Course Outline
CompTIA A+ Complete Study Guide

30 Jul 2019
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1. Course Objective

Gain hands-on expertise in CompTIA 220-901 & 220-902 exam with CompTIA A+ Complete Study Guide. The course covers all the objectives of 220-901 & 220-902 exams and provides the expertise and technical knowledge required to install, configure, and maintain devices, PCs and software for end users; proper and safe 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.

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.

www.ucertify.com
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 5 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

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: Motherboards, Processors, and Memory
• Identifying Components of Motherboard

• Identifying Purposes and Characteristics of Processors

• Identifying Purposes and Characteristics of Memory

• Identifying Purposes and Characteristics of Cooling Systems

• Summary

• Exam Essentials

Chapter 2: Storage Devices and Power Supplies

• Identifying Purposes and Characteristics of Storage Devices

• Identifying Purposes and Characteristics of Power Supplies

• Summary

• Exam Essentials

Chapter 3: Peripherals and Expansion

• Installing and Configuring Expansion Cards

• Identifying Characteristics of Connectors and Cables

• Input Devices
Chapter 4: Display Devices

- Understanding Display Types and Settings
- Understanding Video Standards and Technologies
- Summary
- Exam Essentials

Chapter 5: Custom Configurations

- Standard Thick Clients
- Graphic and CAD/CAM Design Workstations
- Audio/Video Editing Workstations
- Virtualization Workstations
- Gaming PCs
- Home Theater PCs
Chapter 6: Networking Fundamentals

- Understanding Networking Principles
- Identifying Common Network Hardware
- Summary
- Exam Essentials

Chapter 7: Introduction to TCP/IP

- Understanding TCP/IP
- Summary
- Exam Essentials

Chapter 8: Installing Wireless and SOHO Networks

- Understanding Wireless Networking
• Installing and Configuring SOHO Networks

• Summary

• Exam Essentials

Chapter 9: Understanding Laptops

• Understanding Laptop Architecture

• Disassembling and Reassembling Laptops

• Summary

• Exam Essentials

Chapter 10: Understanding Mobile Devices

• Understanding Mobile Devices

• Summary

• Exam Essentials

Chapter 11: Installing and Configuring Printers

• Understanding Print Technologies and Imaging Processes

• Installing and Configuring Printers
Performing Printer Maintenance and Upgrades

Summary

Exam Essentials

Chapter 12: Hardware and Network Troubleshooting

Troubleshooting Core Hardware Issues

Troubleshooting Mobile Devices, Printers, and Networking

Summary

Exam Essentials

Chapter 13: Operating System Basics

Understanding Operating Systems

Going Virtual

Preparing for the Exam

Summary

Exam Essentials

Chapter 14: Operating System Administration
• Interacting with Operating Systems

• Administrative Tools

• Disk Management

• Summary

• Exam Essentials

Chapter 15: Working with Windows 8/8.1

• Windows Editions

• Installing Windows 8

• Windows 8 Boot Methods

• Summary

• Exam Essentials

Chapter 16: Working with Windows 7

• Windows 7 Editions

• Installing Windows 7

• The Windows 7 Boot Sequences

• Windows 7 Features
Windows 7 Administrative Tools

Unique Control Panel Utilities

Networking and Windows 7

Windows 7 System Performance and Optimization

Summary

Exam Essentials

Chapter 17: Working with Windows Vista

Windows Vista Editions

Installing Windows Vista

The Windows Vista Boot Sequences

Windows Vista Features

Windows Vista Administrative Tools

Distinctive Utilities

Networking and Windows Vista

Vista System Performance and Optimization

Summary

Exam Essentials
Chapter 18: Working with Mac OS and Linux

- Best Practices
- Tools
- Features
- Basic Linux Commands
- Summary
- Exam Essentials

Chapter 19: Security

- Common Prevention Methods
- Common Security Threats
- Workstation Security Best Practices
- Working with Windows OS Security Settings
- Mobile Device Security
- Destruction and Disposal Methods
- Securing a SOHO Network (Wireless)
- Securing a SOHO Network (Wired)
• Summary

• Exam Essentials

Chapter 20: Network Services, Cloud Computing, and Virtualization

• Understanding Network Services

• Understanding Cloud Computing and Virtualization

• Summary

• Exam Essentials

Chapter 21: Mobile Operating Systems and Connectivity

• Understanding Mobile Operating Systems

• Network Connectivity and Email

• Mobile Device Synchronization

• Summary

• Exam Essentials

Chapter 22: Troubleshooting Theory, OSs, and Security

• Understanding Troubleshooting Theory
Troubleshooting Operating Systems

Troubleshooting Security Issues

Troubleshooting Mobile Issues

Troubleshooting Mobile Security Issues

Summary

Exam Essentials

Chapter 23: Understanding Operational Procedures

Understanding Safety Procedures

Understanding Environmental Controls

Understanding Policies, Licensing, and Privacy

Demonstrating Professionalism

Summary

Exam Essentials

Chapter 24: Appendix A

3d Objects

Chapter 25: Appendix B
Chapter 26: Appendix C

- Videos: 220-901

Chapter 27: Appendix: 3D Game Simulation

**Videos and How To**

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

142
VIDEOS

15:07
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

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**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. 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.