

North Central Michigan College

NCMC MASTER COURSE SYLLABUS

Last Date Revised 11/30/2010

INSTRUCTIONAL AREA: Business and Technology

DEPARTMENT: Information Technologies

ASSOCIATE DEAN: Robert Marsh, Ph.D.

ORIGINATOR: Fred Harrington

DEAN OF INSTRUCTION: Christine Hammond, Ph.D.

COURSE ALPHA/NUMBER: IT 180

COURSE TITLE: Cisco Routing Protocols

HOURS OF INSTRUCTION:

Credit hours: 3

Lecture: 3

Lab: 0

Clinical: 0

Variable Hours: 0

Total Hours of Instruction: 3

Total Contact Hours: 52.8

(Total Contact Hours Formula: (lecture hours + lab hours) x 17.6

CATALOG DESCRIPTION:

The Cisco Certified Network Associate (CCNA) Exploration Routing Protocols and Concepts course will help you develop an understanding of how a router learns about remote networks and determines the best path to those networks. Both static routing and a variety of dynamic routing protocols will be used in hands on experiments. You will use simulators and hands on experiments to solidify knowledge gained in online tutorials. This is the 2nd course of 3 preparing you for the ICND1 section of the CCNA Certification.

PREREQUISITE(S): IT 170

COREQUISITE(S): none

GENERAL EDUCATION DISTRIBUTION AREA:

Communications, Writing

Natural Science Group A

Communications, Communications

Natural Science Group B

Humanities Group A

Social Science Group A

Humanities Group B

Social Science Group B

Mathematics

Non Applicable

GENERAL EDUCATION OUTCOMES:

Write and Speak Effectively

- Think Critically & Analytically
- Write & Speak Effectively and Think Critically & Analytically
- Non Applicable

COURSE OBJECTIVES AND OUTCOMES:

Describe the routing process
 Describe and implement the most common routing protocols
 Configure and test the most common routing protocols

METHODS OF INSTRUCTION:

Online lectures, simulations and hands on lab exercises

METHODS OF EVALUATION:

Lab demonstration, quizzes and final examination

REQUIRED TEXT AT TIME OF COURSE ADOPTION/REVISION:

TEXTS: CCNA Exploration Course Booklet: Routing Protocols and Concepts, Version 4.0
 - Cisco Networking Academy, Cisco Press, 2010

OPTIONAL SUPPLEMENTARY MATERIALS:

Reasonable accommodations can be provided for students with documented disabilities. Please contact Learning Support Services for assistance: (231)348-6817.

SUGGESTED TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

(List general content description of what is being covered each week)

(If you need more than one line for a week, hit enter at the end of row; second line will begin)

WEEK 1	Introduction
WEEK 2	Routing and packet forwarding
WEEK 3	Static routing
WEEK 4	Dynamic routing
WEEK 5	Distance vector protocols
WEEK 6	RIP V1
WEEK 7	VLSM & CIDR
WEEK 8	Routing tables
WEEK 9	EIGRP
WEEK 10	Link state routing protocols
WEEK 11	OSPF
WEEK 12	Project to end of semester

APPROVED FOR ADOPTION/REVISION BY THE CRD/AP COMMITTEE ON 1/17/11