DEPT: Computer Support Technology      COURSE NO: CST1500

NUMBER OF CREDITS: 3 (2 Lec. – 1 Lab)

COURSE TITLE: Routers and Switches

CATALOG DESCRIPTION:
This course introduces the student to practical networking experiences within a laboratory environment. Students will study router and switch basics, configure routers, investigate routing protocols, configure switches, develop access lists, and troubleshoot routing technologies.

AUDIENCE:
Computer Support Technology students, Information Security students, Information Assurance students, Networking Specialist students and anyone interested in learning about computer network hardware.

FULFILLS MN TRANSFER CURRICULUM AREA(S): (Does not apply.)

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:
CST1190 Introduction to Networking

LENGTH OF COURSE: 2 lecture hours and 2 lab hours per week for 16 weeks.

THIS COURSE IS USUALLY OFFERED:
Every other year ☐ Fall ☑ Spring ☐ Summer ☐ undetermined ☐

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The student will achieve an entry level of knowledge and skill needed for networking and computer security personnel.

2) THINKING SKILLS: The student will develop logical thinking skills by mastering the configuration of routers and switches.

3) COMMUNICATIONS SKILLS:

4) HUMAN DIVERSITY:
TOPICS TO BE COVERED: Basic router and switch elements, basic router and switch configuration, routing protocols, troubleshooting

LIST OF EXPECTED COURSE OUTCOMES:

1. Configure routers and switches
2. Identify router and switch configurations
3. Describe various routing protocols
4. Create standard access lists
5. Create extended access lists
6. Troubleshoot routing scenarios

LEARNING/TEACHING TECHNIQUES used in the course are:

X Collaborative Learning  X Problem Solving
☐ Student Presentations  ☐ Interactive Lectures
☐ Creative Projects  X Individual Coaching
X Lecture  X Films/Videos/Slides
X Demonstrations  ☐ Other (describe below)
X Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

X Reading  X Tests  X Individual Projects
☐ Oral Presentations  X Worksheets  X Collaborative Projects
X Textbook Problems  ☐ Papers  ☐ Portfolio
☐ Group Problems  ☐ Term Paper
X Other (describe below)
Practical Tests

The information in this course outline is subject to revision

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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