CCNA 3—Switching Basics and Intermediate Routing

During the Cisco® Networking Academy® CCNA 3 course administered by the undersigned instructor, the student was able to proficiently:

Ronaldo Onorio dos Santos
Student's Name

December 28, 2006
Date

Heguedusch Antonio
Instructor

Fundacao Bradesco
Academy Name

Osasco
Location

Instructor's Signature

- Compute and use Variable Length Subnet Masking (VLSM) techniques to design and implement effective and efficient IP addressing

- Describe, configure, verify, analyze, and troubleshoot the RIP v2 distance vector routing protocol

- Describe the concepts and techniques of link-state routing, and compare and contrast with distance vector routing

- Describe, configure, verify, analyze, and troubleshoot the OSPF link-state routing protocol in a single area mode of operation

- Describe, configure, verify, analyze, and troubleshoot the Extended IGRP routing protocol

- Demonstrate an ability to troubleshoot routing protocol problems, specifically using and interpreting the **show** and **debug** commands

- Describe the operation and technology of the IEEE 802.3 Ethernet variants

- Describe and compare the concepts and techniques used within Ethernet switched LANs

- Describe and compare the concepts and techniques used by Ethernet LAN switches

- Design a simple LAN using layered techniques

- Describe the three-layer process as used by Cisco for internetwork design purposes

- Describe, configure, and administer a Cisco Catalyst® LAN switch

- Compare and contrast various forms of redundancy built into networks, and explain the advantages and disadvantages of redundancy incorporation

- Describe the operation of the spanning-tree algorithm, and describe the methods by which it is implemented and used in a switched network

- Describe and compare the concepts, advantages, and disadvantages of virtual LANs

- Describe, configure, and administer inter-switch VLANs on Cisco switches

- Troubleshoot VLANs

- Describe, configure, and administer VTP on Cisco switches

- Describe, configure, and administer routing between VLANs on Cisco switches