



Course Outline

CompTIA Security+ (Course and Labs)



Lesson



Practice test



Lab

Contents

1. Course Objective
2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary
Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons
Syllabus
Chapter 1: Introduction
Chapter 2: Managing Risk
Chapter 3: Monitoring and Diagnosing Networks
Chapter 4: Understanding Devices and Infrastructure
Chapter 5: Identity and Access Management
Chapter 6: Wireless Network Threats
Chapter 7: Securing the Cloud
Chapter 8: Host, Data, and Application Security
Chapter 9: Cryptography
Chapter 10: Threats, Attacks, and Vulnerabilities
Chapter 11: Social Engineering and Other Foes
Chapter 12: Security Administration
Chapter 13: Disaster Recovery and Incident Response
Chapter 14: Appendix A: 3D Game Simulation

Chapter 15: Appendix B

Videos and How To

9. Practice Test

Here's what you get

Features

10. Performance Based Labs

Lab Tasks

Here's what you get

11. Post-Assessment

1. Course Objective

Gain hands-on expertise in the CompTIA Security+ SY0-501 certification exam with the CompTIA Security+ 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. The complete study guide covers the SY0-501 exam objectives and provides knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations. The cert guide teaches you all the basic and advanced concepts that are being used in the field of security with its interactive learning resources.

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.

225
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.



121

QUIZZES

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.



265

FLASHCARDS

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 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: Introduction

- Before You Begin the CompTIA Security+ Certification Exam
- Why Become Security+ Certified?
- How to Become a Security+ Certified Professional
- Who Should Read This Book?
- What Does This Book Cover?
- Tips for Taking the Security+ Exam
- Exam SY0-501 Exam Objectives
- SY0-501 Certification Exam Objective Map

Chapter 2: Managing Risk

- Threat Assessment
- Risk Assessment
- Developing Policies, Standards, and Guidelines
- Summary
- Exam Essentials

Chapter 3: Monitoring and Diagnosing Networks

- Frameworks, Best Practices, and Configuration Guides
- Secure Network Architecture Concepts
- Secure Systems Design
- Summary
- Exam Essentials

Chapter 4: Understanding Devices and Infrastructure

- Designing with Security in Mind
- Summary
- Exam Essentials

Chapter 5: Identity and Access Management

- Using Tools to Assess Your Network
- Troubleshooting Common Security Issues
- Security Technologies
- Identity and Access Management Concepts
- Install and Configure Identity and Access Services
- File and Database Security

- Summary
- Exam Essentials

Chapter 6: Wireless Network Threats

- Wireless Vulnerabilities to Know
- Wireless Commonsense
- Wireless Attack Analogy
- Summary
- Exam Essentials

Chapter 7: Securing the Cloud

- Working with Cloud Computing
- Working with Virtualization
- Security and the Cloud
- Summary
- Exam Essentials

Chapter 8: Host, Data, and Application Security

- Threat Actors and Attributes
- Use of Open Source Intelligence
- Types of Vulnerabilities
- Embedded Systems Security
- Application Vulnerabilities
- Secure Programming
- Other Application Security Issues
- Code Issues
- Summary
- Exam Essentials

Chapter 9: Cryptography

- An Overview of Cryptography
- Modern Cryptography
- Using Cryptographic Systems
- Understanding Cryptography Standards and Protocols
- Public Key Infrastructure
- Using Public Key Infrastructure

- Authentication
- Summary
- Exam Essentials

Chapter 10: Threats, Attacks, and Vulnerabilities

- Threat and Attack Terminology
- Living in a World of Viruses
- Malware and Crypto-Malware
- Understanding Various Types of Application/Service Attacks
- Summary
- Exam Essentials

Chapter 11: Social Engineering and Other Foes

- Understanding Social Engineering
- Understanding Physical Security
- Various Control Types
- Data Security and Privacy Practices
- Summary

- Exam Essentials

Chapter 12: Security Administration

- Connection Types
- Mobile Devices
- Account Management Concepts
- Summary
- Exam Essentials

Chapter 13: Disaster Recovery and Incident Response

- Penetration Testing
- Issues Associated with Business Continuity
- Summary
- Exam Essentials

Chapter 14: Appendix A: 3D Game Simulation

Chapter 15: Appendix B

- Videos

Videos and How To

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

81

VIDEOS

20:49

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

2

FULL LENGTH TESTS

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

- Configuring a Perimeter Firewall
- Installing the Web Server IIS Server Role
- Using Network Monitor
- Configuring Remote Access VPN
- Using Windows Defender
- Adding Netcraft Extension
- Preventing Zone Transfers
- Viewing Results of Live Hosts
- Verifying Network Services
- Observing Traffic Pattern using Wireshark
- Analyzing Protocols with Wireshark
- Securing Default Accounts
- Assigning Permissions to Folders
- Managing Windows Firewall
- Configuring Windows firewall
- Enabling Intrusion Prevention and Detection
- Implementing Data Execution Prevention
- Configuring Kerberos Policy Settings
- Enabling Audit Policies
- Enabling Object Access Auditing
- Configuring Audit Group Policy
- Installing Remote Access Services
- Configuring a Static TCP/IP Address
- Installing and Configuring NLB Nodes
- Configuring NLB Operations
- Creating a Virtual Machine
- Importing a Virtual Machine
- Configuring Secondary Virtual Hard Disk
- Creating a Virtual Switch

- Observing MD5 Hash
- Using openssl to Create a Public/Private Keypair
- Adding Certificates to MMC
- Configuring SSL Connections
- Configuring the SSL Port Setting
- Using BitLocker in Windows 10
- Working with Task Manager
- Viewing Running Processes on a Linux-based Machine
- Enabling Debug Logging on the DNS Server
- Simulating a DoS Attack
- Spoofing MAC Addresses with SMAC
- Using Ettercap for ARP Spoofing
- Resetting a Password
- Configuring Group Policy Settings
- Creating a Fine-Grained Password Policy
- Managing Services with Group Policy
- Restricting Local Accounts
- Creating a User Account and Configuring Restriction
- Configuring Account Policies
- Managing User Account
- Running a Security Scan to Identify Vulnerabilities
- Remediating Vulnerabilities on Local Workstation
- Remediating Vulnerabilities on the Network
- Installing Windows Server Backup
- Creating a Backup Schedule
- Creating a Backup Once

Here's what you get



14. 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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