

Montgomery County Community College  
CIS 171  
Switching, Routing and Wireless Essentials (Cisco Semester 2)  
3-2-2

of a router, routing tables, and the route lookup process.	In-Class Labs on CISCO Equipment Supplemented by Packet Tracer Labs Assignments	Hands-on Labs Packet Tracer Labs Exam
5. Configure IP, static and default routing.	Reading Lecture/Discussion In-Class Labs on CISCO Equipment Supplemented by Packet Tracer Labs Assignments	Discussion/Questions Chapter Tests Hands-on Labs Packet Tracer Labs Exam
6. Configure routers using a variety of technologies and protocols which will include wireless, virtual and inter-VLAN routing.	Reading Lecture/Discussion In-Class Labs on CISCO Equipment Supplemented by Packet Tracer Labs Assignments	Discussion/Questions Chapter Tests Hands-on Labs Packet Tracer Labs Exam
7. Troubleshoot problems with switches and routers using a variety of technologies and protocols.	Reading Lecture/Discussion In-Class Labs on CISCO Equipment Supplemented by Packet Tracer Labs Assignments	Discussion/Questions Chapter Tests Hands-on Labs Packet Tracer Labs Exam
8. Explain the security vulnerabilities related to routing configuration and mechanisms to protect against these threats.	Reading Lecture/Discussion In-Class Labs on CISCO Equipment Supplemented by Packet Tracer Labs Assignments	Discussion/Questions Chapter Tests Hands-on Labs Packet Tracer Labs Exam

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Director of Educational Effectiveness. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

SEQUENCE OF TOPICS:

**1. Basic Device Configuration**

~~Configure a Switch with Initial Settings~~

~~Configure Switch Ports~~

Secure Remote Access

Configure Basic Router Settings



## **15. IP Static Routing**

Configure IP Static Routes

Configure IP Default Static  
Routes

Configure Floating Static Routes

Configure Static Host Routes

## **16. Troubleshoot Static and Default Routes**

Packet Processing with Static Routes

Troubleshoot IPv4 Static and Default Route Configuration

### **LEARNING MATERIALS:**

Online curriculum and assessments from Cisco Academy web portal. Provided to students with no additional charge.

(Optional)

*Routing and Switching Essentials* Cisco Press, 2017- ISBN-13: 978-1-58713-427-2

### **COURSE APPROVAL:**

Prepared by: Alan Evans

Date: 3/2001

Revised by: Anil Datta

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