

Southern Illinois University Edwardsville CMIS 270 Structured Systems Analysis Three Semester Hours

Spring 2010

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Office Hours: Monday and Wednesday: 12:30-13:15 and 16:30-17:15

By Appointment

Required Text:

Modern Systems Analysis and Design, 5th edition. Hoffer, J., George, J., and Valacich, J. 2008. ISBN 10:0132240769 (available from Textbook Rental).

Additional Required Materials:

SIUe e-ID

Storage media (flash/thumb drive)

Additional readings may be required and will be posted online

Course Description: Structured tools and techniques as used in business systems analysis and design. Prerequisite: CMIS (or CS) 108.

Course Overview: This course prepares you to become an information systems analyst, either internal to a corporation or as a consultant, and to manage systems development projects. Because these jobs are crucial to the IS field, the concepts and skills developed in this course are central to a career in information systems (i.e., this is a course for your career prospects). The course covers concepts of information systems, methodologies, and techniques used for systems analysis and design, and technologies used during the development of information systems. The course will take an applied approach. You will demonstrate your mastery of the material by applying what you learn in class and homework exercises, in exams, and in a running project, which simulates interaction with a client. You will not implement an information system in this course. Rather, you will follow the process of systems analysis from inception of a project through the specification or what the system is to do.



Course Objectives: The overall course objective is for you to develop the concepts and skills needed to define the information requirements to solve a business problem. Although the course addresses the whole of the systems development life cycle, it focuses on the early phases of the development process including project identification and selection, analysis, and design. Upon successful completion of the course, you are expected to:

- Develop an understanding of "systems."
- Build an understanding of the Systems Development Life Cycle the processes required to develop information systems.
- Analyze a business need for information and develop an appropriate strategy to solve the problem and provide the required information service.
- Prepare and use various information-gathering techniques for eliciting user information requirements.
- Use a number of relevant analysis techniques (e.g., process, logic, and conceptual data models) to aid in defining information requirements.
- Produce the requisite systems documentation at each phase of systems development.
- Communicate systems design specifications effectively and persuasively in both written and oral forms.
- Develop personal goals to facilitate the continuous learning that is central to the information systems profession.

Course Format: Class sessions will vary, using lectures, hands-on-tutorials, in-class exercises, demonstrations, and other classroom experiences. Classes are designed to supplement the textbook and additional assigned readings. Because of the nature of the material in this course, the focus of the class sessions will be on integrating the material into the course as a whole. For this reason, classes will most often take a higher-level perspective than the text readings for that day. In other words:

- Lectures will not necessarily address text directly.
- Lectures will not cover all of the detail in the text.
- Lectures will build on what is presented in the text.

Bottom line: Read your textbook BEFORE class!

Course Requirements and Grading: Your performance in this course will be evaluated in four areas: professionalism, exercises, team project (report plus presentation), and exams. Each will be weighted as follows:





Course Rec	quirements and	d Grading	(continued):

Assessment	Possible Points	Details
Professionalism	25	APEP (Attend, Prepare, Engage, Participate)
Exercises	100	Project Management Chart, Interview, Data Flow Diagram, Entity-Relationship Diagram, Design Choice (20 pts each)
Team Project	125	Final Project Report (100), Presentation (25)
Exams 1, 2, Final	<u>250</u>	Exam 1 (50), Exam 2 (100), Final (100)
Total Possible Points	500	

There will be no rounding of grades! Letter grades are assigned as follows:

Percent	Points	Grade
90.0% or higher	450-500	Α
80.0 to 89.99%	400-449	В
70.0 to 79.99%	350-399	С
60.0 to 69.99%	300-349	D
Less than 60.0%	0-299	F

Professionalism: You share with me the responsibility of your learning. In order for the design of this class to work, we all must be actively involved. Think APEP! You are expected to Attend sessions regularly; Prepare by reading and thinking about the assigned materials and working diligently toward the completion of assignments; Engage in class activities and discussion; and Participate constructively in all discussions, presentations, and activities. In addition, you are expected to show respect, collegiality, and good citizenship toward others is the class. You will be evaluated based on the quality and quantity of constructive participation on all aspects of the course. Class participation is not the same as class attendance - if you merely attend class (even with perfect attendance), you will receive only 5 points for professionalism!

Exercises: There are five assigned homework exercises for this course. Each exercise will draw directly from the material presented in the textbook and covered in the class sessions. Each exercise is directly relevant to the project. For example, data flow diagrams and E-R diagrams will be required for the Project Final Report. Details on these exercises and their grading will be given in class.

<u>Bottom line on exercises</u>: These are designed to help you learn the "nuts and bolts" of what systems analysts and systems consultants do on the job. These are not too difficult to do, and they prepare you nicely for the project.





Course Requirements and Grading (continued):

Team Project: A semester-long team project represents a major element of this class. Details will be provided in a separate document. We will be discussing how to work effectively in systems development teams, but it is <u>your</u> responsibility to make your team work well.

You are strongly encouraged to think carefully about project member assignments, project management roles, and communication mechanisms. You may want to schedule regular weekly team meetings (perhaps very short) at which you coordinate what you are each doing.

Team members will be asked to submit a peer evaluation of themselves and other team members at two different times during the project. You are expected to take the peer evaluation process seriously and to provide constructive feedback on each team member's professionalism and contribution to the project. The purpose is to help the team deal with any problems that might arise and to provide guidance to your colleagues for their improvement. The results of the final peer evaluation will be used to adjust each individual's points earned on the team project. Your final grade could be affected (up or down) based on peer evaluations. Coordinating the work for the team project may be the most difficult part of the class, and you are encouraged to consider that when you choose teammates.

Examinations: There will be three exams given in class: Test 1 (SA&D environment), Test 2 (Analysis), and Final Exam (Design). If English is not your first language, and you encounter words or phrases you do not understand on the exams, please do not hesitate to ask me for clarification. Examination questions will be taken from lectures (which may cover material not in the text), assigned readings, and assignments. Examination questions may include objective plus short answer (requiring from one sentence to a paragraph) and tasks like those completed both in- and out-of-class.

Late Policy: Each assignment carries an explicit due date and is submitted electronically. Assignments are due at 23:55 that day, based on the server clock. I do not accept late assignments.

There will be no make-up exams! If you have an authorized University excuse, you must make arrangements to complete the exam PRIOR to the scheduled date and time.





Policies:

Students with disabilities: Please notify me no later than the end of the first week of class concerning any academic accommodations you will need. You must have a documented disability and an ID CARD from <u>Disability Support Services</u>. If you need accommodations not indicated on the Disability Support Services ID CARD, please contact me or the Disability Support Services office as soon as possible so arrangements can be made for any additional equipment or accommodations.

Success at SIUE: I want you to succeed! Here's how:



Civility in the classroom: Classrooms must be a place where both students and teachers feel safe to learn and exchange ideas. Students are therefore expected to maintain themselves in a professional and civil manner, to act in a manner that is in compliance with the Student Conduct Code (http://www.siue.edu/policies/3c1.shtml). Instructors are expected to uphold the Conduct Code in their classroom and maintain the highest professional standards as outlined in the Faculty Handbook.

Academic ethics: Academic misconduct, including plagiarism and cheating, is described on p. 1 of the SIUE Student Academic Code (http://www.siue.edu/policies/3c2.shtml). Please also familiarize yourself with the sanctions outlined in the Code (Section L). Academic Misconduct on an assignment, paper, test or exam may result in an F in the course. I will enforce the University policy on plagiarism to the fullest extent and reserve the right to submit student work that is suspected of being plagiarized to Internet sites designed to detect plagiarism.

Incomplete Grades: Grades of Incomplete will not be given unless some act beyond your control takes place that materially affects your ability to complete the course, for example severe illness, emotional trauma due to a death in the family, or accident.





Policies (continued):

Electronic Device Usage Policy: Use of cell phones, PDA's, iPods, Blackberrys and other electronic devices during class lectures, labs, or examinations is not authorized. Please turn off/silence your devices and put them away during class. Use of laptop computers for note taking is authorized, but activities other than note taking are not authorized. Check with the instructor if you wish to record lectures.



