

**RUTGERS - THE STATE UNIVERSITY OF NEW JERSEY
FACULTY OF MANAGEMENT
DEPARTMENT OF MSIS**

33:623:370

Management Information Systems - Fall 2001

Professor Sue Kong

245 Janice H. Levin Building

Office phone: 732-445-3244, e-mail: sukong@andromeda.rutgers.edu

Lectures: All Lectures are in Levin 006; all labs are in Levin 005

Office Hours: 245 Levin, Tuesdays and Thursdays 3:30PM-4:30PM, or by appointment.

Course Outline: A critical (if not THE critical) qualification for managers within all business disciplines (e.g. accounting, finance, marketing) is computer technology know-how in general and familiarity with management information systems in particular. The objective of the course is to expose students to the concepts and technology associated with management information systems, including databases, networks, and interfaces. A substantial emphasis is placed on providing students with the capabilities of designing, developing, and implementing database systems. Therefore, the syllabus of the course consists of (1) Telecommunications; (2) Database management and design; (3) Comprehensive study of Microsoft Access application software package; and (4) Applications of MIS in business.

Textbooks:

1. "Management Information Systems: Solving Business Problems with Information Technology", 2nd edition, G. V. Post, and D. L. Anderson, IRWIN, 2000. Abbreviated as PA.
2. "Exploring Microsoft Access 2000, with VBA" by Robert T. Grauer and Maryann Barber; Prentice Hall, 2001. Abbreviated as GB.

Prerequisites: The course has several prerequisites (see the catalog for a complete list). The most important prerequisite is *CS 170: Computer Applications for Business*.

Course Work: Classes consist of lectures and lab sessions. There are regular homework assignments (see the schedule below), two midterm examinations, and a final examination.

Grades: Grades are based on homework assignments, midterm examinations, and a final examination. There is also a component for student interaction within the class. The weights for the final grade are as follows: Homework assignments: 30%; Class Participation: 10%; Midterm examinations: 30%; Final examination: 30%.

Teaching Method:

- The lectures take place at the Levin 006 classroom, and are primarily based on the PA textbook (see above). Students are responsible for reviewing the chapters to be covered at each lecture, based on the schedule provided below, **BEFORE** the lecture. Please note that you are responsible for the **ENTIRE** contents of each assigned chapter, plus any additional handouts, unless otherwise notified. During the lecture I will highlight topics from the covered material, assisted by presentations and short videos. Classroom lectures typically address major and/or confusing topics, but are not necessarily comprehensive of all material within a chapter. Students are welcome to ask questions regarding all relevant topics (including those not covered in class).
- The labs take place at the Levin 005 lab, at the dates specified in the provided schedule, using the GB text and handouts. It is the students' responsibility to review the specified chapters from the lab text **BEFORE** the lab. The labs are mostly designed for individual work, utilizing hands-on exercises. I will typically introduce the topic of the lab at the beginning of the class and may interrupt the individual work for highlighting critical issues during the lab. Please be sure to **SAVE** all lab assignments, as the generated files are modified and enhanced throughout the semester.
- **Attending lectures and labs is expected and recommended, yet not mandatory.** There is a component of the grade based upon class participation. This component is based upon "active" classroom participation, including a short presentation during the semester. If you decide to skip many of the classes, this component of the grade will be adversely affected.

Homework Assignments:

- Homework assignments must be submitted to me electronically. You should receive a notification of acceptance within 24 hours. If not, resubmit. Unless specified otherwise, the assignments should be well formatted. **Plagiarism is strictly forbidden.**
- Assignments are due based on the schedule provided below (approximately two weeks after the date of distribution). Penalty for late submission is 20% of the weight of the assignment **per class**, unless I give an explicit extension. No assignment will be accepted after solutions have been provided to the class.
- The assignments are designed to encourage exploration and deep understanding of the material. It is recommended **NOT** to prepare the assignments at the last minute.
- Students are encouraged to ask questions regarding the homework assignments, either during classes, or during office hours. Questions that might be of general interest will be discussed in class.
- In any grade dispute, the student must provide a written explanation as to why more points should be added. If there is a need for a further clarification, a meeting with the professor will be set.

Examinations:

- The midterm examinations are closed-book examinations designed to encourage students to review the material in the textbook. Calculators are allowed, but **computers are not allowed!** The exam format will be specified in advance of each exam, and might include multiple-choice, fill-in-the-blank, short and long answers, calculations, or short essays. Keep in mind that all material from assigned readings can be included, even if not specifically discussed by the professor in class.
- The final examination is an open-book examination and will be in a problem-solving format. Calculators are allowed, but **computers are not allowed!** The final may include, in addition to the material in the textbooks, any additional information that is provided by the professor at class (this includes notes, handouts, and lecture materials). The students should take this into consideration when preparing for the examination.
- The final examination is a group examination (among all sections of this course). The date, time and place will be provided in the near future. As this is a group exam, you should arrange your exam schedule accordingly.

TENTATIVE SCHEDULE:

Week	Tuesday Classes	Thursday Classes	Assignments
1 Sep 4 Sep 6	<u>Overview of Information Systems (Class)</u> (PA, Chapter 1) Information Systems Information Technology Applications of MIS Role of MIS in business	<u>Overview of Computers (Class)</u> (PA, Chapter 2 and Lec Notes) Data categories Hardware components System & applications software Video: Multimedia presentation	Note: Student presentations will be throughout the semester!
2 Sep 11 Sep 13	<u>Systems Approach (Class)</u> (PA, Chapter 3) Systems components Data-Flow Diagrams Object-Oriented Design Case study: Ben & Jerry's	<u>File Management and Telecom Tools (Lab)</u> (Lecture Notes) Intro to Levin Lab, Windows Explorer, file security, FTP, Telnet, e-mail and attachments, File backup and protection Basic Web browsing	Assignment 1: PA Chapters 1-3 and Notes
3 Sep 18 Sep 20	<u>Operations & Transaction Processing (Class)</u> (PA, Chapter 4) Data capture and quality Transaction processing systems Accounting and human resources Case study: Home Depot	<u>Microsoft Access - I (Lab)</u> (GB, Chapter 1) Introduction to Microsoft Access	
4 Sep 25 Sep 27	<u>Database Management (Class)</u> (PA, Chapter 5) Overview of DBMS Relational database Overview of queries and reports	<u>Microsoft Access - II (Lab)</u> (GB, Chapter 2) Database creation, Tables and Forms	Assignment 1 is due on Sep 25 Assignment 2: PA Chapter 4 GB Chapters 1-2
5 Oct 2 Oct 4	<u>FIRST MIDTERM EXAM (Class)</u> Closed-book exam Chapters 1-4	<u>Microsoft Access - III (Lab)</u> (GB, Chapter 3) Reports and Queries	
6 Oct 9 Oct 11	<u>Database Design -I (Class)</u> (PA, Chapter 5 Appendix and Notes) Data modeling Dependency diagrams Anomalies	<u>Microsoft Access - IV (Lab)</u> (GB, Chapter 4) Relational Databases, External Data, Charts and The Switchboard	Assignment 2 is due on Oct 9 Assignment 3: PA Chapter 5 GB Chapters 3-4
7 Oct 16 Oct 18	<u>Database Design -II (Class)</u> (PA, Chapter 5 Appendix) Partial and transitive dependencies First, second and third Normal Forms Normalization	<u>Microsoft Access - V (Lab)</u> (GB, Chapter 5) One-to-Many Relationships, Sub-forms and Multiple Table Queries	
8	<u>Telecommunications Technology</u>	<u>Microsoft Access - VI (Lab)</u>	Assignment 3 is due on Oct 23

Oct 23 Oct 25	(Class) <i>(PA, Chapter 6)</i> Telecommunications components Computing and networking models Telecommunications Standards Video: Connections	<i>(GB, Chapter 6)</i> Many-to-Many Relationships	Assignment 4: PA Chapter 6 (no Internet Or WWW) GB Chapters 5-6
9 Oct 30 Nov 1	<u>Telecommunications Networks</u> (Class) <i>(PA, Chapter 6)</i> Network topologies Choosing network design Global telecommunications Case study: Fisher Scientific Int	<u>Microsoft Access - VII (Lab)</u> <i>(GB, Chapter 7)</i> Building Applications, The Switchboard, Macros and Prototyping	
10 Nov 6 Nov 8	<u>Internet and WWW (Class)</u> <i>(PA, Chapter 6 and Notes)</i> Internet structure and services TCP/IP Web pages Basic HTML Inserting links and graphics	<u>Microsoft Access - VIII (Lab)</u> <i>(GB, Chapter 8)</i> More Powerful Applications, Introduction to VBA	Assignment 4 is due on Nov 6
11 Nov 13 Nov 15	<u>SECOND MIDTERM EXAM</u> (Class) Closed-book exam Chapters 5-6 Microsoft Access	<u>Microsoft Access - IX (Lab)</u> <i>(GB, Chapter 8) (Cont.)</i> More Powerful Applications, Introduction to VBA	Assignment 5 PA Chapter 6 (Internet and WWW) and 8 GB Chapters 7-8
12 Nov 20	<u>Databases on the Web (Lab)</u> <i>(Lecture Notes)</i> Static Database Loading Dynamic Database Loading	Change in Designation of Class Days	
13 Nov 27 Nov 29	<u>Decision Support Models (Class)</u> <i>(PA, Chapter 8)</i> Introduction to models Model classification	<u>Decision Support Models (Class)</u> <i>(PA, Chapter 8) (Cont.)</i> Data warehousing Decision support systems Case study: Gateway 2000	
14 Dec 4 Dec 6	<u>System Development (Class)</u> <i>(PA Chapter 12)</i> Design methods System development life cycle CASE tools	<u>System Development (Class)</u> <i>(PA Chapter 12) (Cont.)</i> Prototyping and rapid application development Case study: Federal Aviation Administration	Assignment 5 is due on Dec 4
15 Dec 11	Course Summary and Review		
	<u>FINAL EXAM</u> Time: to be determined! Open-book exam all material excluding labs		

Reading the schedule:

1. The leftmost column shows the period within the term and the dates. The schedule is a weekly one; starting with a Wednesday
2. The next two columns provide the material to be covered in that period's Wednesday and Friday (or following Monday) classes, respectively.
3. The rightmost column provides information regarding the distribution and hand-in dates for the various assignments.