# uCertify Course Outline

# Systems Security Certified Practitioner (SSCP)



15 May 2024

- 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: The Business Case for Decision Assurance and Information Security
- Chapter 3: Information Security Fundamentals
- Chapter 4: Integrated Information Risk Management
- Chapter 5: Operationalizing Risk Mitigation
- Chapter 6: Communications and Network Security
- Chapter 7: Identity and Access Control
- Chapter 8: Cryptography
- Chapter 9: Hardware and Systems Security
- Chapter 10: Applications, Data, and Cloud Security
- Chapter 11: Incident Response and Recovery
- Chapter 12: Business Continuity via Information Security and People Power
- Chapter 13: Cross-Domain Challenges

Videos and How To

9. Practice Test

Here's what you get

Features

10. Live labs

Lab Tasks

Here's what you get

11. Post-Assessment



Get hands-on experience in system security with the Systems Security Certified Practitioner (SSCP) course and lab. The course contains interactive tools such as live labs, test preps, and SSCP exam objective-based lessons with knowledge checks, quizzes, flashcards, and glossary terms to get a detailed understanding of critical aspects of information security. It will be a great source to learn about Security Operations and Administration, Access Controls, Risk Identification, Monitoring, and Analysis, Incident Response and Recovery, Cryptography, Network and Communications Security, and Systems and Application Security.



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.





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. J 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. It 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.

# 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. <sup>(S)</sup> 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

- About This Course
- What Is an SSCP?
- Using This Course

• Let's Get Started!

Chapter 2: The Business Case for Decision Assurance and Information Security

- Information: The Lifeblood of Business
- Policy, Procedure, and Process: How Business Gets Business Done
- Who Runs the Business?
- Summary
- Exam Essentials

#### Chapter 3: Information Security Fundamentals

- The Common Needs for Privacy, Confidentiality, Integrity, and Availability
- Training and Educating Everybody
- SSCPs and Professional Ethics
- Summary
- Exam Essentials

#### Chapter 4: Integrated Information Risk Management

- It's a Dangerous World
- The Four Faces of Risk

- Getting Integrated and Proactive with Information Defense
- Risk Management: Concepts and Frameworks
- Risk Assessment
- Four Choices for Limiting or Containing Damage
- Summary
- Exam Essentials

## Chapter 5: Operationalizing Risk Mitigation

- From Tactical Planning to Information Security Operations
- Operationalizing Risk Mitigation: Step by Step
- The Ongoing Job of Keeping Your Baseline Secure
- Ongoing, Continuous Monitoring
- Reporting to and Engaging with Management
- Summary
- Exam Essentials

#### Chapter 6: Communications and Network Security

• Trusting Our Communications in a Converged World

- Internet Systems Concepts
- Two Protocol Stacks, One Internet
- Wireless Network Technologies
- IP Addresses, DHCP, and Subnets
- IPv4 vs. IPv6: Important Differences and Options
- CIANA Layer by Layer
- Securing Networks as Systems
- Summary
- Exam Essentials

### Chapter 7: Identity and Access Control

- Identity and Access: Two Sides of the Same CIANA+PS Coin
- Identity Management Concepts
- Access Control Concepts
- Network Access Control
- Implementing and Scaling IAM
- User and Entity Behavior Analytics (UEBA)
- Zero Trust Architectures

- Summary
- Exam Essentials

## Chapter 8: Cryptography

- Cryptography: What and Why
- Building Blocks of Digital Cryptographic Systems
- Keys and Key Management
- Modern Cryptography: Beyond the "Secret Decoder Ring"
- "Why Isn't All of This Stuff Secret?"
- Cryptography and CIANA+PS
- Public Key Infrastructures
- Applying Cryptography to Meet Different Needs
- Managing Cryptographic Assets and Systems
- Measures of Merit for Cryptographic Solutions
- Attacks and Countermeasures
- PKI and Trust: A Recap
- On the Near Horizon
- Summary

• Exam Essentials

#### Chapter 9: Hardware and Systems Security

- Infrastructure Security Is Baseline Management
- Securing the Physical Context
- Infrastructures 101 and Threat Modeling
- Endpoint Security
- Malware: Exploiting the Infrastructure's Vulnerabilities
- Privacy and Secure Browsing
- "The Sin of Aggregation"
- Updating the Threat Model
- Managing Your Systems' Security
- Summary
- Exam Essentials

#### Chapter 10: Applications, Data, and Cloud Security

- It's a Data-Driven World...At the Endpoint
- Software as Appliances
- Applications Lifecycles and Security

- CIANA+PS and Applications Software Requirements
- Application Vulnerabilities
- "Shadow IT:" The Dilemma of the User as Builder
- Information Quality and Information Assurance
- Protecting Data in Motion, in Use, and at Rest
- Into the Clouds: Endpoint App and Data Security Considerations
- Legal and Regulatory Issues
- Countermeasures: Keeping Your Apps and Data Safe and Secure
- Summary
- Exam Essentials

#### Chapter 11: Incident Response and Recovery

- Defeating the Kill Chain One Skirmish at a Time
- Harsh Realities of Real Incidents
- Incident Response Framework
- Preparation
- Detection and Analysis
- Containment and Eradication

- Recovery: Getting Back to Business
- Post-Incident Activities
- Summary
- Exam Essentials

Chapter 12: Business Continuity via Information Security and People Power

- What Is a Disaster?
- Surviving to Operate: Plan for It!
- Timelines for BC/DR Planning and Action
- Options for Recovery
- Cloud-Based "Do-Over" Buttons for Continuity, Security, and Resilience
- People Power for BC/DR
- Security Assessment: For BC/DR and Compliance
- Converged Communications: Keeping Them Secure During BC/DR Actions
- Summary
- Exam Essentials

Chapter 13: Cross-Domain Challenges

- Operationalizing Security Across the Immediate and Longer Term
- Supply Chains, Security, and the SSCP
- Other Dangers on the Web and Net
- On Our Way to the Future
- Enduring Lessons
- Your Next Steps
- At the Close
- Exam Essentials



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



## 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.

# 13. 😧 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

#### **Information Security Fundamentals**

• Encrypting Files with EFS

#### **Integrated Information Risk Management**

- Conducting Vulnerability Scanning Using Nessus
- Using Social Engineering Techniques to Plan an Attack
- Configuring a VPN

#### **Communications and Network Security**

- Configuring a Router
- Configuring Default Routing
- Configuring Network Address Translation
- Finding the Physical and Logical Address of a LAN Adapter
- Getting the UDP Settings and the Current Connection Statistics of UDP
- Tracing Route Using Tracert
- Intercepting Packets
- Configuring VLANs
- Obtaining the ARP Cache and Getting Information about DNS
- Obtaining Information about Different IP Versions and the IP Version of a Network Adapter
- Getting the TCP Settings and Information about the Current Connection Statistics of TCP
- Adding an IPv6 Address
- Assigning Different Classes of IP Addresses
- Using Burp Suite
- Performing ARP Spoofing

#### **Identity and Access Control**

• Creating ACL in a Router

#### Cryptography

- Observing an MD5-Generated Hash Value
- Observing an SHA-Generated Hash Value
- Performing Symmetric Key Encryption
- Using OpenSSL to Create a Public/Private Key Pair

#### Hardware and Systems Security

• Creating a Virtual Machine

## Here's what you get



# 14. Bost-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.

