DEPARTMENT: Computer Support Technology  COURSE NO: CST 2340
COURSE TITLE: Web Server Concepts  CREDITS: 3

CATALOG DESCRIPTION
This course will introduce the student to the Internet, including setup, operation and maintenance of an Internet web server. Concepts such as installation, configuration and maintaining the server. Creating and troubleshooting web pages, understanding the Internet protocols and security. We will be working with the Microsoft Windows Internet Information server features and functions.

AUDIENCE
Computer Support Technology and PC Maintenance and Repair students in their second year of the program. This course is for someone whose career goals include becoming a Network Administrator and work with the Internet.

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

PREREQUISITES OR NECESSARY SKILLS/KNOWLEDGE: It is required that the student successfully complete the following courses:
- CSCI 1102 – Introduction to Microcomputers
- CST 1111 – File Structures
- CST 1125 – Operating Systems
- CST 1190 – Intro 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 X Spring Summer Undetermined

Four goals are emphasized in courses at Minnesota West Community and Technical College:

1. **ACADEMIC CONTENT**: The student will achieve the knowledge and skill needed for computer support personnel in the area of Internetwork administration.
2. **THINKING SKILLS**: The student will configure and secure a web Server on a computer with an understanding of the rational, theory and components of the Internet and the hardware and software associated with administration of a server on the Internet.
3. **COMMUNICATION SKILLS**: The student will begin to demonstrate appropriate communication techniques in working with fellow students to complete assignments and work on developing help desk skills.
4. **HUMAN DIVERSITY** – The student will gain self-awareness regarding their feelings towards people of different cultures, value systems and socioeconomic status.

Topics to be covered:

1. Identify components of network infrastructure (OSI model)
2. Describe the TCP/IP protocol, components and utilities
3. Plan a Internetwork domain
4. Install and configure web server services on the server
5. Describe security for an internet server

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LIST OF EXPECTED COURSE OUTCOMES:

1. Identify components of network infrastructure (OSI model)
2. Describe the TCP/IP protocol, components and utilities
3. Calculate subnets Describe Name Resolution including DNS, DDNS and Wins
4. Describe IP routing
5. Identify Microsoft terminology
6. Identify Top level Domain names
7. Identify the differences between Domain names and FQDN’s
8. Plan a Windows Internet domain
9. Install DNS
10. Create forward and reverse lookup zones
11. Describe how names are resolved
12. Explain Windows 2000 DNS server roles
13. Describe SRV records
14. Configure DNS clients
15. Describe DHCP
16. Configure TCP/IP on the client
17. Troubleshoot TCP/IP using the command line
18. Install and configure DHCP on the server
19. Describe RRAS
20. Install and configure remote access
21. Describe and assign Remote access permissions
22. Describe a Virtual Private Network
23. Describe APIPA
24. Identify network protocols
25. Describe IP security
26. Compare and contrast ICS and NAT
27. Create a document to share over the Web server you created

LEARNING/TEACHING TECHNIQUES used in the course are:

X Collaborative Learning    X Student presentations
X Creative Projects         X Lecture
X Problem Solving           X Interactive Lectures
X Individual Coaching      X Films/Videos/Slides
X Demonstration             X Labs

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

X Reading                  X Tests                  X Individual Projects
X Oral Presentations       X Worksheets             X Collaborative Projects
X Textbook Problems        X Papers                 Portfolios
X Group Problems           Term Papers              X Performance Exams

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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