SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY					
SAULT STE. MARIE, ONTARIO					
Sault College					
COURSE OUTLINE					
COURSE TITLE:	Networks II				
CODE NO. :	CSN2060	SEM	ESTER: Four		
PROGRAM:	Computer Engineering Technician				
AUTHOR:	Dan Kachur				
DATE:	January 2003	Previous Outline	Dated: Jan 2000		
APPROVED:					
TOTAL CREDITS:	D I 4	EAN	DATE		
PREREQUISITE(S):	CSN2010				
HOURS/WEEK:	4				
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I. COURSE DESCRIPTION:

This course is a successor to "Introduction to Networks" (CSN2010). Students will develop skills in TCP/IP, DNS, DHCP, and WINS Servers using Windows 2000 Server as a platform. Novell NetWare will be introduced, providing students with the opportunity to administer various NetWare 3.xx and 4.xx Servers. NetWare 5.1 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:

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

1. Install and configure various network software including: DNS, DHCP, and WINS servers

Potential Elements of the Performance:

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

- Install and configure a DHCP Server on Windows 2000 Server
- Create a DHCP Scope
- Apply reservations and exclusions
- Test DHCP from a Windows Client
- Identify and troubleshoot DHCP
- Install and configure WINS on Windows 2000 Server
- Identify the WINS Database
- Perform a WINS testing activity from a Windows Client
- Install a DNS Server on Windows 2000 Server
- Configure a zone, then create various records for DNS
- Test DNS using various utilities
- Contrast DNS and WINS
- Identify global "Root" Servers
- Explore registered domains in relation to active DNS Servers

2. Implement and subnet TCP/IP in a Network Environment <u>Potential Elements of the Performance:</u>

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

- Identify TCP / IP classes including public and private address ranges
- Contrast IP Version 6 VS IP Version 4
- Identify subnets and subnet masks
- Utilize various network commands including: ipconfig, ping, tracert, netstat, nbtstat, arp
- Resolve local and remote addressing
- Subnet A, B, and C IP addresses
- Calculate IP Address subnets

3. Administer various NetWare Servers Potential Elements of the Performance:

This learning outcome will constitute approximately 30% of the course.

- Describe the evolution of Novell NetWare.
- Administer various 3.xx and 4.xx Novell Servers
- Identify important Novell subdirectories
- Identify important "boot" files for Novell Client boot disks
- Work with Syscon to add users and groups
- Map Drives and Capture ports
- Set permissions
- Become familiar with NDS object types including: Tree, Root, Organization, Organizational Unit, Tree Objects and Leaf Objects
- Contrast Network Centric vs. Server Centric
- Work with Novell Client 32 to administer various servers

4. **Install, configure, and administer a Novell NetWare 5.1 Server** <u>Potential Elements of the Performance</u>:

This learning outcome will constitute approximately 30% of the course.

- Perform a NetWare 5.1 Server install
- Create SYS and DATA volumes
- Implement and manage NDS
- Implement logon restrictions including: intruder lockout, time, station
- Load and unload NLM (NetWare Loadable Modules)
- Work with NetWare Console commands to administer the network
- Manage Users and Groups from both the Server console and Novell Client
- Create login scripts
- Modify the autoexec.ncf and startup.ncf files
- Mount and dismount volumes
- Perform network security

5. Compare Microsoft Windows 2000 Server and Novell NetWare 5.1

Potential Elements of the Performance:

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

- Contrast Windows 2000 Active Directory with NetWare NDS
- Compare overall positives and negatives of each OS

III. REQUIRED RESOURCES/TEXTS/MATERIALS:

Title: Novell NetWare 5.0 / 5.1 Network Administration Authors: David Doering / Ted Simpson Publisher: Course Technology ISBN: 0-619-03481-5

IV. 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.)

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u> A+	Definition 90 - 100%	Grade Point <u>Equivalent</u> 4.00
А	80 - 89%	3.75
В	70 - 79%	3.00
С	60 - 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been	
-	awarded.	
S	Satisfactory achievement in field	
	placement or non-graded subject areas.	
U	Unsatisfactory achievement in field	
V	placement or non-graded subject areas.	
Х	A temporary grade. This is used in	
	limited situations with extenuating	
	circumstances giving a student additional time to complete the requirements for a	
	course (see Policies & Procedures	
	Manual – Deferred Grades and Make-up).	
NR	Grade not reported to Registrar's office.	
	This is used to facilitate transcript	
	preparation when, for extenuating	
	circumstances, it has not been possible	
	for the faculty member to report grades.	

ELIGIBILITY FOR X GRADES / UPGRADING OF INCOMPLETES

When a student's course work is incomplete or final grade is below 60%, there is the possibility of upgrading to a pass when a student meets all of the following criteria:

- 1. The student's attendance has been satisfactory.
- 2. An overall average of at least 50% has been achieved.
- 3. The student has not had a failing grade in all of the theory tests taken.
- 4. The student has made reasonable efforts to participate in class and complete assignments.

Note: The opportunity for an X grade is usually reserved for those with extenuating circumstances. The nature of the upgrading requirements will be determined by the instructor and may involve one or more of the following: completion of existing labs and assignments, completion of additional assignments, re-testing on individual parts of the course or a comprehensive test on the entire course.

V. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

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 postsecondary institutions.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Rights and Responsibilities*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VI. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.