

# Sault College of Applied Arts & Technology

Sault Ste Marie, ON



## Course Outline

**Course Title:** DATABASE APPLICATIONS  
**Course No.:** COM300  
**Program:** OFFICE ADMINISTRATION - EXECUTIVE  
**Semester:** Third (3)  
**Author:** LYNN DEE EASON  
**Date:** June 1998

**Approved:**

  
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Dean, School of Business & Hospitality

  
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Date

**Total Credits:** 3

**Prerequisites:** None

**Length of Course:** 3 HOURS/WEEK FOR 15 WEEKS

**Total Credit Hrs:** 45



**I PHILOSOPHY/GOALS:**

Students will be introduced to computerized record keeping through the use of Microsoft Access 97. The course will concentrate on the transformation of raw data into database files that can be queried and organized into meaningful reports.

**II LEARNING OUTCOMES:**

- Design, set up and maintain a database using provided data. (30% of course content)
- Create forms and tables. (20% of course content)
- Obtain meaningful information from a database. (30% of course content)
- Integrate other programs in the suite with the database program. (10% of course content)
- Demonstrate the ability to utilize a computer database program to solve business problems. (10% of course content)

**III ELEMENTS OF PERFORMANCE:**

Following successful completion of this course, the student should be able to:

- Design, set up and maintain a database using provided data. (30% of course content)
  - start the Microsoft Access 97 program
  - analyse data to determine a suitable database design
  - describe a relationship database
  - distinguish between a one-to-many and a many-to-many relationship
  - add, edit, and delete records
  - explain the importance of data validation
- Create forms and tables. (20% of course content)
  - describe the data types and properties available within Access and the purpose of each
  - set the primary key for a table
  - use the Table Wizard to create a table

- add and delete fields in an existing table
  - use the Form Wizard to create one of the predefined forms
  - distinguish between bound, unbound, and calculated controls
  - explain how each type of control is entered on a form
  - modify an existing form to include a combo box, command buttons, and colour
  - switch between the Form view, Design view, and Datasheet view
  - use a form to add, edit, and delete records in a table
- Obtain meaningful information from a database. (30% of course content)
- create and edit the reports available through the Report Wizard
  - utilize the views in the Report Window appropriately
  - list the sections that may be present in a report and explain the purpose of each
  - differentiate between a query and a table
  - explain how the objects in an Access database interact with one another
  - perform simple and advanced queries
  - use the design grid to create and modify a select query
  - use multiple criteria rows within the design grid to implement AND and OR conditions in a query
  - sort and group records
  - differentiate between a primary key and a foreign key
  - use the Relationships window to implement a one-to-many relationship within an Access database
  - use referential integrity to maintain consistency within a database
  - use a main form and a subform in conjunction with a one-to-many relationship
  - create a query based on multiple tables and create a report based on that query
  - create a main form containing two subforms linked to one another
  - implement a many-to-many relationship
  - create a parameter query
  - use aggregate functions in a select query to perform calculations on groups of records
  - use the Get External Data command to add external tables to an existing database
- Integrate other programs in the suite with the database program. (10% of course content)
- perform a mail merge between Access and Word
  - convert an Excel worksheet to an Access database
  - link an Excel worksheet to an Access database
  - publish Access reports to the World Wide Web

- Demonstrate the ability to utilize a computer database program to solve business problems. (10% of course content)
  - prepare a written description of the database design
  - create the database and provide detailed documentation for each table using the Documentor
  - develop and create a simple template
  - create the necessary forms and enter test data
  - use appropriate file compression techniques to control the size of the database
  - utilize FTP to transfer files when required

**III. METHODS OF EVALUATION:**

**Mid-Term Reporting**

- S Satisfactory Progress
- U Unsatisfactory Progress
- R Repeat (objectives have not been met)
- NR Grade not reported to Registrar's Office.

**Final Grade Reporting**

- |    |            |   |
|----|------------|---|
| A+ | 90% - 100% | Consistently Outstanding  |
| A  | 80% - 89%  | Outstanding Achievement   |
| B  | 70% - 79%  | Consistently Above Average  |
| C  | 60% - 69%  | Average   |
| R  | Below 60%  | Repeat - Objectives of this course have not been achieved and the course must be repeated for credit. |

**BREAKDOWN OF FINAL GRADE:**

<b>ASSIGNMENTS:</b>	20%
<b>TESTS:</b>	
Database design and setup.	10%
Computer database maintenance.	10%
Form and table creation.	15%
Reports and queries.	25%
Suite Integration.	10%
Solving business problems.	10%
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<b>TOTAL</b>	<b>100%</b>

**NOTES:**

1. 100 percent completion of all assignments is expected. A zero will be assigned if not handed in on the due date. Students are advised to maintain at least one back-up of all files on diskette. A lost or damaged diskette will not be an acceptable reason for a late or incomplete assignment.
2. A disk labelled with the student's, professor's, and course name **MUST** be available with the assignment. At the professor's discretion, disks will be checked.
3. All work must be labelled with the student's name and the project information in the upper right corner of each page.
4. If a student is unable to write a test, that student must contact the professor **PRIOR** to the end of the test. The test will then be written at a time set by the professor. If the student has contacted the professor but the reason given is not considered a legitimate emergency, the test will then be written at a time set by the professor with a 15% deduction.

5. If the student has not contacted the professor, the student will receive a mark of "0" on that test. A student arriving late but prior to any other student leaving the test will be allowed to write for the remainder of the class time.
6. During testing, the program's on-line help may be available. Tests will not be "open book". Students must ensure that they have the appropriate tools to do the test (i.e. diskettes, pencil, pen...).

**WARNING:** Academic dishonesty will result in a grade of zero (0) on the assignment or test for all involved parties. Students are expected to keep their eyes on their own work. This may prove difficult in some computer rooms but the onus is on the student to do so. Talking with other students during the test will result in an automatic deduction of 5 marks per occasion.

**IV. REQUIRED STUDENT RESOURCES:**

Exploring Microsoft Access by Grauer/Barber. Published by Prentice Hall. ISBN 0-13-754227-5.

Five diskettes - 3 1/2" high density pre-formatted 1.44 MB.

One plastic disk container.

Two letter-sized file folders to hand in assignments and tests.

Two individual diskette pockets (one to be attached to inside of each file folder)

**V. SPECIAL NOTES:**

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the professor.

Your professor reserves the right to modify the course as deemed necessary to meet the needs of students.

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