## C S 50B Syllabus

Routing and Switching Essentials (RSE) covers the architecture, components, and operations of routers and switches in a small network. You will learn how to configure a router and a switch for basic functionality. This course is preparation for the CCENT and CCNA certification exams.

## **Course Summary:**

This class utilizes three different Web Sites

1. This Canvas site <a href="https://foothillcollege.instructure.com">https://foothillcollege.instructure.com</a> (your username and password are your MyPortal credentials)

The Canvas site is where you will find the weekly assignments, this site is where is assignments are posted but the assignments are actually performed on one of the other sites.

2. The Cisco Networking Academy site <a href="https://cisco.netacad.com">https://cisco.netacad.com</a> (Links to an external site.) Links to an external site. (You were sent an email telling you how to confirm your Cisco Networking Academy account)

Each week you must go to the Cisco Networking Academy site, read the assigned Module, take the quiz and then take the weekly exam. The quiz is scored by it is not part of your grade, its' purpose is to help you evaluate your understanding of the Module that you read. When you are ready, you will take the weekly exam, each exam only count 1% of your class grade.

I recommend that you first do the reading and take the quiz. Then do the Labs and finally take the Module Exam.

3. The NETLAB site is <a href="https://openlab.bayict.cabrillo.edu">https://openlab.bayict.cabrillo.edu</a> (Links to an external site.) Links to an external site.) (Your NETLAB username is your Foothill Student ID and the initial password is foothill 123, not your MyPortal password (Links to an external site.) Links to an external site.)

You will perform the assigned labs on the NETLAB site, the lab documents are downloaded from this Canvas site, the labs are provided to you as Word Documents. You will download the labs each week and use them when you perform the Labs using NETLAB. As you perform the Labs you should answer the questions presented in the Lab document.

NETLAB is a Web Based front end to the Cisco Routers and Switches that you are learning to configure. The set of Routers, Switches, and PCs that you will be accessing is called a Pod. You will reserve a Pod for your exclusive use.

When you complete the Lab and the Lab write-up you will submit it for grading on the Canvas site.

How to ask questions and/or contact one of the instructors: Please use Canvas for all communications, use Discussions to ask questions regarding any of the Course Material, discussions have been setup for each chapter.

- Questions about the Reading
- Questions about the Labs
- Questions about the Quiz
- Questions about the Exams

If you need to ask one of us a private question please use the Inbox on the far right of this page.

**All of the assignments** for the class are listed in the Module section, the Syllabus includes a summary of the dates that all assignments are due.

**Methods of Evaluation** (All work must be completed by the scheduled due dates, this distribution may change)

Chapter Exams 10%

Labs 50%

Final Exam 40%

## Grading

Grade		Grad	Grade		
Α	90 to 100%	D	60 to 69.9%		
В	80 to 89.9%	F	< 60%		
С	70 to 79.9%				

**Recommended Supplemental Textbooks** These books are not required but can be very helpful to help you understand the material, they are design to assist you when you are studying for the Cisco CCENT and CCNA Exams.

<u>Cisco CCENT/CCNA ICND1 100-105 Official Cert Guide covers C S 50A & B or (Links to an external site.)</u> Links to an external site.

CCNA Routing and Switching 200-125 Official Cert Guide Library covers C S 50A, B, C, D (Links to an external site.) Links to an external site.

## **Class Web Sites**

Canvas <a href="https://foothillcollege.instructure.com">https://foothillcollege.instructure.com</a>

Cisco Network Academy (NetAcad) <a href="https://cisco.netacad.com">https://cisco.netacad.com</a> (Links to an external site.)Links to an external site.

NETLAB https://openlab.bayict.cabrillo.edu/ (Links to an external site.)Links to an external site.

Foothill College Academic Integrity Policy and Statement (Links to an external site.)Links to an external site.

Foothill College Disability Resource Center

Date	Details	
Wed Sep 26, 2018	Getting to Know You, Please Introduce Yourself to the Class	due by 11:59pm
Thu Sep 27, 2018	Quiz 1 (Take on the Cisco NetAcad Site)	due by 6pm
	Read Chapter 1 in NetAcad https://cisco.netacad.com	due by 6pm
Sun Sep 30, 2018	1.1.1.9 Lab - Mapping the Internet	due by 11:59pm
	Exam 1 (Take on the Cisco NetAcad Site)	due by 11:59pm
	1.1.4.6 Lab - Configuring Basic Router Settings with IOS CLI	due by 11:59pm
Thu Oct 4, 2018	Exam 2 (Take on the Cisco NetAcad Site)	due by 5:59pm
	Quiz 2 (Take on the Cisco NetAcad Site)	due by 5:59pm
	Read Chapter 2 in NetAcad https://cisco.netacad.com	due by 5:59pm
Sun Oct 7, 2018	2.2.4.5 Lab - Configuring IPv6 Static and Default Routes	due by 5:59pm
	2.2.2.5 Lab - Configuring IPv4 Static and Default Routes	due by 11:59pm

Date	Details	
	2.3.2.4 Lab - Troubleshooting IPv4 and IPv6 Static Routes	due by 11:59pm
Thu Oct 11, 2018	Quiz 3 (Take on the Cisco NetAcad Site)	due by 5:59pm
	Read Chapter 3 in NetAcad https://cisco.netacad.com	due by 5:59pm
Sun Oct 14, 2018	3.2.1.9 Lab - Configuring Basic RIPv2 due by 6pr Exam 3 (Take on the Cisco NetAcad Site) due by 6pr	
Mon Oct 15, 2018	2.2.2.5 Lab - Configuring IPv4 Static and Default Routes (1 student)	due by 11:59pm
Thu Oct 18, 2018	Quiz 4 (Take on the Cisco NetAcad Site)  Read Chapter 4 in NetAcad https://cisco.netacad.com	due by 6pm due by 6pm
	2.3.2.4 Lab - Troubleshooting IPv4 and IPv6 Static Routes (1 student)	due by 11:59pm
Sun Oct 21, 2018	Exam 4 (Take on the Cisco NetAcad Site) due by 6pr	n
Thu Oct 25, 2018	Quiz 5 (Take on the Cisco NetAcad Site)  Read Chapter 5 in NetAcad https://cisco.netacad.com	due by 11:59pm due by 11:59pm
Sun Oct 28, 2018	5.2.2.9 Lab - Configuring Switch Security Features de	ue by 11:59pm ue by 11:59pm ue by 11:59pm
Thu Nov 1, 2018	Quiz 6 (Take on the Cisco NetAcad Site)  Read Chapter 6 in NetAcad https://cisco.netacad.com	due by 11:59pm
Fri Nov 2, 2018	3.2.1.9 Lab - Configuring Basic RIPv2	due by
	(2 students)	11:59pm
	1.1.1.9 Lab - Mapping the Internet (1 student)	due by 11:59pm
	2.2.2.5 Lab - Configuring IPv4 Static and Default Routes (1 student)	due by 11:59pm
	2.2.4.5 Lab - Configuring IPv6 Static and Default Routes (1 student)	due by 11:59pm
	2.3.2.4 Lab - Troubleshooting IPv4 and IPv6 Static Routes (1 student)	due by 11:59pm
	5.1.1.6 Lab - Configuring Basic Switch Settings (1 student)	due by 11:59pm

Date	Details	
	5.2.2.9 Lab - Configuring Switch Security Features (1 student)	due by 11:59pm
	1.1.4.6 Lab - Configuring Basic Router Settings with IOS CLI (1 student)	due by 11:59pm
Sun Nov 4, 2018	6.3.2.4 Lab - Configuring Per-Interface Inter-VLAN Routing	due by 11:59pm
	6.2.2.5 Lab - Configuring VLANs and Trunking	due by 11:59pm
	6.2.3.9 Lab - Troubleshooting VLAN Configurations	due by 11:59pm
	6.3.3.7 Lab - Configuring 802.1Q Trunk-Based Inter- VLAN Routing	due by 11:59pm
	Exam 6 (Take on the Cisco NetAcad Site)	due by 11:59pm
Thu Nov 8, 2018	Quiz 7 (Take the Cisco NetAcad Site)	due by 11:59pm
	Read Chapter 7 in NetAcad https://cisco.netacad.com	due by 11:59pm
Sun Nov 11, 2018	7.2.2.6 Lab - Configuring and Modifying Standard IPv ACLs	v4 due by 11:59pm
	7.2.3.4 Lab - Configuring and Verifying VTY Restrictions	due by 11:59pm
	7.3.2.5 Lab - Troubleshooting Standard IPv4 ACL Configuration and Placement	due by 11:59pm
	Exam 7 (Take on the Cisco NetAcad Site)	due by 11:59pm
Thu Nov 15, 2018	Quiz 8 (Take on the Cisco NetAcad Site)	due by 11:59pm
	Read Chapter 8 in NetAcad https://cisco.netacad.com	due by 11:59pm
Sun Nov 18, 2018	8.1.2.4 Lab - Configuring Basic DHCPv4 on a Router	due by 11:59pm
	8.1.2.5 Lab - Configuring Basic DHCPv4 on a Switch	due by 11:59pm
	8.1.4.4 Lab - Troubleshooting DHCPv4	due by 11:59pm
	8.2.3.5 Lab - Configuring Stateless and Stateful DHCPv6	due by 11:59pm
	8.2.4.4 Lab - Troubleshooting DHCPv6	due by 11:59pm
	Exam 8 (Take on the Cisco NetAcad Site)	due by 11:59pm

Date	Details	
Thu Nov 22, 2018	Quiz 9 (Take on the Cisco NetAcad Site)	due by 6pm
	Read Chapter 9 in NetAcad https://cisco.netacad.com	due by 6pm
Sun Nov 25, 2018	9.2.2.6 Lab - Configuring Dynamic and Static NAT	due by 11:59pm
	9.2.3.7 Lab - Configuring Port Address Translation (PAT)	due by 11:59pm
	9.3.1.5 Lab - Troubleshooting NAT Configurations	due by 11:59pm
	Exam 9 (Take on the Cisco NetAcad Site)	due by 11:59pm
Thu Nov 29, 2018	Quiz 10 Quiz 9 (Take on the Cisco NetAcad Site)	due by 6pm
	Read Chapter 10 in NetAcad https://cisco.netacad.com	due by 6pm
Sun Dec 2, 2018	10.1.2.5 Lab - Configure CDP and LLDP	due by 11:59pm
	10.2.3.6 Lab - Configuring Syslog and NTP	due by 11:59pm
	10.3.1.10 Lab - Managing Device Configuration Files Using TFTP, Flash, and USB	due by 11:59pm
	10.3.1.11 Lab - Configure and Verify Password Recovery	due by 11:59pm
	10.3.1.9 Lab - Managing Router Configuration Files with Terminal Emulation Software	due by 11:59pm
	Exam 10 (Take on the Cisco NetAcad Site)	due by 11:59pm