

MGSC 490

Information Systems Analysis and Design

Course Syllabus for Fall 2007

Mon & Wed 11:00 a.m. - 12:15 a.m.
Room 364, College of Business Administration
<http://dmsweb.moore.sc.edu/mgsc490/>

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and by an appointment

Course Description

Information systems are crucial to the success of modern business organizations, and new systems are constantly being analyzed and designed to make businesses more productive, efficient, and competitive. Information systems analysis and design are a set of processes in which technical, organizational, and human aspects of a system are analyzed and changed with the intent of creating a better system. Although advances in technology continually provide us with new capabilities, the processes of systems analysis and design are still highly dependent on the skills of individuals and the quality of their collective teamwork. Thus, the purpose of this course is to provide students with an opportunity to develop the skills required for effectively analyzing and designing information systems. Students will be exposed to various techniques and tools that are available for systems analysis and design as well as to the fundamental concepts underlying the analysis and design processes involved. This course is designed to be useful to those who are potential system analysts, system designers, project managers, information systems consultants, and information systems managers.

Course Objectives

Upon successful completion of this course, the student would be able to

- understand the processes of systems analysis and design;
- understand the key concepts and principles of the systems development life cycle (SDLC);
- use the techniques and tools of the structured systems analysis and design methodology;
- generate commonly expected deliverables of systems analysis and design.

Course Material

- Systems Analysis and Design (6th edition), Kendall and Kendall, Prentice Hall, 2004, ISBN 0-13-145455-2.

Grading

The grading components are as follows:

- Exams 50% (Exam 1: 15%, Exam 2: 15%, Final: 20%)
- Course Project 25% (Presentation: 8%, R1: 2%, R2: 5%, R3: 10%)
- Problem Sets 15%
- Class Participation 10% (Class Exercise: 5%, Attendance & Discussion: 5%)

Exams

There will be three closed book and closed note exams. The final exam will be cumulative. *Absence from an exam will result in a grade of zero unless the exam is missed due to a verifiable illness or family emergency on the exam day and permission from the instructor has been obtained prior to the exam.* In the event of an excused absence from an exam, either a make-up will be given, or another exam or assignment will be weighted more heavily.

Course Project

An important element of this course is to complete the analysis and design of an information system, in a group of three or four members. Each team will choose its own members and submit a sign-up form (attached to the syllabus) by the due date specified in the class schedule. For the project, each team must find a project site, a company or organization that will support its project activities. Within the selected project site, choose an information system that you feel would benefit from computerization or from further improvement. If necessary, I can give a call to the organization to explain the purpose of the project. In that case, provide me with the name and phone number of the contact person.

The course project is a team assignment. Hence, team members in the same team must work together to generate and submit the following three reports:

- **Report 1 (Initial Proposal):** Written proposal that describes the nature of the project and current problems. The proposal also includes project management plan depicted through a Gantt chart and a PERT diagram.
- **Report 2 (Analysis Report):** Written report that includes a list of business activities and data flow diagrams for both the existing system and the proposed system.
- **Report 3 (Final Report):** The final report includes executive summary, outline of systems study, written description of the business organizations and its information systems, systems analysis report, and systems design report.

More detailed specification of each report will be posted on the Web. The final report (Report 3) is cumulative. It includes all the elements of the previous two reports plus some new elements. Due dates of the reports are specified in the class schedule. All the reports should be submitted at the **beginning of class** (strictly enforced). *Late reports (for*

any reason) will be penalized 30% of the report score (additional 10% per day after the due date). Any reports not submitted by the next class period will not be graded and, as a result, no points will be awarded for the report. No hand-written reports will be accepted.

Each team is required to present its project before the semester ends to share its system development experience with other classmates. Each team's presentation will be evaluated by the classmates and instructor.

Team members are expected to equally contribute to the project. At the end of semester, each team member will be asked to evaluate the contribution of other members in the group. The total project score, which is the sum of the presentation score and the three report scores, will be adjusted based on their peer evaluation scores.

Problem Sets

There will be three problem sets (PSs). **These problem sets are individual assignments. Hence, all your printouts and other outcomes submitted for these assignments must be out of your own work.** Any student who violates this rule or who knowingly assists another to violate this rule shall be subject to grade penalty (zero for the assignment in question) and/or academic disciplines. These PSs will be directly related to the topics discussed in the classroom. Each PS may consist of several questions. Due dates of these PSs are specified in the class schedule. *All the PSs should be submitted at the beginning of class. Late PSs will not be accepted. No hand-written PSs will be graded.*

Class Participation

Students are expected to study the assigned course readings for a given day before coming to class and actively participate in the class activities. During class, students may be asked to solve problems related to the assigned readings or called upon to discuss issues covered in the assigned readings. The quality of solving problems, answering questions, and discussing readings will significantly determine class participation credit. In addition, criteria for the credit include attendance, punctuality, and attitude toward learning. Tardiness disrupts the flow of class activities and often leads to having to repeat announcements or instructions. **STUDENTS WILL NOT BE ALLOWED TO ENTER THE CLASSROOM 15 MINUTES AFTER THE BEGINNING OF CLASS.** Entering and leaving the room during class similarly distracts both students and instructor and conveys a disregard for the material being discussed. Those students who are not paying attention to the class material may be asked to leave the classroom. During class, I encourage you to engage in critical thinking, to challenge ideas without showing disrespect for others' ideas. Please use judgment when raising issues in class - do not waste the class's time on a personal matter - instead see the instructor one-on-one. Effective participation has much more to do with the quality than with the quantity of your interaction. In other words, those who attempt to dominate air time for its own sake without contributing to the advancement of the discussion will not be rewarded for it. Those students who severely interrupt with or disrupt normal course activity will be awarded no participation points. Please note that you are required to turn off your mobile phone before the class starts.

Attendance will be taken regularly. The instructor can take attendance by calling out student names or by requesting students to sign the attendance sheet. It is the student's responsibility to respond to the roll call or sign the attendance sheet. A student who arrives after the attendance call should see the instructor after the class period to change the attendance record. **STUDENTS WHO ARE NOT IN THE CLASSROOM FOR THE ENTIRE CLASS PERIOD WILL BE MARKED ABSENT.** The university policy states that absence from more than 10 percent of the scheduled class sessions, *whether excused or unexcused*, is excessive and the instructor may choose to exact a grade penalty for such absences. Note that the policy applies to both excused and unexcused absences. In this course, a student who misses more than 20 percent of attendance checks, *whether excused or unexcused*, will be awarded no participation points. If you anticipate excessive absences, you must submit a written request and receive prior approval from the instructor before the last day to change the schedule.

Final Grade

Final letter grades are *not* determined according to a "curve" that specifies in advance the proportion of people to receive each grade. Instead, letter grades are determined according to the percentage of possible credit achieved by each student, computed by adding together the individual grading component scores. The cutoff points to assign letter grades are typically as follows:

A:	90 or higher
B+:	87 or higher but lower than 90
B:	80 or higher but lower than 87
C+:	77 or higher but lower than 80
C:	70 or higher but lower than 77
D+:	67 or higher but lower than 70
D:	60 or higher but lower than 67
F:	lower than 60

Class Policies

Lecture Notes

PowerPoint slides will be prepared for each topic and will become available from the class homepage before the topic is covered. A hard copy of the slides will be also distributed at the beginning of class on the day when the topic is covered.

Computer Use

The student use of a computer in the classroom is discouraged in this course. Over the years, I have found that computer use in the classroom is rather a distraction to others as well as to the student. If you are in a special circumstance that require the use of a computer, please obtain my permission during the first week of class

Academic Misconduct

It is the responsibility of every student at the University of South Carolina to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in

connection with any academic program. Academic dishonesty includes, but is not necessarily limited to, cheating on assignments or examinations; plagiarizing, which means misrepresenting as one's own work any part of work done by another; submitting the same paper or substantially similar papers to meet the requirements of more than one course without the approval of all instructors concerned; depriving another student of necessary course materials; offering any favor for the purpose of influencing improperly a grade of a student; or interfering with an instructor's ability to evaluate a student's competency or performance.

Whenever a student is uncertain as to whether conduct would violate academic responsibility rules, the student should seek clarification from the instructor prior to engaging in such conduct. Any academic misconduct will be treated consistent with the University of South Carolina policies.

Accommodation for Students with Disabilities

Any student in this class who has a documented visual impairment, hearing disability, or any other disability should contact the instructor during the first week of class to discuss and arrange any instructional accommodation that may be necessary. Student who would like to serve as volunteer tutors, readers, or note takers for students needing special assistance are also encouraged to contact the instructor.

Final Note

On a final note, if you have any concerns or problems during the course, feel free to contact me. I will attempt to resolve them to the best of my ability. You can see me during my office hours or call me (office: 777-4351; cell: 730-5009) to set up an appointment. You can also get a response to a quick question or concern via e-mail (myi@moore.sc.edu).

Class Schedule

Week	Date	Topic	Reading	Note
1	Aug. 27 Aug. 29	Course Orientation Introduction to Systems Development	Ch. 1, 2	
2	Sep. 3 Sep. 5	Labor Day Holiday – No Class Introduction to Systems Development	Ch. 1, 2	
3	Sep. 10 Sep. 12	Project Planning and Management Project Planning and Management	Ch. 3 Ch. 3	Team Sign-up Form due (Mon)
4	Sep. 17 Sep. 19	Determining Information Requirements Determining Information Requirements	Ch. 4, 5 Ch. 4, 5	
5	Sep. 24 Sep. 26	Data Flow Diagram Data Flow Diagram	Ch. 7 Ch. 7	PS #1 due (Wed)
6	Oct. 1 Oct. 3	Data Flow Diagram Exercise Data Flow Diagram Exercise	Ch. 7 Ch. 7	
7	Oct. 8 Oct. 10	Exam 1 Exam 1 Review		Report #1 due (Wed)
8	Oct. 15 Oct. 17	Data Dictionary Data Dictionary	Ch. 8 Ch. 8	
9	Oct. 22 Oct. 24	Process Specifications Process Specifications	Ch. 9 Ch. 9	PS #2 due (Wed)
10	Oct. 29 Oct. 31	Database Design Database Design	Ch. 13 Ch. 13	Report #2 due (Wed)
11	Nov. 5 Nov. 7	Database Design Exercise Exam 2	Ch. 13	
12	Nov. 12 Nov. 14	Exam 2 Review Interface Design	Ch. 11, 12, 14	
13	Nov. 19 Nov. 21	Interface Design Thanksgiving Recess – No Class	Ch. 11, 12, 14	
14	Nov. 26 Nov. 28	Preparing the Systems Proposal Preparing the Systems Proposal	Ch. 10 Ch. 10	PS #3 due (Wed)
15	Dec. 3 Dec. 5	Review for the Final Exam Group Presentation		Final Report due (Wed)
16	Dec. 12	Final Exam (5:30 p.m.)		

Note. This schedule is tentative. It provides a general plan for the course; deviations may be necessary depending on the class progress.

Team Sign-up Form

As specified in the syllabus, students are required to work together to complete the course project. Each team can have 3 or 4 members. Each team must submit this sign-up form by Sep. 10, 2007 (Mon). Only one copy per team needs to be submitted. Note that it is not allowed to change the team membership until the project is completed once the team is formed. However, it is possible for a team to fire its member if the remaining members all agree. In that case, the team needs to contact the instructor and resubmit this form excluding the fired member. The fired student will then have to work individually. Once Report 2 is submitted, it is not allowed to fire a member.

Team Name: _____

Student Name	Email Address	Signature