# MARTIN COMMUNITY COLLEGE COURSE SYLLABUS

Semester/Year: Spring 2011

COURSE NUMBER: NET 126-5H1 INSTRUCTOR: Kris Augustus

**COURSE TITLE:** Routing Basics **OFFICE NO:** N/A

CREDIT HOURS: 3 OFFICE/VIRTUAL HOURS: Email Instructor

**CONTACT HRS/WK:** 5 (1 class, 4 lab) **PHONE NO:** (252)-789-0246

**PREREQUISITES:** NET 125 **FAX:** 252-792-0826

**COREQUISITES:** None **E-MAIL:** kaugustus@mcc.martincc.edu

#### **COURSE DESCRIPTION:**

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocols, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

## PROGRAM LEARNING OUTCOMES:

- 1. Demonstrate a working knowledge of applications software such as word processing, spreadsheet, and database.
- 2. Demonstrate a working knowledge of LAN and WAN technologies.
- 3. Explain the fundamentals of basic PC security.

## **COURSE LEARNING OUTCOMES:**

- 1. Demonstrate the ability to perform basic routing configuration from the command line.
- 2. Design and apply both standard and extended Access Control Lists.
- 3. Perform basic router troubleshooting at OSI layers 1, 2, 3 and 7.

## **REQUIRED TEXTBOOKS:**

Graziani, R (2007). *Routing protocols and concepts CCNA exploration companion guide*. Indianapolis: Cisco Press.

## **SUPPLEMENTAL RESOURCES:**

Johnson, A (2007). *Routing protocols and concepts CCNA exploration labs and study guide*. Indianapolis: Cisco Press

#### LEARNING/TEACHING METHODS:

This course will consist of online lectures, labs, hands-on activities, final project, and outside reading assignments. The structure of the course will be a blended/hybrid format. You will be required to attend physical lab sessions when assigned. This course will also utilize Skype video calling and messaging service. Details on setting up a Skype account will be outlined in Blackboard

#### ASSESMENTS/METHODS OF EVALUATION:

- Labs 30%
- Outside Reading Assignments 5%
- Quizzes/Tests 20%
- Midterm 15%
- Skills Test 15%
- Final Exam 15%

GRADING POLICY: Grading will be on a seven-point scale:

- 90 100 = A
- 80 89 = B
- 70 79 = C
- 60 69 = D
- Below 70 = F

#### **COURSE OUTLINE:**

Week 1: January 6: Chapter 1 (Introduction to Routing and Packet Forwarding)

Week 2: January 13: Chapter 2 (Static Routing)

Week 3: January 20: Chapter 3 (Introduction to Dynamic Routing Protocols)

Week 4 January 27: Chapter 4 (Distance Vector Routing Protocols)

Week 5: February 3: Chapter 5 (Rip Version 1)

Weeks 6 & 7: February 10: Chapter 6 (VLSM and CIDR)

Week 8: February 24: Chapter 7 (RIPv2)

Week 9: March 3: Chapter 8 (The Routing Table: A Closer Look)

Weeks 10 & 11: March 10: Chapter 9 (EIGRP)

Week 12: March 24: Chapter 10 (Link-State Routing Protocols)

Weeks 13 & 14: March 31: Chapter 11 (OSPF)

Weeks 15: April 21: Skills Test Week 16: Review and Final Exam

The dates and topics found in this syllabus are tentative, and therefore may change. Changes will be announced in class. It is your responsibility to get these changes

#### STUDENT ATTENDANCE POLICY:

Martin Community College recognizes that academic success is tied to regular attendance and completion of assigned work and tasks in a timely manner. Students are expected to attend a minimum of 80 percent of the total hours for this course. <u>Attendance will be taken at each class meeting.</u>

Students must be present in at least one class during the first ten percent (10%) of a course in order to be considered enrolled in the class. If a student has not attended at least one class by the ten percent census date, the instructor will administratively withdraw the student.

Students who miss more than six contiguous contact hours or fail to attend the required percentage of total hours without a justifiable absence and verifiable contact with the instructor may be administratively withdrawn from the class by the instructor and given a grade of "WF." The "WF" will be equivalent to an "F" when calculated into the student's GPA. The course syllabus will indicate what the instructor considers a justifiable absence and will define "verifiable contact." Students may remove a "WF" by submitting appropriate

paperwork for an official withdrawal by the last day to officially withdraw without receiving an "F." The last day to officially withdraw without receiving an "F" is published in the academic calendar for each academic year. The official withdrawal date for mini sessions, block courses, or other non-traditional schedules are available from the registrar and will be included on the course syllabus.

Make-up work may be allowed at the discretion of the instructor, and the instructor's policy on make-up work will be included in the course syllabus. Students in clinical and cooperative educational work experiences must complete 100 percent of the required hours to receive a passing grade. Clinical or cooperative work experience make-up hours require clinical or cooperative educational work site approval and approval of the instructor.

Habitual tardiness and/or early departure in a course may, at the discretion of the instructor, be considered in computing class attendance. A student is considered tardy if not present when the class begins.

Students will be counted absent from the date they register for each course.

Note: Under DVA regulations, the enrollment of veterans or dependents will be terminated or adjusted if they are administratively withdrawn or if they officially withdraw.

If an instructor fails to report for a class within 15 minutes of the scheduled beginning time and has not left instructions, those students present should sign a sheet before leaving and designate a student to submit it to the Dean of Academic Affairs and Student Services.

#### Justifiable Absences:

- 1. Sickness
- 2. Family emergency
- 3. Transportation problems

#### Verifiable Contact:

- 1. Phone call
- 2. E-mail
- 3. Snail mail
- 4. Person-to-person contact

## \*Request for Excused Absences for Religious Observances\*

In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student's faith. The policy limits the excused absences to a maximum of two days per academic year.

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) <u>prior to the census date of each class.</u> The *Request for Excused Absences for Religious Observances* form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

## **COURSE POLICIES:**

Make-up Tests and Assignments: The student is responsible for obtaining material when he/she was absent. The student can contact a classmate who was present or the instructor during his office hours or other times. Missed or late tests and assignments are subject to a 50% penalty, and must be completed within one week of the original due date. Any uncoordinated, unexcused, or missed test will result in a score of 0 for that test. <a href="Extra credit">Extra credit</a> is **not** available in this course.

The instructor will help you as much as possible but cannot be expected to be available to you at the last minute. **Never** wait until the day work is due to complete and submit quizzes or exercises. The unexpected often happens, especially it seems, on the day assignments are due.

## Housekeeping:

- 1. Do not bring any food or drinks into classroom or computer lab.
- 2. Do not bring children or visitors into the classroom or computer lab.
- 3. Do not turn on computer speakers unless instructed to do so.
- 4. Do not play computer games or surf the Web during class time.
- 5. Turn off all cell phones beepers, etc.

If you cannot reach your instructor, you may contact Dr. Phyllis Broughton, Dean of Academic Affairs and Student Services at (252)789-0246 or (252)789-0247 by phone, <a href="mailto:pbroughton@martincc.edu">pbroughton@martincc.edu</a> by e-mail, or in person at her office in Building 2, Room 33.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to <a href="www.martincc.edu">www.martincc.edu</a>.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.