

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: LOCAL AREA NETWORKS II

CODE NO. : CSN203 **SEMESTER:** 4

PROGRAM: COMPUTER NETWORK TECHNICIAN

AUTHOR: TYCHO BLACK

DATE: Jan. 2006 **PREVIOUS OUTLINE** Jan. 2005
DATED:

APPROVED:

	_____ DEAN	_____ DATE
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TOTAL CREDITS: 5

PREREQUISITE(S): CSN202

HOURS/WEEK: 4

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School of Technology, Skilled Trades, Natural Resources & Business
(705) 759-2554, Ext. 2688

COURSE DESCRIPTION:**I.**

This course continues the study of local area networks and network operating systems, with the emphasis on development of hands-on skills in network installation and management of Novell Netware and eDirectory environments. A detailed study of Novell Netware (versions 4.x through 6.5), eDirectory and their associated tools, terminology and utilities are the major components of this course. Novell solutions will be compared with those of other vendors, especially in the area of directory services and upgrading to a SuSE Linux environment will also be investigated.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Perform basic administrative tasks on Novell Netware 6.0 and 6.5 networks.Potential Elements of the Performance:

- Describe the history of Novell Netware and compare various versions with respect to their operating environments, features, strengths and weaknesses.
- Demonstrate an ability to perform basic management of a Netware server.
- Implement file system security in a Netware environment.
- Access network resources using various Netware clients.

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

2. Plan and Implement an eDirectory Directory Tree.Potential Elements of the Performance:

- Work with eDirectory objects and naming conventions.
- Design an eDirectory tree.
- Utilize the Netware Administrator utility to manage eDirectory objects.
- Implement security in an eDirectory tree, considering inheritance and the various ways objects obtain rights.

- Manage eDirectory partitions, time synchronisation and replication.

This learning outcome will constitute approximately 15% of the course.

3. Install and manage a Novell Netware 6.0/6.5 network.

Potential Elements of the Performance:

- Install and configure Netware 6.0.
- Upgrade Netware 6.0 to Netware 6.5 and investigate its new features and capabilities.
- Manage users, groups and login security in a Netware 6.0/6.5 environment.
- Create a Directory Tree structure and network file system to required specifications.
- Manage trustee assignments and file attributes.
- Creating and managing the network file system including iFolder.
- Install Netware client software and manage the user environment.
- Install applications on a Netware server.
- Install Netware printing support using NDPS and iPrint.
- Describe Windows 2000 interoperability with Netware servers.
- Manage a Netware 6.0/6.5 network using ConsoleOne and iManager.
- Demonstrate an awareness of typical security threats in Netware networks and be able to take steps to prevent or minimize the impact of such threats.

This learning outcome will constitute approximately 50% of the course.

4. Compare Netware 6.x with Windows 2000, and eDirectory with other Directories.

Potential Elements of the Performance:

- Compare X.500, LDAP and Active Directory architecture, strengths and weaknesses.
- Compare Active Directory with eDirectory.
- Compare Novell products and solutions with other vendors and be able to specify appropriate solutions for specific situations.

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

5. Migrate/ convert an existing Netware server to a SuSE Linux environment.

Potential Elements of the Performance:

- Discuss the evolution of Novell's operating systems to include SuSE Linux.
- Discuss the strengths and weaknesses of the SuSE Linux environment compared to Novell's legacy operating systems.
- Install SuSE Linux and integrate / migrate existing servers into the new environment.

This learning outcome will constitute approximately 15% of the course.

III. TOPICS:

1. Early Netware server versions, management and configuration.
2. Netware v6.0/6.5 server installation, management, upgrading and configuration.
3. eDirectory design and implementation.
4. Comparison between eDirectory and various other directory services.
5. SuSE Linux.

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

"Guide to Novell Netware 6.0/6.5 Administration " by Ted Simpson and Michael Simpson (Course Technology, Inc 2004, ITP) ISBN 0-619-21543-7

V. EVALUATION PROCESS/GRADING SYSTEM:

3 THEORY TESTS : 20% each	60%
LAB ASSIGNMENTS and QUIZZES	40%

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

NOTE: *It is necessary to pass both the theory and the lab parts 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).*

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

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

VI. 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 professor and/or the Special Needs office. Visit Room E1101 or call Extension 2493 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.

UPGRADING OF INCOMPLETES

When a student's course work is incomplete or final grade is below 50%, 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 40% 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.

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.

LABS:

Lab activities represent a very important component of this course. Because of this, **attendance is mandatory** and the satisfactory completion of all lab activities is required. *It is the student's responsibility to discuss absences from regularly scheduled labs with the instructor so that alternate arrangements (where possible) can be made to complete the lab requirements.*

Required lab report requirements will be detailed before labs are

assigned. **A late penalty will be applied for labs handed in after the due date.**

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. Attendance will be taken and those with unsatisfactory attendance (more than 10% of the classes missed) will not be allowed any upgrading if required.

VII. 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.

VIII. 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.