# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

## **SAULT STE. MARIE, ONTARIO**



## **COURSE OUTLINE**

COURSE TITLE: DATABASE MANAGEMENT AND APPLICATIONS

CODE NO.: OAD109 MODULE: FOUR

**PROGRAM:** OFFICE ADMINISTRATION – EXECUTIVE

(ACCELERATED)

**AUTHOR:** LYNN DEE EASON

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DATED:

APPROVED:

\_\_\_\_\_\_ DEAN

DATE

TOTAL CREDITS: 3

PREREQUISITE(S): NONE

**HOURS/WEEK:** 9 HOURS/7 WEEKS

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## I. COURSE DESCRIPTION:

Data is a valuable resource to companies, and the organizing, creating, maintaining, retrieving, and sorting of data are important activities. Using Access, students will concentrate on transforming raw data into database files that can be queried and organized into accurate, final-form business-style reports and forms.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

 Use the basic features of Access to track information for businesses or individuals

## Potential Elements of the Performance:

- Identify parts of the Access screen
- Open and close an existing or new database
- Create a new database
- Create a new table
- Create a primary key and add records to a table
- Modify the table design
- Open, save, print, and close a table
- Edit records in a table
- Sort records
- Navigate to records in a table
- Use the access help system
- Create, save and close a form
- View and navigate to records with a form
- Add or delete records with a form
- Create a form using the form wizard
- Modify the structure of a form
- Create a report with the report wizard
- Open, save, and print a report
- Modify the design of a report
- Create, run, save, and close a query
- Open and edit an existing query
- Specify text criteria in a query
- Use wildcards in a query
- Specify numeric criteria in a query
- Use compound criteria in a query
- Sort data in a query
- Use calculated fields in a query

- Group data and calculate statistics in a query
- 2. Customizing Tables, Data Access Pages, and converting a Database.

## Potential Elements of the Performance:

- Customize a field
- Specify a field format
- Create input masks using the input mask wizard
- Create input masks using the input mask properties box
- Specify a required field
- Validate data entry
- Create a lookup wizard field
- Find a record
- Display specific records
- Create and use a data access page
- Convert a database from a previous version of Access
- 3. Building and Maintaining a relational database.

## Potential Elements of the Performance:

- Index Fields in a table
- View relationships in a database
- Establish relationships between tables
- Create a query from joined tables
- Identify and correct design errors in tables
- Protect and maintain a database
- 4. Advanced Forms, subforms, reports and queries.

## Potential Elements of the Performance:

- Add fields to a form
- Use toolbar buttons to enhance a form
- Use form control properties
- Make a form user-friendly
- Create a form in design view
- Create a subform
- Create a subreport
- Group data in a report
- Create calculated fields in a report
- Set report and report section properties
- Create a crosstab report
- Create an update query

- Create a delete query
- Create special purpose queries
- Create action queries
- View queries in SQL
- 5. Integrating Access with other office applications.
  - Import data from a Word table
  - Use mail merge to integrate Access and Word
  - Import from Excel
  - Add hyperlinks to Word and Excel files
  - Link database objects to office files
  - Add a chart to a from
  - Add a chart to a report
  - View the macro window
  - Create a new macro
  - Run a macro in response to an event
  - Create a macro group
  - Create a switchboard page
  - Use the database wizard
  - Analyze data with the table analyzer
  - Use the performance analyzer
  - Manage and secure a database
  - Create a replica of a database
  - Export an Access table to Excel
  - Export an Access table to Word
  - Create a report snapshot
  - Create a custom data Access page
  - Place a PivotTable in a data Access page
  - Export Access data as XML document
  - Import an XML document into Access

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

<u>Access 2003 Comprehensive</u>, by Shelley Gaskin, Linda Foster-Turpen, Jeffrey M. Howard. Pearson Education/Prentice Hall 2004.

Two manila file folders letter size

## IV. EVALUATION PROCESS/GRADING SYSTEM:

Two tests: Students will be evaluated on their database skills. Two tests will be administered based on projects that have been completed.

Test #1 - 50%Test #2 - 50%

100%

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

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

## V. 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 instructor 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.

Students are expected to demonstrate respect for others in the class. Classroom disturbances will be dealt with through an escalating procedure as follows:

- Verbal warning
- E-mail notification
- Meeting with the Dean

It is expected that 100 percent of classroom work be completed as preparation for the tests. All work must be labeled with the student's name and the project information on each page. Students are responsible for maintaining back-ups of all completed files.

Students are expected to be present to write all tests during regularly scheduled classes.

In the event of a failed course grade, a supplementary test will be administered at the end of the semester to those students who have attended 75 percent of classes and have completed the course work. The mark achieved on the supplemental will replace the lowest failed test for the final grade calculation.

Test papers will be returned to the student after grading in order to permit verification of the results and to review the tests. However, the student will be required to return all test papers to the professor who will keep them on file for three weeks after the semester finish date. Any questions regarding the grading of individual tests must be brought to the professor's attention within two weeks of the test paper being returned.

Tests will not be "open book." Students must ensure that they have the appropriate tools to do the test (i.e. blank paper, pencil, pen, etc.).

Proofreading is fundamental to this course. Marks will be deducted for inaccuracies.

Keyboarding proficiency is encouraged. Students who are unable to keyboard with a touch type technique are encouraged to use (or purchase) the *All the Right Type* typing tutor software located on the E-wing network and in The Learning Centre.

Regular attendance and participation is expected to ensure course information is communicated to all students. In-class observation of student work and guidance by the professor aids student success. Lectures will not be repeated in subsequent classes.

It is the student's responsibility to be familiar with the course outline and department manual. Students are expected to check college email twice daily as a minimum.