A POLYTECHNIC INSTITUTION

Course Outline

School of Business
Program: Integrated Management Studies
Option:

BUSA 3600
Introduction to Database Management Systems

Start Date:	September 2005				**End Date:**	December 2005			
Total Hours:	42	**Total Weeks:**	14		**Term/Level:**	3	**Course Credits:**	3	
Hours/Week:	3	**Lecture:**	1	**Lab:** 2	**Shop:**	0	**Seminar:** 0	**Other:**	0

Prerequisites

Course No.	Course Name
BUSA 1600	Computer Applications 1

BUSA 3600 is a Prerequisite for:

Course No.	Course Name

Course Description

This is an introductory course on the theory and application of Database Management Systems (DBMS) using the Microsoft ACCESS Relational DBMS for Windows. The intent of the course is to provide enough theoretical background, practical skill and hands-on experience to make effective users of DBMS technology for business improvement.

Detailed Course Description

Organizations are becoming more and more dependent on Information Technology (IT) to operate effectively and efficiently. Employers expect their employees to have a better understanding of IT and better hands-on skill with computers than ever before. The overall goal of this course is to provide you with the understanding and skills you will need to be successful in this new work environment.

In this course we will explore the role of Database Management Systems (DBMS) in organizations and the relationship between DBMS and other Information Systems (IS) in organizations. Students will learn to describe a DBMS and its importance to organizations; identify the steps required in database design and development; develop a simple database system using Microsoft ACCESS; and use Microsoft ACCESS to perform a variety of data management tasks. The course is split into a lecture component (1 hour/week) and a lab component (2 hours/week). The lecture will focus on theory and the lab will provide students with an opportunity for hands-on experience using the Microsoft ACCESS Relational DBMS for Windows.

The intent of the course is to provide students with enough theoretical background, practical skill and hands-on experience to make effective use of DBMS technology for business improvement. The focus is on practical knowledge - the theory will be presented at a basic, introductory level.

Evaluation

Lab Exercises & Attendance	20	%	(Sign in within 15 minutes of lab start time)
Midterm	20	%	
Project	35	%	(30% application, 5% final presentation)
Final Exam	25	%	
TOTAL	**100**	%	

■ Course Learning Outcomes/Competencies

Upon successful completion of this course the student will be able to:

1. Use Microsoft ACCESS to:
   - Create and modify data tables;
   - Create forms to enter data into tables;
   - Work with tables and forms to sort and search contents;
   - Define simple and complex queries to create multiple views of data in tables;
   - Define relationships between tables to create simple database applications; and
   - Design easy to read, useful reports to present information.
2. Describe the relational DBMS model;
3. Describe an Information System (IS) and differentiate between the various types of IS and their role within organizations;
4. Describe the properties of a DBMS and describe how it fits into an IS architecture;
5. Identify the strategic nature of a DBMS and describe how it can be used to achieve business improvement;
6. Identify the stages in the System Development Life Cycle and discuss how they apply to DBMS acquisition and development

■ Verification

I verify that the content of this course outline is current.

Authoring Instructor — Date: Sept. 6/2005

I verify that this course outline has been reviewed.

Program Head/Chief Instructor — Date: Sept 8/2005

I verify that this course outline complies with BCIT policy.

Dean/~~Associate~~ Dean — Date: Sept 09/2005

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

Instructor(s)

Malcolm Ferrier

Office Location: SE6-360
Office Hrs.: 2:30-3:30 Wed.
9:30-10:30 Thurs.

Office Phone: 412-7495
E-mail Address: mferrier@bcit.ca

Learning Resources

Required:

Exploring Microsoft Access 2003 Volume II, Grauer & Barber, Prentice Hall, 2001 (An older edition will suffice)

A USB hard drive or one (1) box of high-density 3.5 inch floppy diskettes. Some labs support 250MB or 100 MB Zip disks, but these are being phased out.

Recommended:

Microsoft Office XP or 2003 Professional Version (includes ACCESS, EXCEL, WORD, POWERPOINT, etc.) software on a home computer.

The labs have Microsoft Office 2003 installed. ACCESS is available to students during the scheduled labs and other 'scramble' time. Having the software and manuals available at home will be helpful, but is not required.

Information for Students

Assignments: Late assignments, lab reports or projects will **not** be accepted for marking. Assignments must be done on an individual basis unless otherwise specified by the instructor.

Makeup Tests, Exams or Quizzes: There will be **no** makeup tests, exams or quizzes. If you miss a test, exam or quiz, you will receive zero marks. Exceptions may be made for **documented** medical reasons or extenuating circumstances. In such a case, it is the responsibility of the student to inform the instructor **immediately**.

Ethics: BCIT assumes that all students attending the Institute will follow a high standard of ethics. Incidents of cheating or plagiarism may, therefore, result in a grade of zero for the assignment, quiz, test, exam, or project for all parties involved and/or expulsion from the course.

Attendance: The attendance policy as outlined in the current BCIT Calendar will be enforced. Attendance will be taken at the beginning of each session. Students not present at that time will be recorded as absent.

Illness: A doctor's note is required for any illness causing you to miss assignments, quizzes, tests, projects, or exam. At the discretion of the instructor, you may complete the work missed or have the work prorated.

Attempts: Students must successfully complete a course within a maximum of three attempts at the course. Students with two attempts in a single course will be allowed to repeat the course only upon special written permission from the Associate Dean. Students who have not successfully completed a course within three attempts will not be eligible to graduate from the appropriate program.

Course Outline Changes: The material or schedule specified in this course outline may be changed by the instructor. If changes are required, they will be announced in class.

Assignment Details

The lab assignments will be made up of Microsoft ACCESS exercises. There will be adequate time in the lab periods to complete these exercises. You cannot get an attendance mark for a lab without a participation mark.

Student projects will be completed in teams. Although limited time will be provided in the lab periods for project work, students should allocate time outside the labs for team meetings and development effort. Project details will be provided within the first few weeks of the course.

Schedule

Week of/ Number	Outcome/Material Covered	Reference/ Reading	Assignment	Due Date
Sept. 5	Introduction/Course Outline/Review of ACCESS	Chapter 1-3	**No Lab**	
Sept. 12	Introduction/Course Outline/Review of ACCESS	Chapter 1-3		
Sept. 19	Project Management/Systems Development Life Cycle (SDLC)			
Sept. 26	Advanced Queries & Reports	Chapter 4		
Oct. 3	Data Modeling/DBMS Design			
Oct. 10	One-to-Many Relationships/Subforms	Chapter 5		
Oct. 17	Midterm (in class)		**Midterm**	
Oct. 24	Many-to-Many Relationships	Chapter 6		
Oct. 31	Building a User Interface	Chapter 7		
Nov. 7			**No Lab, No Lecture**	
Nov. 14	Introduction to VBA	Chapter 8		
Nov. 21	Web/Database Development/Project Presentations			
Nov. 28	Project Presentations			
Dec. 5	Final Exam (in class)		**Final Exam**	