



Computer Technologies Department



**CSCO 121, section 2001 – Fall 2012 CCNA
Exploration 2 – Routing Protocols and Concepts
MW 5:00 – 9:50 PM SIER 110**

INSTRUCTOR: Joseph Cheung

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Office hours:

Thursdays – 11:00 AM to 4:00 PM
or by appointment

Office address: SIER 202-O

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CISCO NETWORKING ACADEMY DESCRIPTION

CCNA 2 Exploration v4.0 – Routing Protocols and Concepts – Credits: 5

Routing Protocols and Concepts is the second of four courses leading to the Cisco Certified Network Associate (CCNA) certification.* CCNA 2 focuses on initial router configuration, Cisco IOS VLSM, CIDR, static routes, and dynamic routing protocols.

*CCNA certification is not awarded by TMCC. Students wishing to be certified must pass the appropriate certification exam(s) offered by Cisco.

Prerequisite: CSCO 120 with a grade of “C” or better.

COURSE OBJECTIVES

Successful students will demonstrate the ability to perform tasks related to:

- Cisco IOS
- Router Configuration
- Static Routing
- RIP, EIGRP, and OSPF Routing Protocols
- Router Troubleshooting
- VLSM and CIDR

LEARNING OUTCOMES

Students will be able to apply their knowledge of the EIGRP routing protocol.

Students will be able to apply their knowledge of the OSPF routing protocol.

Students will be able to apply their knowledge of static and default routing.

COURSE OUTLINE

1. Introduction to Routing and Packet Forwarding
2. Static Routing

3. Introduction to Dynamic Routing Protocols
4. Distance Vector Routing Protocols
5. RIP v1
6. VLSM and CIDR
7. RIP v2
8. The Routing Table: A Closer Look
9. EIGRP
10. Link-State Routing
11. OSPF

METHOD OF INSTRUCTION

This class is a "hands-on" and "online" computer technology course. Lecture, hands-on exercises, class participation, and online instruction provided by Cisco will be the primary means of instruction. See the **late work policy** and the **class schedule** for details.

TEXTS

The following text is **required**:

Title: CCNA Portable Command Guide, 2nd Edition

Author: Scott Empson

Publisher: Cisco Press

ISBN: 1-58720-193-3

Pub. Date: July 18, 2007

The following text is **optional**:

Title: CCNA Exploration Course Booklet: Routing Protocols and Concepts, Version 4.0

Author: Cisco Networking Academy

Publisher: Cisco Press

ISBN: 1-58713-251-6

Pub. Date: Sept. 18, 2009

The following text is **optional**:

Title: Routing Protocols and Concepts, CCNA Exploration Companion Guide, 2nd Edition

Author: Rick Graziani, Allan Johnson

Publisher: Cisco Press

ISBN: 1-58713-206-0

Pub. Date: Dec. 6, 2007

The following text is **optional**:

Title: Routing Protocols and Concepts, CCNA Exploration Labs and Study Guide, 2nd Edition

Author: Allan Johnson

Publisher: Cisco Press

ISBN: 1-58713-204-4

Pub. Date: Nov. 29, 2007

ATTENDANCE

It is each student's responsibility to attend class regularly. The nature of this course makes successful completion difficult if a student has excessive absences. Students are responsible for exercises, projects, discussions, or announcements missed due to their absence.

Note: Students who do not attend the first class and fail to contact the instructor beforehand may be administratively withdrawn.

STUDENT EVALUATION

The student evaluation components consist of online quizzes for each chapter, labs and activities, a final examination, and a practical examination (also known as a “skills test”).

Students are expected to read and complete the chapters before class and be prepared with questions during the class period. Some material covered in the reading may not be covered during lecture, but students are still responsible for knowing the material! Read and ask questions.

Any homework assignments, projects, reports, exams, or other information given to the instructor become the property of the instructor. The instructor has the choice of retaining or returning anything turned in.

	Points
Online Module Quizzes (11 @ 30 pts. ea.)	330
Labs and Packet Tracer Activities	200
Challenge Labs (2 @ 35 points each)	70
Final Exam	200
Skills Test	200
Total =	1000

Grades will be assigned based on total points using the following scale:

A = 90 – 100% B = 80 – 89% C = 70 – 79% D = 60 – 69% F = < 60%

W's will be issued for students who officially withdraw in accordance with TMCC withdrawal policy. The deadline for withdrawal is **5:00 PM on October 21**.

Students choosing to audit the course have until **5:00 PM on September 2** to change their status from letter grade to auditing.

LATE WORK:

Late work will not be accepted for any reason. If you miss a deadline for any assignment, quiz, or exam, you will receive zero points for the grade. The reason for this policy: In a “real world” work environment, missing a deadline can mean lost revenue, the loss of a contract or client, and/or the loss of a job.

ADA STATEMENT

Qualified, self-identified students with documented disabilities have the right to free accommodations to ensure equal access to educational opportunities at Truckee Meadows Community College. For assistance, contact TMCC's Disability Resource Center at 775-6737277 TTY 775-673-7888, come by the Red Mountain Building, room 315 B or visit www.tmcc.edu/drc.

TUTORING AND LEARNING CENTER

Study skills advice and tutoring are available. For more information, go to Red Mountain 115, call 673-7285, or visit <http://www.tmcc.edu/tutoring/>.

GENERAL POLICIES

It is assumed that all registered students are mature members of the college community who will adhere to the rules of academic integrity. Plagiarism and cheating will be subject to all disciplinary action as provided in the TMCC code. It is each individual's responsibility to meet scheduled deadlines. Due dates will not be waived for illness or technical difficulties.

Student feedback will be requested each semester to assist the instructor in evaluating the materials, methods of presentation, and pedagogy.

The instructor reserves the right to change this syllabus.

Course Schedule

	Date	Course Topic	Due Dates
1	10/22	Course Introduction / Chapter 1: Introduction to Routing and Packet Forwarding	
2	10/24	Chapter 2: Static Routing	Chapter 1
3	10/29	Chapter 3: Introduction to Dynamic Routing Protocols	Chapter 2
4	10/31	Chapter 4: Distance Vector Routing Protocols	Chapter 3
5	11/5	Chapter 5: RIP v1	Chapter 4
6	11/7	Chapter 6: VLSM and CIDR	Chapter 5
7	11/12	Chapter 7: RIP v2	Chapter 6
8	11/14	Chapter 8: The Routing Table: A Closer Look	Chapter 7
9	11/19	Challenge Lab 1	
10	11/21	Chapter 9: EIGRP	Chapter 8
11	11/26	Chapter 10: Link-State Routing	Chapter 9
12	11/28	Chapter 11: OSPF	Chapter 10
13	12/3	Challenge Lab 2	Chapter 11
14	12/5	Challenge Lab 3	
15	12/10	Skills Test	
16	12/12	Final Exam	

*Quizzes, labs, and Packet Tracer activities must be completed **before class** on the date specified.

This schedule is subject to change at the instructor's discretion.