

## CCIE Routing and Switching Foundation Lab Boot Camp Course Syllabus

### Day 1:

1. CCIE Routing and Switching Track Introduction
  - 1.1. Blueprint
  - 1.2. Requirements
2. CCBOOTCAMP's Rack Introduction
3. CCIE Routing and Switching Program Overview
4. Frame-Relay
  - 4.1. Frame relay overview
  - 4.2. Hub and spoke topology
  - 4.3. Mesh topology
  - 4.4. Point-to-point topology
  - 4.5. Combination
  - 4.6. Other issues
5. Catalyst
  - 5.1. Interface Commands
  - 5.2. VTP / Trunking
  - 5.3. Spanning Tree
  - 5.4. SPAN / RSPAN
  - 5.5. Disable Password Recovery
  - 5.6. Control Telnet Access
  - 5.7. Storm Control
  - 5.8. Protected Ports
  - 5.9. 802.1X authentication
  - 5.10. MAC Address expiration
  - 5.11. Ether-channel
  - 5.12. Templates

### **Complete FR and Catalyst Labs**

### Day 2:

6. RIPv2
  - 6.1. Introduction
  - 6.2. Authentication
  - 6.3. Summarization
  - 6.4. Timers
  - 6.5. Split Horizon
  - 6.6. Poison Reverse
  - 6.7. Neighbors
  - 6.8. RIPv1 and RIPv2 Communication
  - 6.9. Offset List
  - 6.10. Source IP address Validation
  - 6.11. Distribution Control
  - 6.12. Other Topics
7. OSPF
  - 7.1. OSPF Router Types
  - 7.2. OSPF Network Types
  - 7.3. OSPF Area Types
  - 7.4. OSPF Neighbors
  - 7.5. OSPF in NBMA
  - 7.6. OSPF Summary
  - 7.7. OSPF Virtual Like
  - 7.8. OSPF Authentication
  - 7.9. Distribution Control
  - 7.10. Neighbor Adjacency troubleshooting
  - 7.11. Other Topics

### **Complete RIPv2 and OSPF Labs**

### Day 3:

8. EIGRP
  - 8.1. Introduction
  - 8.2. EIGRP Update
  - 8.3. EIGRP Algorithm
  - 8.4. EIGRP Metrics
  - 8.5. EIGRP Authentication
  - 8.6. EIGRP Default Routes
  - 8.7. EIGRP Summarization
  - 8.8. EIGRP Load Balancing
  - 8.9. Tuning EIGRP
  - 8.10. Other Topics
9. Multiple Routing Protocols
  - 9.1. Administrative Distance
  - 9.2. Redistribution
  - 9.3. Route Maps
  - 9.4. Distribute List
  - 9.5. Prefix List
10. Redundancy
  - 10.1. HSRP
  - 10.2. GLBP
  - 10.3. VRRP

**Complete EIGRP and Multiple Routing Protocols Labs**

**Day 4:**

11. BGP
  - 11.1. BGP neighbor relationships
  - 11.2. BGP and IGP (Interior Gateway Protocol)
  - 11.3. iBGP, eBGP and next hop
  - 11.4. Full mesh for iBGP peers
  - 11.5. BGP and Authentication
  - 11.6. Preventing AS from becoming a transit AS
  - 11.7. Summarizing in BGP
  - 11.8. BGP attributes and metrics

**Complete BGP Labs**

**Day 5:**

12. IPv6
  - 12.1. IPv6 Addressing
  - 12.2. IPv6 Address Scopes
  - 12.3. Enabling IPv6
  - 12.4. RIPng
  - 12.5. OSPFv3
  - 12.6. OSPFv3 over NBMA
  - 12.7. IPv6 over IPv4

**Complete IPv6 and all Labs**