SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

Sault College

COURSE OUTLINE

COURSE TITLE: Network Applications II

CODE NO. :   CSN307   **SEMESTER:** 6

PROGRAM: Computer Network Technology

AUTHOR: Dan Kachur

DATE: Jan 2004   **PREVIOUS OUTLINE DATED:** Jan 2003

APPROVED:

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                                    DEAN   DATE

TOTAL CREDITS: 4

PREREQUISITE(S): CSN205

HOURS/WEEK: 4

COURSE DESCRIPTION:

I.   This course continues the development of the students' abilities to install, configure and manage applications, groupware and web-based services primarily in a Windows 2000 environment. The major emphasis will be on database concepts, network support of client/server database systems such as Microsoft SQL Server and Groupware configuration and testing using Microsoft Outlook / Microsoft Exchange Server.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1.   Utilize data modelling techniques to implement simple relational database management systems.

Potential Elements of the Performance:
- Define entity, relationship and attribute.
- Identify and apply different types of relationships used in designing a database, such as one-to-one, one-to-many and many-to-many.
- Identify how key components of data modelling are implemented.
- Identify the relationship between a primary key and a foreign key.
- Describe normalisation and its role in database design.

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

2.   Formulate simple Structured Query Language (SQL) queries on a relational database.

Potential Elements of the Performance:
- Utilize the SELECT statement using a variety of operators.
- Perform JOINS using SQL.
- Implement a variety of SQL statements in database queries.
- Identify the factors in SQL, which impact network performance.

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

3.   Implement a client-server database system using Microsoft SQL Server and Microsoft Visual Basic.
     <u>Potential Elements of the Performance</u>:
     - Describe the evolution and important features of Client/Server Database environments in general and Microsoft SQL Server in particular.
     - Install and configure Microsoft SQL Server.
     - Manage and optimise Microsoft SQL Server.
     - Enhance performance of and manage a Microsoft SQL Server Database.

     This learning outcome will constitute approximately 40% of the course.

4.   Install and configure various GroupWare applications.
     <u>Potential Elements of the Performance</u>:
     - Install and configure Microsoft Exchange Server.
     - Describe and compare groupware applications and their typical components.
     - Describe the history of Exchange Server and the evolution of its features.
     - Use the features of Microsoft Outlook including managing the workspace, creating and sharing Tasks, calendaring and scheduling, and the integration of Exchange in the Internet /Intranet environment.
     - Compare groupware solutions provided by various vendors.

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

III.   TOPICS:

1.   Relational Database concepts and data modeling.
2.   Structured Query Language.
3.   Client / Server installation, security, and troubleshooting.
4.   Groupware applications and systems.

IV.   REQUIRED RESOURCES/TEXTS/MATERIALS:
Notes provided by instructor
Internet Resources and assigned Internet Readings

V.   EVALUATION PROCESS/GRADING SYSTEM:

SQL / Access / Database Test	20 %
Exchange Server / Outlook Test	20 %
Network Applications Research	10 %
Database Assignments	20 %

- Entity Relationship
- SQL Results
- VB / VBA
- Html publishing
- ODBC Connections
- Access to SQL Server import
- Windows 2000 Event Viewer import

SQL Server (5 labs)	20 %
Web Servers / Web Services	10 %

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

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

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00

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 493
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.

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.