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



COURSE OUTLINE

Course Title	: Introduc	ction to Acc	cess	
Code No.:	GIS403	Seme	ester: 1	
Program:	GIS			
Author: MARCEL VANLANDEGHEM				
Date: Se	pt 2003	Previous (Outline Date: Sept 2002	
Approved: _				
-	Dea	in	Date	
Total Credits:		Prerequisite:		

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For additional information, please contact Colin Kirkwood, Dean School of Technology, Skilled Trades & Natural Resources

(705) 759-2554, Ext. 688

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I. <u>COURSE DESCRIPTION</u>:

In this course students will learn to use the basic to intermediate features of Access 2000.

Students will learn functions and concepts, use menus and toolbars, create enter and edit database records. Students will also be introduced to basic SQL concepts using an access database.

This course will also provide an in depth understanding of the logistics of database design. Through practical applications students will learn to design tables, queries, reports in addition to understanding and creating relationships between numerous tables.

Practical "hands-on" applications will be utilized to incorporate basic database concepts.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Describe and explain database structures.

Potential elements of the performance:

- Define database and tables
- Discuss database concepts and design
- Explain field types and record layouts
- Explain Single vs. Relational database
- Describe Key Fields and Indexing
- Discuss Access and how it will be used to interface with GIS
- Review Access Screen Layouts and Toolbars
- Discuss Linking and Joining Tables
- Explain Referential Integrity

This will constitute approximately 20 % of the course grade.

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2. Define and Create Database & Tables

Potential elements of the performance:

- Follow procedures to design and create a new database
- Create and save tables in a database
- Explain the different field types in a table
- Add records to a table
- Perform procedures to change the design of the table
- Open a table and add additional records
- Preview and print the contents of a table

This will constitute approximately 20% of the course grade

3. Using Multiple Tables

Potential elements of performance

- Create additional tables
- Create and Use Forms to enter view data
- Create a customized Form
- Join tables
- Link tables using unique keys
- Indexing table items

This will constitute approximately 20% of the course grade.

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4. Creating Queries and basic reports

Potential elements of the performance:

- Explain and define Query
- Create new queries
- Display selected fields in a query
- Running Queries
- Using Text data in the Criteria section
- Using Numbers and Wildcards in the criteria section
- Using Comparison Operators
- Sorting data in a query
- Creating and use Parameter Queries
- Create and use Calculation queries
- Introduction to Queries using SQL

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This will constitute 20 % of the course grade

5. Working with and using Reports

Potential elements of the performance:

- Create a simple Report
- Create Group Reports Using the Report Wizard
- Create Customized Reports
- Formatting the Report
- Using Calculations in a report
- Running Queries into reports

This will constitute 20 % of the course grade.

III. <u>TOPICS</u>

TOPICS

- 1 Describe and Explain Database Structures
- 2 Define and Create a Database and Tables
- 3 Working with Multiple Tables
- 4 Creating Queries and Multiple Reports
- 5 Working with and Using Reports

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IV. REQUIRED STUDENT RESOURCES/TEXTS/MATERIALS

Microsoft Access 2000 Comprehensive Techniques ISBN 0789556103

Instructor Handouts Internet Resources

V EVALUATION PROCESS/GRADING SYSTEM:

Marks Breakdown:

Test	(1) @	30%	30%
Practical Assignments	(8)	5 %	40%
Projects	(2) @	15 %	30%

Total 100%

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The following semester grades will be assigned to students .

Grade A+ A B C F (Fail)	<u>Definition</u> 90 - 100% 80 - 89% 70 - 79% 60 - 69% 59% or below	Grade Point <u>Equivalent</u> 4.00 3.75 3.00 2.00 0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>).	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the cours academic penalty	e without

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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 instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 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.