# CompTIA Network+ Certification

## Course Outline

### 1. Network Fundamentals
- Network Elements
- Physical Topologies
- Physical Media
- Common Network Connectivity Devices

### 2. The OSI Model
- Introducing the OSI Model
- The OSI Model's Lower Layers
- The OSI Model's Middle Layers
- The OSI Model's Upper Layers
- Networking Protocols

### 3. TCP/IP Fundamentals
- Introducing to TCP/IP
- The Transmission Control Protocol
- The Internet Layers Protocols
- The Application Protocols
- Other Upper-Layer Protocols
- Overview of Port and Sockets
- Understanding IP Addressing
- Name Resolution Methods
- Configuring TCP/IP on Windows Workstations
- Virtual LANs (VLANs)

Practice Questions: 1~180

### 4. TCP/IP Utilities
- arp
- netstat
- nbtstat
- ftp
- ping
- ipconfig
- tracert
- telnet
- nslookup

### 5. Network Operating Systems (NOS)
- Microsoft Windows
- Novell NetWare
- UNIX / Linux
- MacOS

### 6. Wired and Wireless Networks
- Before Installing New Hardware or Software
- Wireless Networking
- Workstation Configuration
- Network Installation Tools

### 7. WAN and Remote Access Technologies
- Remote Access Connection
- Configuration Requirements
- Remote Access Connection Methods
- Remote Access Protocols

Practice Questions: 181~360

### 8. Network Access and Security
- Accessing Network Resources
- Managing User Account and Password Security
- Using Firewalls
- Understanding and Defending against Hacker Attacks
- DoD Security Standards
- Understanding Encryption
- Security Policies

## 9. Fault Tolerance and Disaster Recovery

- Accessing Fault Tolerance and Disaster Recovery Needs
- Power Management
- Disk System Fault Tolerance
- Backup Considerations
- Virus Protection
- Software Revisions

## 10. Network Troubleshooting

- Narrowing Down the Problem
- Troubleshooting Steps
- The Troubleshooter's Resources
- Troubleshooting Tips

Practice Questions: 361~548

- General Review - Assorted Practice Questions
- Testing