

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



COURSE OUTLINE

Course Title: NETWORK APPLICATIONS II

Code No.: CSN307 Semester: 6

Program: COMPUTER NETWORK TECHNOLOGY

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Date: Jan. , 2002 Previous Outline Date: Jan, 2001

Approved: _____
Dean Date

Total Credits: 4 Prerequisite(s): CSN205
Length of Course: 16 weeks Total Credit Hours: 64

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I. COURSE DESCRIPTION:

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:

(Generic Skills Learning Outcomes placement on the course outline will be determined and communicated at a later date.)

A. Learning Outcomes:

1. Utilize data modelling techniques to implement simple relational database management systems.
2. Formulate simple Structured Query Language (SQL) queries on a relational database.
3. Implement a client-server database system using Microsoft SQL Server.
4. Install and configure various groupware applications.

Learning Outcomes and Elements of the Performance:

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

1. **Utilize introductory-level data modelling techniques in implementing simple relational database management systems.**

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.

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.

Elements of the Performance:

- 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 Groupware applications.

Elements of the Performance:

- 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.

Reference:

Notes supplied and Internet-based resources
(<http://www.microsoft.com>)

III. TOPICS TO BE COVERED:

1. Relational Database concepts and data modelling.
2. Structured Query Language.
3. Microsoft SQL Server installation and management.
4. Microsoft Exchange Server / Microsoft Outlook groupware applications and systems.

IV. REQUIRED STUDENT RESOURCES/TEXTS:

TEXT BOOK:

Notes provided.
Internet-based resources.

V. EVALUATION PROCESS/GRADING SYSTEM:

SQL / Access / Database Test	20 %
Exchange Server / Outlook Test	20 %
Exchange Server 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 / VB / Active Server Pages	10 %

(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			

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.

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.

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.

VI. 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.

VII. 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.