# Information Operations Management

## **Syllabus**

IOM402 - 2 units (Business Information Systems – Database Applications)

#### **Contact Information**

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Bridge Hall 202A
Tuesdays 6pm - 7:50pm
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Tuesdays 5pm-6pm (You can also email me for an appointment at another time.)

### **Course Goal**

Business Information Systems Database Applications is designed to provide you with an applied understanding of how databases are used to analyze business information. This course brings in the technology layer providing you with an opportunity to create real world software applications that are used in (Accounting, Finance, Marketing and Operations). This course will also enhance the your understanding of the core disciplines by providing you with the skills and experience to develop, test and implement systems that support many of the information analysis needs of today's organizations.

### **Learning Objectives**

- Proficient in the use and design of relational database systems using "Microsoft Access" as a tool for achieving this objective.
- Design and develop and implement a database application to solve a real world managerial problem.

### **Prerequisites and Technical Requirements**

The following identifies the standard office automation software (Microsoft Office 2007, PC version) used at the Marshall School of Business and the associated basic usage skills students should have prior to taking this course. Students should be able to:

- Properly operate the mouse to navigate and manipulate files and menu items.
- Open, move, resize, and work in multiple application windows at one time.
- Search, open, rename and save existing files.
- Cut, copy, and paste from one application to another.
- Use Internet Explorer.
- Access specific Web pages by entering the appropriate URL information.
- Access Blackboard.

#### Textbook

None - Materials will be provided.

### ASSESSMENT

- Participation (50pts)
- Exercise 1 Normalization (20pts)
- Exercise 2 Boomerang Relationships (30pts)
- Tables Assignment (100pts)
- Queries Assignment (100pts)

- Forms Exercises (100pts)
- Reports Assignment (100pts)
- Forms/Macros/Switchboards Assignment (100pts)
- Final Project (400pts)

#### Final Database Project – Working Database - 400 pts.

You will apply your knowledge acquired in the labs to develop a real world database application using Microsoft Access. Preferably, your database should meet the needs of a real entity such as a club, organization, or business (no fees may be charged). Your database should have the following characteristics:

- 3 Tables Minimum
- 2 Reports Minimum
- 4 Queries Minimum. (Some of which utilize: Calculations, Multi-table joins, summary operators, functions.)
- 1 Data Entry From & 1 Switchboard Minimum.
- All projects must be approved by the professor.
- Requests to work in groups must be approved by the instructor

The database will be evaluated based upon its design, functionality, and complexity (i.e. working, no bugs, relationships normalized), user interface, and formatting.

Session	Agenda	Items Due
Session 1	Lecture	
Aug. 27	Lecture - Overview of Course/Syllabus	
	Lecture - Normalizing a Database	
	Access Demo / Structure & Examples	
	Lab Work	
	In-Class Exercise 1 – Database Design	
	Go over Solution to Exercise 1	
	Materials Distributed:	
	Syllabus	
	Database Design Basics	
	<ul> <li>In-Class Exercise 1 – Database Design</li> </ul>	
	Boomerang Case (Exercise 2)	
	Homework Assignment:	
	Read Database Design Basics	
	Read Boomerang Case & Complete Exercise 2 for next week.	

Session	Agenda	Items Due
Session 2	Lecture/Lab	
Sept. 3	Creating Different Table Relationships in Access	
	Solution to Boomerang Case	
	Table Creation and Properties	
		Exercises 1 & 2
	Materials Distributed:	Due
	Tables Assignment	
	Homework Assignment:	
	• Tables	
Session 3	Lecture: More on Tables	
Sept. 10		
•	Lab: Work on Tables Assignment	
Session 4	Lecture: Access Queries - Basics	
Sept. 17		Tables
	Lab: Work on Queries	Assignment Due
		(Start of Class)
	Materials Distributed / Homework Assignment:	
	Queries 1-22	
Session 5	Lecture: Access Queries – Summary Operators and Dates	
Sept. 24	Lab: Work on Queries	
	Materials Distributed / Homework Assignment:	
	Queries 23-35: Summary Operators	
	Queries 36-43: Working with Dates	
Session 6	Lecture: Access Queries – Domain, Join Manipulation, & Parameter	
Oct. 1		
	Lab: Work on Queries	
	Materials Distributed (Homework Assignment)	
	<ul> <li>Materials Distributed / Homework Assignment:</li> <li>Queries 44-47: Domain Aggregate Queries</li> </ul>	
	<ul> <li>Queries 44-47: Domain Aggregate Queries</li> <li>Queries 48-47: Table Join Manipulation</li> </ul>	
	<ul> <li>Queries 54-58: Parameter Queries</li> </ul>	
Session 7	Lecture: Access Queries – Action & Crosstab Queries	
Oct. 8		
000.0	Lab: Work on Queries	
	Materials Distributed / Homework Assignment:	
	Queries 59-69: Action & Crosstab Queries	
Session 8	Lecture: Data Entry Forms (Inventory System)	
Oct. 15		
	Materials Distributed / Homework Assignment:	All Queries Due
	Forms Assignment	(Start of Class)
Session 9	Lecture: Final Project Discussion / Examples / Expectations	
Oct. 22		
	Lab: Work on Forms Assignment	

Session	Agenda	Items Due
Session 10 Oct. 29	Lecture: Access Reports	
	Lab: Work on Work on Reports Assignment	Forms Due (Beginning of Class)
	Materials Distributed / Homework Assignment:	
	Reports Assignment	
Session 11 Nov. 5	Lecture: More on Reports	
	Lab: Work on Reports	
Session 12 Nov. 12	Lecture: Order Form/Macros/Switchboards Lecture	Reports Assignment
	Materials Distributed / Homework Assignment:	Due
	Forms/Macros/Switchboards Assignment	(Beginning of Class)
Session 13 Nov. 19	Lab: Work on Forms/Macros/Switchboards & Final Project	
Session 14 Nov. 26	Lab: Work on Forms/Macros/Switchboards & Final Project	
Session 15 Dec. 3 Last Session	<ul> <li>Lab time to work on Forms/Macros/Switchboards</li> <li>Lab time to work on Final Project.</li> </ul>	Forms/Macros Assignment Due Last Day Late Boomerang Materials Accepted
Final Project Due Dec. 17	<ul><li>Lab time to work on Final Project.</li><li>Final Project Due</li></ul>	Final Project due by end of class.

#### **TURNING IN ASSIGNMENTS**

Assignments will be turned in via Blackboard (blackboard.usc.edu). Please do not email me your database files.

#### DUE DATES AND LATE ASSIGNMENTS

The due dates are in the syllabus; however, I may extend a due date depending upon the pace of the class. Under most circumstances late work is accepted; however, I subtract 4 points per day for late Boomerang work and 10 points per day for late final projects.

#### NOTICE ON ACADEMIC INTEGRITY

The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tensions accompanying examinations. Where a clear violation has occurred, however, the instructor may disqualify the student's work as unacceptable and assign a failing mark on the paper.

#### FOR STUDENTS WITH DISABILILITIES

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.