

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.