AWS Cloud Practitioner (CLF-C02) Course Outline

Chapter 1

Course Introduction

Chapter 2

Foundation of Cloud Computing

- ☐ Getting Your Head in the Cloud
- ☐ Introducing Cloud Computing and Deployment Models
- ☐ Exploring Regions and Availability Zones
- ☐ Reviewing Edge Locations and Local Zones
- ☐ Introducing the Frameworks
- ☐ Meeting the AWS Management Console and Accessing AWS
- ☐ Demo: Exploring Your Amazon Web Services (AWS) Account
- ☐ Foundations of Cloud Computing Exam Tips
- ☐ QUIZ
- ☐ Foundations of Cloud Computing Quiz

Chapter 3

Compute Technology and Services

- ☐ Compute: The Bigger Picture
- ☐ Reviewing EC2 Features
- ☐ Demo: Exploring Compute Services - EC2 in Action
- ☐ Containers: The Bigger Picture
- ☐ Serverless Services: The Bigger Picture
- ☐ Understanding Serverless Services Pricing and Features
- ☐ Demo: Exploring Compute Services - Lambda in Action
- ☐ HANDS-ON LAB Create a Lambda Function Using the AWS Management Console
- ☐ Introducing Additional Compute Services
- ☐ Compute Technology and Services Exam Tips
- ☐ QUIZ Compute Technology and Services Quiz

Chapter 4

Storage Technology and Services

- ☐ Exploring Amazon EC2 Storage
- ☐ Amazon Simple Storage Service (S3): The Bigger Picture
- ☐ Exploring S3 Storage Classes
- ☐ Demo: Exploring Storage Services - S3 in Action
- ☐ HANDS-ON LAB Creating S3 Buckets with Versioning and Encryption
- ☐ Introducing Additional Storage Services
- ☐ Amazon Elastic Block Store (EBS)
- ☐ AWS Storage Gateway
- ☐ Overview of AWS Backup
- ☐ Storage Exam Tips
- ☐ QUIZ Storage Technology and Services Quiz

Chapter 5

Content Delivery and Networking Technology and Services

- ☐ Content Delivery: The Bigger Picture
- ☐ AWS Global Accelerator
- ☐ Networking: The Bigger Picture
- ☐ Demo: Exploring Networking Services - VPC in Action
- ☐ HANDS-ON LAB Launch an EC2 Instance in a Virtual Private Cloud (VPC)
- ☐ DNS: The Bigger Picture
- ☐ Applying Hybrid Models with Networking Services
- ☐ Content Delivery and Networking Exam Tips
- ☐ QUIZ Content Delivery and Networking Technology and Services Quiz

Chapter 6

Database Technology and Services

- ☐ Databases: The Bigger Picture
- ☐ Understanding AWS Database Migration Services
- ☐ Amazon DynamoDB
- ☐ Overview of Memory-Based Databases in AWS
- ☐ QUIZ Database Technology and Services Quiz

Chapter 7

Development, Messaging, and Deployment Technology and Services

- ☐ What Is CI/CD?
- ☐ AWS Development Tools
- ☐ Demo: Working with AWS CloudShell and the AWS Command Line Interface (AWS CLI)

- ☐ Demo: Using AWS Cloud9
- ☐ Understanding AWS CodeArtifact
- ☐ Decoupling Application Components
- ☐ Introducing Amazon Simple Notification Service (SNS)
- ☐ HANDS-ON LAB Create and Subscribe to an AWS SNS Topic
- ☐ Introducing Amazon Simple Queue Service (SQS)
- ☐ Standard And FIFO Queues
- ☐ Short Polling vs Long Polling
- ☐ What Is Amazon Simple Email Service (SES)?
- ☐ Introducing Amazon EventBridge
- ☐ Understanding Step Functions
- ☐ Deploying Infrastructure as Code with AWS CloudFormation
- ☐ HANDS-ON LAB Create a DynamoDB Table Using CloudFormation
- ☐ What Is AWS Elastic Beanstalk?
- ☐ Demo: Deploying an Application Using Elastic Beanstalk
- ☐ Demo: Using AWS X-Ray to Identify Performance Issues
- ☐ Development, Messaging, and Deployment Exam Tips - Part 1
- ☐ Development, Messaging, and Deployment Exam Tips - Part 2
- ☐ QUIZ Development, Messaging, and Deployment Technology and Services Quiz

Chapter 8

Migration and Transfer Technology and Services

- ☐ Introducing the AWS Snow Family
- ☐ Identifying Database Migration Tools
- ☐ Exploring the AWS Transfer Family
- ☐ AWS DataSync
- ☐ Understanding AWS Application Discovery Service
- ☐ Introducing AWS Application Migration Service
- ☐ Discovering AWS Migration Hub
- ☐ QUIZ Migration and Transfer Technology and Services Quiz

Chapter 9

- ☐ Artificial Intelligence, Machine Learning, and Analytics Technology and Amazon Redshift and Redshift Serverless
  What Is Amazon Kinesis?
- ☐ Exploring Kinesis Data Firehose
- ☐ What Is Amazon Athena?
- ☐ Demo: Using Athena to Query Data
- ☐ Introducing AWS Glue
- ☐ Exploring AWS Data Exchange
- ☐ Understanding Amazon Elastic Map Reduce (EMR)
- ☐ What is Amazon OpenSearch?
- ☐ Exploring Managed Streaming for Apache Kafka (Amazon MSK)
- ☐ Understanding Amazon QuickSight
- ☐ Machine Learning With Amazon SageMaker
- ☐ What Is Amazon Kendra?
- ☐ Understanding Amazon Lex
- ☐ Demo: Using Amazon Polly
- ☐ Introducing Amazon Comprehend
- ☐ Amazon Textract, Amazon Transcribe, and Amazon Translate
- ☐ Demo: Using Amazon Transcribe
- ☐ Demo: Amazon Rekognition in Action
- ☐ Artificial Intelligence, Machine Learning, and Analytics Exam Tips - Part 1
- ☐ Artificial Intelligence, Machine Learning, and Analytics Exam Tips - Part 2
- ☐ QUIZ Artificial Intelligence and Machine Learning Technology and Services Quiz

Services

Chapter 10

Auditing, Monitoring, Logging, and Additional Technology and Services

- ☐ Introducing Monitoring and Logging on AWS
- ☐ Exploring Amazon CloudWatch and AWS CloudTrail
- ☐ Demo: Getting to Know CloudWatch Dashboards
- ☐ Managing Many Resources on AWS
- ☐ Monitoring Service Health and Best Practices
- ☐ Understanding Auditing on AWS
- ☐ Identifying Business and End User Services
- ☐ Auditing, Monitoring, and Logging Exam Tips

☐ Auditing, Monitoring, Logging, and Additional Technology and Services n and Exam Preparation

Chapter 11

☐ Security, Compliance, and Support
Security: The Bigger Picture
☐ What Do We Need To Secure on AWS?
☐ Illustrating the Principle of Least Privilege
☐ What Is IAM?
☐ Leveraging Existing Identity Providers
☐ Keeping Secrets Safe
☐ Exploring Network Security Services
☐ What Is Security Hub?
☐ Demo: Exploring Security Hub
☐ Responding to Security Events
☐ Growing Your Security Muscles
☐ Governing Multiple Accounts on AWS
☐ Understanding Compliance on AWS
☐ Security, Compliance, and Governance Exam Tips

Chapter 12

☐ Pricing, Billing, and Support
Cloud Costs: The Bigger Picture
☐ Optimizing the Cost of Compute
☐ Understanding Data Storage Costs
☐ Understanding Data Transfer Costs
☐ Monitoring and Predicting Costs on AWS
☐ Demo: Setting a Budget Alert in Your AWS Account
☐ Managing Costs in a Multi-Account Environment
☐ Monitoring The Cost of Resource Groups
☐ Seeking Support From AWS
☐ Exploring Other Sources of Support

Chapter 13
Exam Preparation