

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: NETWORKS II

Code No.: CSN206

Semester: 4

Program: COMPUTER ENGINEERING TECHNOLOGY

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Date: JANUARY, 2000

Approved: _____
Dean Date

Total Credits: 4

Prerequisite(s): CSN201

Length of Course: 16 weeks

Total Credit Hours: 64

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I. COURSE DESCRIPTION:

This course is a successor to "Introduction to Networks" (CSN201). Students will develop skills in TCP/IP, DNS, DHCP, and WINS Servers using Windows NT 4 Server as a platform. Novell NetWare will be introduced, providing students with the opportunity to administer a NetWare 3.12 Server. NetWare 4.11 hands-on experience will consist of: Server installation, configuration and administration. Novell Directory Services will be explored and implemented.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

A. Learning Outcomes:

1. Implement and subnet TCP/IP in a Network Environment.
2. Install and configure various network software including: DNS, DHCP, and WINS servers.
3. Create a NetWare client boot disk and install and configure NetWare Client32 for Windows 98.
4. Administer a Netware 3.12 Server.
5. Install, configure, and administer a Novell NetWare 4.11 Server.
6. Compare Microsoft Windows 2000 Advanced Server and Novell NetWare 5.0.

Upon successful completion of this course the student will demonstrate the ability to:

1. Install, configure, and subnet TCP / IP in a network environment.

Elements of the Performance:

- Be able to identify TCP / IP classes including address ranges
- Recognize reserved addresses
- Identify the subnet
- Apply IP Routing
- Create subnet masks
- Utilize various network commands including: ipconfig, ping, tracert, netstat, nbtstat, arp
- Resolve local and remote addressing
- Demonstrate the ability to subnet a class C IP address.

This learning outcome will constitute approximately 20% of the course.

2. Install, configure and test: DHCP, WINS, and DNS Servers

Elements of the Performance:

- Obtain an overview of name resolution
- Understand the concepts of DHCP, WINS, and DNS.
- Master NetBIOS and DNS name resolution
- Setup DHCP
- Allocate address leases
- Define and implement WINS configuration
- Understand the purpose of HOSTS and LMHOSTS files
- Create a DNS namespace
- Understand DNS domains and zones
- Create a root domain
- Setup Primary and Secondary DNS Servers

This learning outcome will constitute approximately 25% of the course.

3. Install, configure and connect to a NetWare server using both NetWare Client32 for Windows 98 and NetWare Dos Requester.

Elements of the Performance:

- Locate and install Client32 for Windows 98
- Create a client boot disk containing: lsl, 3C905txb, ipxodi, and netx (vlm)
- Configure workstation services

This learning outcome will constitute approximately 5% of the course.

4. Administer a Netware 3.12 Server.

Elements of the Performance:

- Understand the concepts of Volume, bindery, public, users, groups, login scripts
- Apply hands-on use of syscon, fconsole, pconsole

This learning outcome will constitute approximately 10% of the course.

5. Install, configure, and test Novell NetWare 4.11 Server.

Elements of the Performance:

- Describe the evolution of Novell NetWare.
- Perform a NetWare 4.11 server install
- Implement and manage NDS
- Become familiar with NDS object types
- Apply hands-on security issues with NDS
- Work with NWadmin to administer the network
- Implement logon restrictions including: intruder lockout, time, station
- Work with NLM (NetWare Loadable Modules)
- Work with NetWare Console commands

This learning outcome will constitute approximately 35% of the course.

5.0. 6. Compare Microsoft Windows 2000 Advanced Server and Novell NetWare

Elements of the Performance:

- Compare Windows Active Directory Service and NetWare NDS 8.0
- Evaluate pros and cons of each NOS including price structure
- Identify uniqueness of each product
- Evaluate and compare market share of each product

This learning outcome will constitute approximately 5% of the course.

III. TOPICS TO BE COVERED:

1. TCP / IP, DHCP, WINS, and DNS using Windows NT Server
2. Client for Novell NetWare using Windows 98
3. Novell NetWare 4.11 Server

IV. REQUIRED STUDENT RESOURCES/TEXTS:

TEXT BOOK:

Network Administration NetWare 4.11	Simpson, Auer, Ciampa
Windows NT Server 4.0 (Optional)	Brierly
Business Data Communications (Optional)	Fitzgerald & Dennis

V. EVALUATION PROCESS/GRADING SYSTEM:

3 WRITTEN TESTS (20% each)	60%
TAKE-HOME AND LAB ASSIGNMENTS	40%

(The percentages shown above may vary slightly if circumstances warrant.)

NOTE: *It is necessary to pass both the theory and the lab part of this course. It is not possible to pass the course if a student has a failing average in the three written tests but is passing the lab portion, (or vice versa).*

GRADING SYSTEM

A+	90 -	100%
A	80 -	89%
B	70 -	79%
C	60 -	69%
R	Repeat	less than 60%
X	Incomplete	

VI. ASSIGNMENTS:

Late assignments will be penalized 10% for each day late. After 5 days, late assignments will not be accepted.

ATTENDANCE:

Absenteeism will affect a student's ability to succeed in this course. Absences due to medical or other unavoidable circumstances should be discussed with the instructor.

MISSED TESTS:

The instructor must be notified ahead of time if you will be absent on a test date.

TEST RE-WRITES:

No re-writes are available in this course.

VII. SPECIAL NOTES:

- **Special Needs**

Students with special needs (e.g. physical limitations, visual or hearing impairments, or learning disabilities) are encouraged to discuss any required accommodations confidentially with the instructor and/or contact the Special Needs Office so that support services can be arranged.

- **Retention of Course Outlines**

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.

- **Course Modifications**

Your instructor reserves the right to make reasonable modifications to the course as deemed necessary to meet the needs of students or take advantage of new or different learning opportunities.

VIII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced standing in the course should consult the instructor. This course is not eligible for challenge at the present time.