsoft Windows

- TOPIC A: Implement Client-Side Virtualization

- TOPIC B: Install Microsoft Windows
- TOPIC C: Use Microsoft Windows
- TOPIC D: Configure Microsoft Windows
- TOPIC E: Upgrade Microsoft Windows
- Summary

Chapter 10: Optimizing and Maintaining Microsoft Windows

- TOPIC A: Optimize Microsoft Windows
- TOPIC B: Back Up and Restore System Data
- TOPIC C: Perform Disk Maintenance
- TOPIC D: Update Software
- Summary

Chapter 11: Working With Other Operating Systems

- TOPIC A: The OS X Operating System
- TOPIC B: The Linux Operating System
- Summary

Chapter 12: Customized Client Environments

- TOPIC A: Types of Common Business Clients
- TOPIC B: Custom Client Environments
- Summary

Chapter 13: Networking Technologies

- TOPIC A: TCP/IP Properties and Characteristics
- TOPIC B: TCP/IP
- TOPIC C: Internet Connections
- TOPIC D: Ports and Protocols
- TOPIC E: Networking Tools
- Summary

Chapter 14: Installing and Configuring Networking Capabilities

- TOPIC A: Configure Basic Windows Networking
- TOPIC B: Configure Network Perimeters
- TOPIC C: Using Windows Networking Features
- TOPIC D: Install and Configure SOHO Networks
- Summary

Chapter 15: Supporting Mobile Digital Devices

- TOPIC A: Install and Configure Exterior Laptop Components
- TOPIC B: Install and Configure Interior Laptop Components
- TOPIC C: Other Mobile Devices
- TOPIC D: Mobile Device Accessories and Ports
- TOPIC E: Mobile Device Connectivity
- TOPIC F: Mobile Device Synchronization
- TOPIC G: Troubleshoot Mobile Device Hardware
- Summary

Chapter 16: Supporting Printers and Multifunction Devices

- TOPIC A: Printer and Multifunction Technologies
- TOPIC B: Install and Configure Printers
- TOPIC C: Maintain Printers
- TOPIC D: Troubleshoot Printers
- Summary

Chapter 17: Security Threats, Vulnerabilities, and Controls

- TOPIC A: Common Security Threats and Vulnerabilities
- TOPIC B: General Security Controls
- TOPIC C: Mobile Security Controls
- TOPIC D: Data Destruction and Disposal Methods
- Summary

Chapter 18: Implementing Security Controls

- TOPIC A: Secure Operating Systems
- TOPIC B: Secure Workstations
- TOPIC C: Secure SOHO Networks
- TOPIC D: Secure Mobile Devices
- Summary

Chapter 19: Troubleshooting System-Wide Issues

- TOPIC A: Troubleshoot PC Operating Systems
- TOPIC B: Troubleshoot Mobile Device Operating Systems and Applications
- TOPIC C: Troubleshoot Wired and Wireless Networks
- TOPIC D: Troubleshoot Common Security Issues

Chapter 20: Appendix A

- Mapping Course Content to CompTIA A+ Certification Exam 220-901

Chapter 21: Appendix B

- Mapping Course Content to CompTIA A+ Certification Exam 220-902

Chapter 22: Appendix C

- A+ Command Reference

Chapter 23: Appendix D

- A Brief History of Personal Computers

Chapter 24: Appendix: 3D Game Simulation

Chapter 25: Video Tutorials: 220-901

- About the Exam
- Motherboards, Processors, and Memory
- Storage Devices
- Peripherals and Expansions
- Understanding Laptops and Mobile Devices

- TCP/IP and Networking Fundamentals
- Hardware and Network Troubleshooting
- Conclusion

Chapter 26: Video Tutorials: 220-902

- Introduction
- Operating Systems Overview and Functions
- Windows Operating System
- Control Panel, Installing and Upgrades
- Graphical and Command line Administrative tools
- Networking and Security
- Mac, Linux and Network Operating Systems
- Virtualization
- Mobile Devices
- Threats and Security Concepts
- Troubleshooting Theory and Models
- Operational Procedures
- Software Troubleshooting

- Conclusion

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

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VIDEOS

15:43

HOURS

12. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

Here's what you get

95

PRE-ASSESSMENTS QUESTIONS

90

POST-ASSESSMENTS QUESTIONS

Features

Full Remediation

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.

Learn, Test and Review Mode

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.

13. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

Lab Tasks

- Understanding USB versions
- Identifying I/O ports of a motherboard

- Connecting a USB Printer to a Computer
- Identifying Video Ports and Connectors
- Viewing the iOS version
- Listing files and folders
- Identifying network types
- Understanding personal safety while moving equipment
- Identifying guidelines for effective communication
- Installing a processor
- Identifying a PCI-Bus Slot
- Identifying a CPU Socket
- Installing Memory Modules
- Identifying Types of RAM
- Identifying RAID level characteristics
- Viewing the status of a disk
- Viewing processes details in the task manager
- Changing the time zone
- Performing disk cleanup
- Identifying tools used in Mac OS and Linux
- Listing Files and Directories
- Understanding Linux commands
- Verifying the working directory
- Modifying the ownership of a file
- Creating and listing directories
- Listing Files of the Current Directory
- Identifying types of a cable
- Identifying network connectors
- Identifying components of a coaxial cable
- Identifying IP address class values
- Understanding email protocols
- Renewing an IP address
- Identifying network cabling tools
- Understanding network card properties
- Connecting to a remote desktop
- Describing 802.11 networking standards
- Identifying a port

- Installing Laptop Components
- Establishing a Bluetooth connection
- Identifying a Daisy-Wheel Printer
- Understanding the electrophotographic print process
- Installing a printer
- Customizing user account notification settings
- Encrypting a folder
- Identifying symptoms of problems with the mobile OS

Here's what you get

45
PERFORMANCE BASED
LAB

17
VIDEO TUTORIALS

12
MINUTES

14. Live Labs

Live-Lab is a real computer equipment, networked together and conveniently accessible over the internet using virtualization. A live-lab has equipments such as a computer, server, switch or router in it that a user is free to configure.

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

Hardware Fundamentals

- Understanding USB versions
- Identifying I/O ports of a motherboard
- Connecting a USB Printer to a Computer
- Identifying Video Ports and Connectors

Operating System Fundamentals

- Viewing the iOS version
- Listing files and folders

Networking and Security Fundamentals

- Identifying network types

Safety and Operational Procedures

- Understanding personal safety while moving equipment
- Identifying guidelines for effective communication

Supporting Display Devices

Installing and Configuring Peripheral Components

Managing System Components

- Installing a processor
- Identifying a PCI-Bus Slot
- Identifying a CPU Socket
- Installing Memory Modules

Managing Data Storage

- Identifying Types of RAM
- Identifying RAID level characteristics
- Viewing the status of a disk

Installing and Configuring Microsoft Windows

- Viewing processes details in the task manager
- Changing the time zone

Optimizing and Maintaining Microsoft Windows

- Performing disk cleanup

Working With Other Operating Systems

- Identifying tools used in Mac OS and Linux
- Listing Files and Directories
- Understanding Linux commands
- Verifying the working directory
- Modifying the ownership of a file
- Creating and listing directories
- Listing Files of the Current Directory

Customized Client Environments

Networking Technologies

- Identifying types of a cable
- Identifying network connectors

- Identifying components of a coaxial cable
- Identifying IP address class values
- Understanding email protocols
- Renewing an IP address
- Identifying network cabling tools

Installing and Configuring Networking Capabilities

- Understanding network card properties
- Connecting to a remote desktop
- Describing 802.11 networking standards

Supporting Mobile Digital Devices

- Identifying a port
- Installing Laptop Components
- Establishing a Bluetooth connection

Supporting Printers and Multifunction Devices

- Identifying a Daisy-Wheel Printer
- Understanding the electrophotographic print process
- Installing a printer

Security Threats, Vulnerabilities, and Controls

Implementing Security Controls

- Customizing user account notification settings
- Encrypting a folder

Troubleshooting System-Wide Issues

- Identifying symptoms of problems with the mobile OS

Appendix A

Appendix B

Appendix C

Appendix D

Appendix: 3D Game Simulation

Video Tutorials: 220-901

Video Tutorials: 220-902

Here's what you get

45
LIVE LABS

17
VIDEO TUTORIALS

12
MINUTES

15. 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.

Have Any Query? We Are Happy To Help!

GET IN TOUCH:

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