Course Outline

Course Outline	CertMaster Learn	Student Guide eBook	CertMaster Labs
Overview	Each of the bulleted	Review Activities are	Labs are available at the
	activities below is a	embedded within the	course level or integrated
	separate study task	eBook. Videos and Practice	as study tasks within
	within the CertMaster	Questions are found in the	CertMaster Learn.
	Learn learning plan.	CompTIA Learning Center,	
	Students are	the platform through which	
	encouraged to complete	the eBook is delivered.	
	a certain number of		
	tasks in each login session based on their		
	desired course		
	completion date.		
Lesson 1:	completion date.		
Summarize			
Fundamental			
Security Concepts			
-			
Topic 1A: Security	Video: Job Roles	Video: Job Roles Using	
Concepts	Using Security+	Security+	
	Review Activity:	Review Activity:	
Exam objectives	Security Concepts	Security Concepts	
covered: 1.2			
Summarize			
fundamental security			
concepts. Topic 1B: Security	PBO: Compare and	Review Activity:	
Controls	PBQ: Compare and Contrast Security	Review Activity: Security Controls	
Controls	Control and	Security Controls	
Exam objectives	Framework Types		
covered:	Review Activity:		
1.1 Compare and	Security Controls		
contrast various types	-		
of security controls.			
	• Lesson 1: Practice	• Lesson 1: Practice	Assisted Lab: Explore
	Questions	Questions	the Lab Environment
			Assisted Lab: Perform
			System Configuration
			Gap Analysis
			Assisted Lab: Configuring Examples
			Configuring Examples
			of Security Control
Lesson 2: Compare			Types
Threat Types			
Topic 2A: Threat	Video:	Video: Identifying	
Actors	Identifying	Common Threat	
	Common Threat	Actors and	
Exam objectives	Actors and	Motivations	
covered:	Motivations		

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2.1 Compare and	Review Activity:	Review Activity:	
contrast common	Threat Actors	Threat Actors	
threat actors and			
motivations.			
Topic 2B: Attack	Review Activity:	Review Activity: Attack	
Surfaces	Attack Surfaces	Surfaces	
Exam objectives			
covered:			
2.2 Explain common			
threat vectors and			
attack surfaces.			
Topic 2C: Social	Video: Use the Social	Video: Use the Social	
Engineering	Engineer Toolkit	Engineer Toolkit	
	PBQ: Compare and	Review Activity: Social	
Exam objectives	Contrast Social	Engineering	
covered:	Engineering		
2.2 Explain common	Techniques		
threat vectors and	Review Activity:		
attack surfaces.	Social Engineering		
	• Lesson 2: Practice	Lesson 2: Practice	Assisted Lab: Finding
	Questions	Questions	Open Service Ports
			Assisted Lab: Using
			SET to Perform Social
			Engineering
Lesson 3: Explain			
Cryptographic			
Solutions			
Topic 3A:	Video: Identifying	Video: Identifying	
Cryptographic	Symmetric	Symmetric	
Algorithms	Cryptographic	Cryptographic	
	Algorithms	Algorithms	
Exam objectives	PBQ: Identify	Review Activity:	
covered:	Cryptographic	Cryptographic	
1.4 Explain the	Modes of Operation	Algorithms	
importance of using	Review Activity:		
appropriate	Cryptographic		
cryptographic	Algorithms		
solutions.			
Topic 3B: Public Key	PBQ: Implement	Review Activity: Public	
Infrastructure	Certificates and	Key Infrastructure	
	Certificate		
Exam objectives	Authorities		
covered: 1.4 Explain	Review Activity:		
the importance of	Public Key		
using appropriate	Infrastructure		
cryptographic			
solutions.			

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Topic 3C: Cryptographic Solutions	Review Activity: Cryptographic Solutions	Review Activity: Cryptographic Solutions	
Exam objectives covered: 1.4 Explain the importance of using appropriate cryptographic solutions.			
	Lesson 3: Practice Questions	Lesson 3: Practice Questions	 APPLIED Lab: Using Storage Encryption Assisted Lab: Using Hashing and Salting
Lesson 4: Implement Identity and Access Management			
Topic 4A: Authentication Exam objectives covered: 4.6 Given a scenario, implement and maintain identity and access management.	 Video: Implementing IAM Review Activity: Authentication 	 Video: Implementing IAM Review Activity: Authentication 	
Topic 4B: Authorization Exam objectives covered: 4.6 Given a scenario, implement and maintain identity and access management.	 Video: Examining the Access Token Review Authorization PBQ: Implement an Access Control Model 	 Video: Examining the Access Token Review Activity: Authorization 	
Topic 4C: Identity Management Exam objectives covered: 4.6 Given a scenario, implement and maintain identity and access management	Review Activity: Identity Management	Review Activity: Identity Management	
	• Lesson 4: Practice Questions	Lesson 4: Practice Questions	Assisted Lab: Managing Password Security

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			Assisted Lab: Managing Permissions
Lesson 5: Secure Enterprise Network Architecture			
Topic 5A: Enterprise Network Architecture Exam objectives covered: 3.1 Compare and contrast security implications of different architecture models. 3.2 Given a scenario, apply security principles to secure enterprise infrastructure.	 Video: Configuring EAP and AAA Authentication Technologies Review Activity: Enterprise Network Architecture 	 Video: Configuring EAP and AAA Authentication Technologies Review Activity: Enterprise Network Architecture 	
Topic 5B: Network Security Appliances Exam objectives covered: 3.2 Given a scenario, apply security principles to secure enterprise infrastructure.	 Video: Load Balancer Configuration Review Activity: Network Security Appliances 	 Video: Load Balancer Configuration Review Activity: Network Security Appliances 	
Topic 5C: Secure Communications Exam objectives covered: 3.2 Given a scenario, apply security principles to secure enterprise infrastructure.	Video: Secure Remote Administration Protocols PBQ: Implement Secure Remote Access Protocols Review Activity: Secure Communications Lesson 5: Practice	 Video: Secure Remote Administration Protocols Review Activity: Secure Communications 	Assisted Lab: Setting
Lesson 6: Secure Cloud Network Architecture	Questions	Questions	up Remote Access Assisted Lab: Jetting Up Remote Access TLS Tunneling

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Topic 6A: Cloud Infrastructure Exam objectives covered: 3.1 Compare and contrast security implications of different architecture models.	 Review Activity: Cloud Infrastructure PBQ: Analyze Infrastructure Types and Functions 	Review Activity: Cloud Infrastructure	
Topic 6B: Embedded Systems and Zero Trust Architecture Exam objectives covered: 1.2 Summarize fundamental security concepts. 3.1 Compare and contrast security implications of different architecture models.	Review Activity: Embedded Systems and Zero Trust Architecture	Review Activity: Embedded Systems and Zero Trust Architecture	
The decision of the decision o	Lesson 6: Practice Questions	Lesson 6: Practice Questions	 Assisted Lab: Using Containers Assisted Lab: Using Virtualization
Lesson 7: Explain Resiliency and Site Security Concepts			
Topic 7A: Asset Management Exam objectives covered: 3.4 Explain the importance of resilience and recovery in security architecture. 4.2 Explain the security implications of proper hardware, software, and data asset management.	Video: Applying the Elements of Asset Management Review Activity: Asset Management	Video: Applying the Elements of Asset Management Review Activity: Asset Management	

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Topic 7B: Redundancy Strategies Exam objectives covered: 1.2 Summarize fundamental security concepts. 3.4 Explain the importance of resilience and recovery in security architecture.	 Video: Detect Malicious Network Traffic with a Honeypot PBQ: Incorporate Redundancy Strategies Review Activity: Redundancy Strategies 	 Video: Detect Malicious Network Traffic with a Honeypot Review Activity: Redundancy Strategies 	
Topic 7C: Physical Security Exam objectives covered: 1.2 Summarize fundamental security concepts.	Review Activity: Physical Security	Review Activity: Physical Security	
	Lesson 7: Practice Questions	Lesson 7: Practice Questions	 Assisted Lab: Implement Backups Assisted Lab: Performing Drive Sanitization
Lesson 8: Explain Vulnerability Management			
Topic 8A: Device and OS Vulnerabilities Exam objectives covered: 2.3 Explain various types of vulnerabilities.	 PBQ: Identify Types of Vulnerabilities Review Activity: Device and OS Vulnerabilities 	Review Activity: Device and OS Vulnerabilities	
Topic 8B: Application and Cloud Vulnerabilities Exam objectives covered: 2.3 Explain	 Video: Understand Various Types of Vulnerabilities Review Activity: Application and 	 Video: Understand Various Types of Vulnerabilities Review Activity: Application and Cloud Vulnerabilities 	

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various types of vulnerabilities.	Cloud Vulnerabilities		
Topic 8C: Vulnerability Identification Methods Exam objectives covered: 4.3 Explain various activities associated with vulnerability management.	 Video: Scanning a Network with Nessus Review Activity: Vulnerability Identification Methods 	 Video: Scanning a Network with Nessus Review Activity: Vulnerability Identification Methods 	
Topic 8D: Vulnerability Analysis and Remediation Exam objectives covered: 4.3 Explain various activities associated with vulnerability management.	Review Activity: Vulnerability Analysis and Remediation	Review Activity: Vulnerability Analysis and Remediation	
	Lesson 8: Practice Questions	Lesson 8: Practice Questions	 Assisted Lab: Exploiting and Detecting SQLi Assisted Lab: Working with Threat Feeds Assisted Lab: Performing Vulnerability Scans
Lesson 9: Evaluate Network Security Capabilities			
Topic 9A: Network Security Baselines Exam objectives covered: 4.1 Given a scenario, apply common security techniques to computing resources.	 Review Activity: Network Security Baselines PBQ: Implement Secure Wireless Infrastructure 	Review Activity: Network Security Baselines	
4.5 Given a scenario, modify enterprise			

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capabilities to enhance			
security. Topic 9B: Network Security Capability Enhancement Exam objectives covered: 4.5 Given a scenario, modify enterprise capabilities to enhance security.	 Video: Configuring Application Control Software Review Activity: Network Security Capability Enhancement 	 Video: Configuring Application Control Software Review Activity: Network Security Capability Enhancement 	
	Lesson 9: Practice Questions	Lesson 9: Practice Questions	 Assisted Lab: Understanding Security Baselines APPLIED Lab: Implementing a Firewall
Lesson 10: Assess Endpoint Security Capabilities			
Topic 10A: Implement Endpoint Security Exam objectives covered: 2.5 Explain the purpose of mitigation techniques used to secure the enterprise. 4.1 Given a scenario, apply common security techniques to computing resources. 4.5 Given a scenario, modify enterprise capabilities to enhance security.	 Video: Removing Unnecessary Services Video: Hardening an Operating System Review Activity: Implement Endpoint Security 	 Video: Removing Unnecessary Services Video: Hardening an Operating System Review Activity: Implement Endpoint Security 	
Topic 10B: Mobile Device Hardening Exam objectives covered: 4.1 Given a scenario, apply common security techniques to	 PBQ: Implement Mobile Device Management Review Activity: Mobile Device Hardening 	Review Activity: Mobile Device Hardening	

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computing resources.			
	Lesson 10: Practice Questions	Lesson 10: Practice Questions	Assisted Lab: Using Group PolicyAPPLIED Lab: Hardening
Lesson 11: Enhance Application Security Capabilities			
Topic 11A: Application Protocol Security Baselines Exam objectives covered: 4.5 Given a scenario, modify enterprise capabilities to enhance security.	 Video: Securing an Email Server PBQ: Modify Enterprise Capabilities to Enhance Security Review Activity: Application Protocol Security Baselines 	 Video: Securing an Email Server Review Activity: Application Protocol Security Baselines 	
Topic 11B: Cloud and Web Application Security Concepts Exam objectives covered: 4.1 Given a scenario, apply common security techniques to computing resources.	Review Activity: Cloud and Web Application Security Concepts	Review Activity: Cloud and Web Application Security Concepts	
, 0	Lesson 11: Practice Questions	Lesson 11: Practice Questions	 Assisted Lab: Performing DNS Filtering Assisted Lab: Configuring System Monitoring
Lesson 12: Explain Incident Response and Monitoring Concepts			
Topic 12A: Incident Response Exam objectives covered: 4.8 Explain appropriate incident response activities.	 PBQ: Summarize Incident Response Procedures Review Activity: Incident Response 	Review Activity: Incident Response	

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Topic 12B: Digital Forensics Exam objectives covered: 4.8 Explain appropriate incident response activities.	 Video: Investigating Security Incidents Review Activity: Digital Forensics PBQ: 	 Video: Investigating Security Incidents Review Activity: Digital Forensics 	
Topic 12C: Data Sources Exam objectives covered: 4.9 Given a scenario, use data sources to support an investigation.	 Video: Analyzing Packets Review Activity: Data Sources 	 Video: Analyzing Packets Review Activity: Data Sources 	
Topic 12D: Alerting and Monitoring Tools Exam objectives covered: 4.4 Explain security alerting and monitoring concepts and tools.	 Video: Understand Security Alerting and Monitoring Concepts and Tools Review Activity: Alerting and Monitoring Tools 	 Video: Understand Security Alerting and Monitoring Concepts and Tools Review Activity: Alerting and Monitoring Tools 	
	Lesson 12: Practice Questions	Lesson 12: Practice Questions	 APPLIED Lab: Incident Response: Detection APPLIED Lab: Performing Digital Forensics Assisted Lab: Performing Root Cause Analysis APPLIED Lab: Using Network Sniffers
Lesson 13: Analyze Indicators of Malicious Activity			
Topic 13A: Malware Attack Indicators Exam objectives covered: 2.4 Given a scenario, analyze indicators of malicious activity.	 PBQ: Analyze Indicators of Malware-Based Attacks Review Activity: Malware Attack Indicators 	Review Activity: Malware Attack Indicators	
Topic 13B: Physical and Network Attack Indicators	 Video: Password Attacks Video: Implementing Secure Network Addressing Services 	 Video: Password Attacks Video: Implementing Secure Network Addressing Services 	

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Exam objectives covered: 2.4 Given a scenario, analyze indicators of malicious activity.	Review Activity: Physical and Network Attack Indicators	Review Activity: Physical and Network Attack Indicators	
Topic 13C: Application Attack Indicators Exam objectives covered: 2.4 Given a scenario, analyze indicators of malicious activity.	Review Activity: Application Attack Indicators	Review Activity: Application Attack Indicators	
Lesson 14:	Lesson 13: Practice Questions	Lesson 13: Practice Questions	 Assisted Lab: Detecting and Responding to Malware Assisted Lab: Understanding On-Path Attacks
Summarize Security Governance Concepts			
Topic 14A: Policies, Standards, and Procedures Exam objectives covered: 5.1 Summarize elements of effective security governance.	 PBQ: Apply Appropriate Polices and Regulations Review Activity: Policies, Standards, and Procedures 	Review Activity: Policies, Standards, and Procedures	
Topic 14B: Change Management Exam objectives covered: 1.3 Explain the importance of change management processes and the impact to security.	 Video: Understand the Importance of Change Management Processes Review Activity: Change Management 	 Video: Understand the Importance of Change Management Processes Review Activity: Change Management 	
Topic 14C: Automation and Orchestration Exam objectives covered: 4.7 Explain the importance of	Video: Understand Automation and Orchestration for Secure Operations	Video: Understand Automation and Orchestration for Secure Operations	

 Review Activity: Automation and Orchestration Lesson 14: Practice Questions 	 Review Activity: Automation and Orchestration Lesson 14: Practice Questions 	 ADAPTIVE Lab: Using a Playbook Assisted Lab: Implementing Allow
Orchestration • Lesson 14: Practice	Orchestration • Lesson 14: Practice	a Playbook • Assisted Lab:
Lesson 14: Practice	Lesson 14: Practice	a Playbook • Assisted Lab:
		a Playbook • Assisted Lab:
		Lists and Deny Lists • Assisted Lab: Use Cases of Automation and Scripting
		!
Review Activity: Risk Management Processes and Concepts	Review Activity: Risk Management Processes and Concepts	
Review Activity: Vendor Management Concepts	Review Activity: Vendor Management Concepts	
 Video: Exploring Penetration Testing Tools Review Activity: Audits and Assessments 	 Video: Exploring Penetration Testing Tools Review Activity: Audits and Assessments 	
Lesson 15: Practice Questions	Lesson 15: Practice Questions	 Assisted Lab: Performing Reconnaissance Assisted Lab: Performing Penetration Testing
	Management Processes and Concepts Review Activity: Vendor Management Concepts Video: Exploring Penetration Testing Tools Review Activity: Audits and Assessments Lesson 15: Practice	Management Processes and Concepts Review Activity: Vendor Management Concepts Review Activity: Vendor Management Concepts Video: Exploring Penetration Testing Tools Review Activity: Audits and Assessments Management Processes and Concepts Video: Exploring Penetration Testing Tools Review Activity: Audits and Assessments Nanagement Processes and Concepts Video: Exploring Penetration Testing Tools Review Activity: Audits and Assessments

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Concepts			
Topic 16A: Data Classification and Compliance Exam objectives covered: 3.3 Compare and contrast concepts and strategies to protect data. 5.4 Summarize elements of effective security compliance.	 Video: Understand Effective Security Compliance PBQ: Explain Privacy and Data Sensitivity Concepts PBQ: Apply Appropriate Techniques to Secure Data Review Activity: Data Classification and Compliance 	Video: Understand Effective Security Compliance Review Activity: Data Classification and Compliance	
Topic 16B: Personnel Policies Exam objectives			
covered: 5.6 Given a scenario, implement security awareness practices.			
	Lesson 16: Practice Questions	Lesson 16: Practice Questions	 Assisted Lab: Training and Awareness through Simulation Challenge Lab: Network Incident Investigation and Remediation
	Final Assessment	Final Assessment	
	 Strengths and Weaknesses Dashboard Flashcards Game Center 	Strengths and Weaknesses Dashboard	
Student Resources	Mapping Course Content to CompTIA Security+ SY0-701 (pdf)	Mapping Course Content to CompTIA Security+ SY0-701 (pdf)	
Instructor Resources	 Presentation Planner for Security+ SY0-701 (xlsx) Transition Guide for Official CompTIA Security+ Exam SY0- 601 to Official CompTIA Security+ SY0-701 (pdf) 	 Presentation Planner for Security+ SY0-701 (xlsx) Transition Guide for Official CompTIA Security+ Exam SY0-601 to Official CompTIA Security+ SY0-701 (pdf) Onboarding Guide for Official CompTIA 	

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	 Onboarding Guide for Official CompTIA Security+ SY0-701 Content (pdf) Mapping Course Content to CompTIA Security+ SY0-701 (pdf) Instructor PowerPoint Presentations for Security+ SY0-701 (zip) 	Security+ SY0-701 Content (pdf) Mapping Course Content to CompTIA Security+ SY0-701 (pdf) Instructor PowerPoint Presentations for Security+ SY0-701 (zip)	