

# 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 190

**COURSE TITLE:** Cisco LAN Switching & Wireless

### **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 primary focus of this course is on LAN switching and wireless LANs. You will develop an understanding of how a switch communicates with other switches and routers in a small- or medium-sized business network to implement VLAN segmentation. You will also learn how to integrate wireless appliances into a LAN. This is the 3<sup>rd</sup> course of 3 preparing you for the ICND1 section of the Cisco Certified Network Associate (CCNA) Certification.

**PREREQUISITE(S):** IT 180

**COREQUISITE(S):**

### **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

\_x\_ Non Applicable

**COURSE OBJECTIVES AND OUTCOMES:**

Describe the switching process

Describe and implement various switched LAN configurations

Implement and test a wireless network appliance

**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: LAN Switching and Wireless, 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	LAN design
WEEK 3	LAN design
WEEK 4	Switch concepts & configuration
WEEK 5	Switch concepts & configuration
WEEK 6	VLANs
WEEK 7	VTP
WEEK 8	STP
WEEK 9	Inter-VLAN routing
WEEK 10	Wireless concepts & configuration
WEEK 11	Wireless concepts & configuration
WEEK 12	Project to end of semester

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