## SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



#### COURSE OUTLINE

COURSE TITLE: Network Applications II

CODE NO.: CSN307 SEMESTER: 6

**PROGRAM:** Computer Network Technology

**AUTHOR:** Dan Kachur

DATE: Jan 2006 PREVIOUS OUTLINE DATED: Jan 2005

APPROVED:

DEAN DATE

TOTAL CREDITS: 4

PREREQUISITE(S): CSN205

HOURS/WEEK: 4

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#### I. COURSE DESCRIPTION:

This course continues the development of the students' abilities to install, configure and manage applications, groupware and webbased services primarily in a Windows 2003 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 normalization and its role in database design.

This learning outcome will constitute approximately 20% of the course.

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

#### Potential Elements of the Performance:

- Utilize various common SQL constructs with the SELECT statement to extract data from tables.
- Implement a variety of SQL statements in database queries.
- Utilize various SQL statements to insert, modify, delete and extract data from tables.
- Identify the factors in SQL, which impact network performance.

This learning outcome will constitute approximately 20% of the course.

 Implement a client-server database system using Microsoft SQL Server architecture.

### Potential Elements of the Performance:

- Describe the evolution and important features of Client/Server Database environments in general and SQL Server in particular.
- Install and configure Microsoft SQL Server environment.
- Manage and optimise Microsoft SQL Server.
- Enhance performance of and manage a Microsoft SQL Server Database.

This learning outcome will constitute approximately 20% of the course.

4. Install and configure various GroupWare applications.

## Potential 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 40% of the course.

#### III. TOPICS:

- 1. Relational Database concepts and data modeling.
- 2. Structured Query Language.
- Client / Server database management.
- 4. Groupware applications and systems.

### IV. REQUIRED RESOURCES / TEXTS / MATERIALS:

Textbook: MCSE Guide to Microsoft Exchange Server 2003

Administration

Authors: Chambers, Wright, DiNicolo

ISBN: 0619121270

In addition, various notes and Internet resources will be provided by the instructor.

### V. EVALUATION PROCESS/GRADING SYSTEM:

Chapter quizzes, projects, assignments, labs
Attendance
2 Tests @ 25% each
40%
50%

- This evaluation scheme is subject to change if circumstances warrant.
   Any changes will be discussed with students and reported in writing by email before implementation.
- Students must complete and pass both the test and assignment portion of the course in order to pass the entire courses.
- All Assignments must be completed satisfactorily to complete the course. Late hand in penalties will be 5% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.

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

		Grade Point
Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	4.00
В	70 - 79%	3.00
С	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.	
Χ	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.	

#### **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 45% has been achieved by semester's end on the tests taken.
- 3. The student has made reasonable efforts to participate in class and maintain the recommended schedule for assigned activities.

The nature of the upgrading requirements will be determined by the instructor and may involve re-testing and/or additional lab assignments

#### 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. There will be a 1% penalty for each 2-hour class missed in this course (up to a maximum of 10%).

#### 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.

#### 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.