

## BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Course Outline Part A

School of Business

Program: Business Administration

**BUSA 3600** 

Option:

## Introduction to Database Management Systems

Hours/Week

3

**Total Hours** 

45

Term/Level:

1

Lecture:

1

Total Weeks: 15

Credits:

3

Lab: Other: 3

**Prerequisites** 

is a Prerequisite for:

Course No.

Course Name

Course No.

**Course Name** 

BUSA 1600/2650

**Decision Support** 

### **Course Goals**

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 the 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.

## **Course Description**

This is an introductory course in the theory and application of Database Management Systems (DBMS). 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				
Assignments 2 Quizzes: Project: Final Exam:		20 % 30 % 20 % 30%		
TOTAL	ſ	100%		

#### Course Outcomes and Sub-Outcomes

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;

Course Record				
Developed by:	Masoud Jalili Instructor Name & Department	(signature)	Date: Aug 3, 200	00
Revised by:	Instructor Name & Department	(signature)	Date:	
Recommended by:	Program Head Name & Department	(signature)	Date:	
Approved by:	Associate Dean/Dean Name & Department	L	Start Date:	ug 26/00



### BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Course Outline Part B

School of: Business

Program: Business Administration

**BUSA 3600** 

Option:

Introduction to Database Management Systems

Effective Date: September 2000

Instructor(s)

Masoud Jalili

Office No.:

SE6 - 326

Phone: 451-6781

Office Hrs.:

Posted on Door

Email: mjalili@bcit.bc.ca

## Text(s) and Equipment

Required:

Exploring Microsoft Access 97, Grauer & Barber, Prentice Hall, 1997

Recommended:

Microsoft Office 97 Professional Version (includes ACCESS, EXCEL, WORD, POWERPOINT, etc.)

The labs in SE6 have Microsoft Office 97 installed. ACCESS is available to students during the scheduled labs and other 'scramble' time. Having the software, on-line help, and manuals available at home will be helpful, but is not required.

## **Course Notes (Policies and Procedures):**

## I.D. Required In Exam Centers

Effective December 2000, students will be required to produce photo-identification for admittance to examination halls. Photo I.D. must be placed on the desk while writing the exam, for inspection by invigilators. Students should bring a BCIT OneCard or alternatively two pieces of identification, one of which must be government photo I.D. such as a drivers license. Please see BCIT Policy #5300, Formal Invigilation Procedures.

#### **Assignment Details**

The assignments will be made up of Microsoft ACCESS exercises. You will be given two weeks to complete the assignments including at least one scheduled lab period.

The assignments may be team assignments.



## BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Schedule

School of: Business

Program: Business Administration

Option

# BUSA 3600 Introduction to Database Management Systems

Week of/ Number	Outcome/Material Covered (Lecture / Lab)	Reference/ Reading	Assignment	Due Date	
Sept. 4	Introduction -Course Outline / Review of ACCESS	Chapter 1-3	Assignment 1	Sept. 18	
Sept. 11	Relational Data model / Assignment 1				
Sept. 18	DBMS Design I / Multiple table forms and queries	Chapter 4			
Sept. 25	DBMS Design II / Multiple table forms and queries		Assignment 2	Oct. 9	
Oct. 2	Assignment 2				
Oct. 9	DBMS Design III / Many-to-many relationships	Chapter 5			
Oct. 16	Many-to-many relationships		Assignment 3	Oct. 30	
Oct. 23	DBMS Design IV / Assignment 3				
Oct. 30	Building a User Interface / Building Applications	Chapter 6			
Nov. 6	Managing Data as a Resource		Assignment 4	Nov. 20	
Nov. 13	Strategic Value of DBMS / Assignment 4				
Nov. 20	Project Presentations				
Nov. 27	Course Summary				