

**Michael F. Price College of Business
Division of Management Information Systems
Systems Analysis and Design Theory
Fall 2002**

Section 1 1:30 - 2:45 TR Classroom AH 101	Section 2 3:00 - 4:15 TR Classroom AH 101
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Office Hours: 4:30 - 5:30 p.m. TR and by appointment

“The University of Oklahoma exists for the students . . . but the university cannot give you an education -- it can only help you acquire one for yourselves. The main effort must be made by the students.”

(Former OU President George Lynn Cross -- 1952)

Course Overview and Objectives

Systems analysis and design is concerned with bringing all of a system's components together: software, hardware, people, procedures, databases, and etc. You will learn about the role of the systems analyst during systems development. In particular, this course focuses on the analysis, design, implementation, and maintenance of information systems. Along the way, you will learn about the tools, techniques, and methodologies used by systems analysts to develop information systems in organizations.

At the end of the course successful students should be able to:

- Understand and explain the role of information systems in organizations
- Understand systems analysis and design concepts that apply to business organizations
- Apply common modeling techniques to represent the specifications of a system
- Understand and explain the processes of the systems development lifecycle
- Work successfully with a team of peers on a common problem

Course Prerequisites

The posted prerequisites for this course are MIS 3353 and MIS 3013. If you have not successfully completed these two prerequisite courses, please see the instructor.

Course Text

Valacich, J. S., J. F. George, and J. A. Hoffer. *Essentials of Systems Analysis and Design*, Prentice Hall, Upper Saddle River, NJ, 2001.

Occasionally additional reading and study from outside sources may be required or recommended. These sources will include, but are not limited to, recent newspapers, business journals and monographs, and the World Wide Web. Any such reading/study assignments will be announced in class by the instructor.

Grading and Course Requirements

The course requirements and evaluation of each student's work in the course are based upon performance in four areas: exams, class participation, homework, and a team project. Grade contributions and letter grade determination are shown below.

Conceptual Midterms (2)	20%
Application Midterms (2)	30%
Final Exam	10%
Class Participation	10%
Homework	10%
Team Project	<u>20%</u>
Total	100%

Percent	Grade
91-100	A
81-90	B
71-80	C
61-70	D
0-60	F

This course will require a significant amount of group work. To prevent a student from receiving a passing grade for the course just because his or her group receives very high grades on the group project and assignments, the following policy applies.

If a student's average score across all three exams is less than 70%, the highest grade the student may earn for the course is a "D." This rule applies regardless of the student's performance in other areas of the course. If a student's average exam score is less than 70%, the student will earn a final grade of "D" or "F" based on the student's average exam score.

Conceptual Midterms. There will be two conceptual midterm examinations. Each conceptual midterm exam is worth 10% of your final grade. The conceptual midterms will consist of questions to assess students' understanding of the conceptual issues related to systems analysis and design (i.e., terminology, definitions, syntax, etc.). These examinations will cover material from text readings, class discussions, guest lectures, and outside readings.

Application Midterms. There will be two application midterm examinations. Each application midterm exam is worth 15% of your final grade. The application exams will assess the extent to which students can apply proper systems modeling techniques to solve a systems problem. Students will be given a case description to use in preparing for each application midterm. Each student will be allowed to use one 8½ X 11 sheet of notes about the case while taking the application midterms.

Final Exam. The final exam is worth 10% of your final grade. The final exam is similar to a conceptual midterm. Students will be required to purchase a scantron form for use in completing the final exam.

Each exam will cover any material previously discussed in class. The exams are not comprehensive; however, they are cumulative. Knowledge is cumulative and material discussed at the end of the semester will draw from earlier course material. Therefore, examinations toward the end of the semester will draw upon, (and may even ask questions about), major concepts covered during earlier portions of the course.

Class Participation. Class participation is based on participation in and contribution to in-class discussions. Students are expected to contribute to classroom discussions and activities. I will periodically give unannounced quizzes and/or in-class assignments. There are no make-ups allowed for any of these activities -- **no exception**. Your graded performance on these assignments and quizzes will be applied toward your class participation grade.

The quizzes and assignments will typically cover material from prior class discussions or from the assigned reading for the current class period. Completion of the chapter review questions and review of the key terms for each chapter are strongly recommended as preparation for each class period.

No make-ups will be allowed for missed in-class activities. If you are not in class on the day of an in-class activity, you cannot participate in the activity and cannot receive points for the activity. There will be enough of these activities that missing one or two will not significantly impact your final grade.

Participation may also include both assigned and no-notice brief presentations of the material assigned for the current class period. These presentations may be on an individual or team basis. Presentations are expected to go beyond just summarizing or restating material and will be used to conduct the class discussion for the day's assigned materials. Presentations often include sharing individual or group solutions assigned homework problems.

Homework. There will be 5 individual homework assignments and 5 team homework assignments during the semester. One of the team homework assignments will consist of a peer evaluation for each of the other four team assignments. All work on individual assignments is to be performed by the individual submitting the work for grading.

Each assignment will be worth 100 points. Homework is always due at the beginning of the class period on the due date. Submitted homework assignments should look

professional (i.e., have correct spelling, proper grammar, consistent format, good writing style, multiple pages stapled together, etc.).

The requirements for these assignments will be made available on the web. You will be expected to view and use the documents online or download and print the assignment from the web (see the "Electronic Course Support" section for the URL and instructions). Handouts for the assignments will not be distributed in class.

You should make every effort to complete the homework assignments early. Those who wait until the last minute risk delays with the computer facilities (i.e., down time, printer jams, computer crashes, etc.) and availability of the instructor.

Team Project. The team project will give you hands-on experience designing a computer-based information system. Details on the project will be provided later in the semester. The project is due on December 6, 2002 at 4:25 p.m. Projects turned in before November 29, 2002 will receive up to 10 bonus points for early submission.

Teams should make every effort to complete the project early. Those who wait until the last minute risk delays with the computer facilities (i.e., down time, printer jams, computer crashes, etc.) and availability of the instructor.

Work turned in late will be discounted by 25% per day no matter what the reason. Projects turned in more than 72 hours late will not be graded (i.e., all students on the team will receive a zero grade for the assignment). Projects are considered late if they are turned in after the specified time.

Office Hour Policy

Office hours provide an opportunity for you to obtain specific guidance and help with your understanding of the material. I expect you to use them as your needs demand. I tend to be unsympathetic toward individuals with grade problems at the end of the semester who have never attempted to get help via office hours.

During office hours, I will not answer questions regarding any to-be-graded assignments (i.e., homework or the group project). Questions regarding to-be-graded assignments (i.e., homework and projects) must be asked in class or e-mailed to the instructor. I will e-mail my response to each question to the class distribution list (stripped of any information that would identify the question poser). This policy has two purposes: 1) it forces you to articulate your questions, and 2) it allows all students to have the same information for completing the assignment.

The purpose of office hours is for you to obtain assistance in understanding the course material. I will gladly respond to questions that you may have regarding material that was covered during a class discussion and/or provide feedback on diagramming or modeling efforts that do not pertain to assigned homework or projects.

Electronic Course Support

I will rely extensively on electronic communication with the class. As information professionals, you should have the habit of regularly checking your e-mail. When I send e-mail message to the class, I will use the distribution list that the university has established for the course. This list will only send messages to your university account. If you use a different e-mail account, it is your responsibility to have messages forwarded from your university account to another account.

Links to the syllabus and other pertinent course information such as handouts and assignments can be found in the OU Blackboard system. You should check this website regularly to be informed of what is happening in the class. You can login to the Blackboard system at the following URL: (<https://ou.blackboard.com>).

Students With Disabilities

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 325-3852 or TDD only 325-4173.

Religious Holidays

It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required course work that may fall on religious holidays. Students **must** notify the instructor **in advance** of any such observances.

Academic Conduct

The University of Oklahoma has an Academic Misconduct Code that governs student academic performance in and out of the classroom. The Academic Misconduct Code can be reviewed online at <http://www.ou.edu/provost/pronew/content/miscond.html>.

Academic misconduct is defined as “*any act that improperly affects the evaluation of a student’s academic performance or achievement.*” All students are responsible for submitting their own work for evaluation by the instructor. The steps and procedures as outlined in the Academic Misconduct Code will be followed in all cases of academic misconduct in this class.

Food and Drink in the Classroom

The Price College has spent a great deal of private and state funds to provide nicely furnished classrooms and computer labs. No food or drinks will be allowed in the classroom.

Class Policies

- *Do not engage in disruptive behavior in the classroom.* Interfering with your fellow students' ability to learn will not be tolerated.
- *Turn assignments in when they are due. I will accept one late assignment for grading.* "Late" means anytime after the assignment has been collected in class by the instructor. If you choose to use this option, the penalty is 25% of the possible points for the assignment. To be considered for grading, the assignment must be submitted by the beginning of the class period following the date the assignment was due. Use this policy wisely, **no exceptions will be made.**
- *Be prepared.* Each student is expected to come to class fully prepared to discuss the material from the assigned readings. I will expect students to have read the text before class and rely on their preparedness to drive class discussions.
- *Attend class.* If you must miss class, it is your responsibility to find out what material, homework assignments, schedule changes, etc. you missed. Do not come to my office a week later and ask, "Did I miss anything?" (Assume that I would answer "yes" to this question.)
- *Arrive on time and stay for the duration of each class.* If you must be late to or leave early from class, please let me know beforehand and be as unobtrusive as possible. It is very disruptive to have students walking in and out during class time.
- *Take exams during the scheduled time.* If, due to emergency or illness, you know you will miss a scheduled exam, it is your responsibility to let me know ahead of time. Make-up exams may be oral, essay, or another format, as determined by the instructor.

Miscellaneous Class Notes

Problems. This is a very difficult course. Let me know, as early as possible, if you have trouble with the material, assignments, project, team members, etc. Ask questions during class. Come see me during office hours. Send e-mail messages. In short, if you are doing the work and need help, get it! I cannot help you if I am not aware of the problem. If you find yourself in a team that is causing problems which you and the team cannot work out, please come see me as soon as possible.

Privacy of grades. Scores and grades will be posted in the Blackboard system. If you would like to have your scores and grades posted, please indicate your desire on the student information sheet. I do not discuss scores or grades over the phone or via e-mail.

Syllabus changes. The topics and dates as outlined in the course schedule are subject to change. All necessary changes will be announced and discussed in class. You are responsible for making sure you are aware of any such changes. In particular, I have invited three additional guest speakers. As I am still negotiating final dates with these individuals, we will rework the schedule as these plans become more finalized. However, the dates of the examinations will not change.

Course Schedule

Date	Class Discussion	Assignment	Homework Due
Aug 27	Introduction to Course -- What are systems analysts and what do they do?		
Aug 29	Determining System Requirements	Chap 4	
Sep 3	System Context -- Context Level Diagrams		
Sep 5	Structuring System Requirements: Conceptual and Logical Data Modeling (review from MIS 3353)	Chap 6 and p. 288-308	Group 1
Sep 10	Structuring System Requirements: Process Modeling	Chap 5	Individual 1
Sep 12			
Sep 17			Individual 2
Sep 19			
Sep 24			
Sep 26			Individual 3
Oct 1	Application Midterm Exam 1 (Structuring Systems Requirements: Data and Process)		
Oct 3	Conceptual Midterm Exam 1 (Chapters 4, 5, 6, 9) Note: only pages 288-308 of Chapter 9		
Oct 8	Structuring System Requirements: Logic Modeling	Chap 5	
Oct 10	Data Dictionary	Readings on BB	Group 2
Oct 15	CASE Tools and Project	p. 392-395 Big Horn Dental	Individual 4
Oct 17	Guest Speaker, <i>Dan Barth</i> , CIO, OPUBCO (http://www.newsok.com)		
Oct 22	The Systems Development Environment	Chap 1	Group 3
Oct 24	Systems Planning and Selection	Chap 3	
Oct 29			
Oct 31			
Nov 5			Group 4
Nov 7	Conceptual Midterm Exam 1 (Chapters 1, 3, 5, p 392-395)		
Nov 12	Application Midterm Exam 2 (Structuring Systems Requirements: Data, Process, and Logic)		
Nov 14	Designing the Human Interface	Chap 8	
Nov 19	Project Day		
Nov 21	Guest Speaker, <i>Sally Zuponcic</i> , PepsiCo Business Solution Group (http://www.pepsico.com)		
Nov 26	Guest Speaker, <i>Steve Berberich</i> , VP of IT Energy, TXU (http://www.txu.com)		
Nov 28	Thanksgiving Break -- No Class		
Dec 3	Selecting the Best Alternative Design Strategy	Chap 7	
Dec 5	Managing the Information Systems Project	Chap 2	
Dec 10	Alternatives to the SDLC -- OO	Appendix A	Individual 9
Dec 12	Alternatives to the SDLC -- RAD	Appendix B	
Dec 17	Section 001 Final Exam – 1:30-3:30 p.m.		
Dec 18	Section 002 Final Exam – 4:30-6:30 p.m.		