

IDS 405: Business Systems Analysis and Design

Spring 2005

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Class Time: T-Th 12:30-1:45 pm BH316
Office Hours: T 2-245 pm, Th 2-5pm
Class website: <http://blackboard.uic.edu/>

Text

Dennis, Alan and Barbara H. Wixom. **Systems Analysis and Design: An Applied Approach, 2nd Edition**, John Wiley and Sons, 2002.

Objectives

This is a course on the analysis, design, and implementation of information systems. Though all stages of the systems development life-cycle will be considered, specific focus will be on analysis and design of business information systems. The course aims at providing a foundation in traditional structured analysis and design techniques, together with an introduction to object-oriented (O-O) analysis and design concepts that are increasingly in use today. This entails three major phases: (1) abstraction (planning and requirements determination), (2) design (process and data) and (3) installation (software and database). The basic topics that will be discussed are: techniques for structured analysis, feasibility and requirements analysis, various aspects of system design including system data, behavior and interfaces, and system implementation considerations; concepts in object-orientation and computer aided software engineering (CASE) will also be examined in relation to these basic topics.

Students will work on a series of assignments covering various activities in the systems analysis and design process. These assignments, based on cases simulating real-life projects, will provide hands-on experience in analyzing and designing computer-based information systems.

At the conclusion of this course the student should be able to:

1. organize an information system development effort,
2. analyze business processes (decompose into component parts),
3. develop process and data models for an information system application by interacting with system customers,
4. evaluate process and data representations &
5. validate process and data models

Grading Criteria

Exam 1	25%
Exam 2	20%
Assignments	
• Short exercises/quizzes:	20%
• Semester-long Group Project:	30%
• International Systems Analysis and Design Exercise	5%
Total:	100%

In-class Assignments

In class group and individual assignments will include book related case assignments as well as short exercises. Students must bring their book to class for completion of these exercises. In-class exercises cannot be made up by students who were not present in class (see note below on acceptable reasons for alternate assignments). Although recommended, group membership is not fixed in these assignments.

Home Assignments

There will be several individual assignments re-enforcing some of the key knowledge acquired in class. They will also be geared to bringing some of the latest thinking in Systems Analysis and Design to the classroom.

The group project will be a semester long assignment, with multiple milestone deadlines. Membership in this group cannot be changed after the second week of class. Students will work in groups of three.

Group members will, further, be asked to evaluate each other's contribution. At mid-semester, groups will have opportunity to “fire” members who are deemed not to be participating appropriately in the conduct of the project. “Fired” members will complete the project alone.

Tentatively there is an International exercise scheduled involving students from other countries. This is designed to expose students to cutting edge issues related to distributed systems analysis and design.

Assignment due-dates will be strictly adhered to, and groups may be required to present their work in class discussions. Both written reports as well as presentations will form part of the evaluation - note that format and manner of written presentations are key to this evaluation.

Individual and Group Home Assignments will be posted on Courseinfo. Please check back often, even if you missed class.

Course Requirements

This course relies heavily on group participation. All members should schedule times to meet, check email regularly, as well as access to the blackboard course site, where questions will be placed.

Attendance

Attendance is not mandatory. However, a large percentage of the grade depends on class participation, in-class assignments and the like. Past experience shows that students who attend class get better grades.

Teaching Method

The teaching method will combine lectures, in-class short group work and case discussions. Since interpersonal skills are essential to be successful as a systems analyst, they will be covered in the course and reinforced while conducting the project.

Grade Availability

Grades will be available on “blackboard” as soon as possible. After availability has been announced (or after assignments already graded are handed back) it is your responsibility to check for correctness and/or omissions. The deadline to request any potential corrections to a grade is two weeks after the availability date.

Retaking exams or making up assignments

Only UIC-acceptable reasons (doctor’s note, for instance) will be honored. In exceptional circumstances, advance arrangements with the instructor are also possible.

Honor Code

The Honor Code attached to this syllabus will be strictly followed. Please take the time to acquaint yourself with it.

Schedule

The following is a tentative sequence of topics to be covered. Assigned readings are to be completed prior to the next class session.

- Information Systems Development: An Introduction
- Systems Development Lifecycle and Approaches [Chapter 1]
- Systems Analysis: Requirements Determination [Chapter 4]
- Use Case Analysis [Chapter 5]
- Process Modeling
 - Data Flow Diagrams [Chapter 6]
- Data Modeling [Chapter 7]
 - E/R Diagrams
- Project Management [Chapter 3]
- System design [Chapter 8]

EXAM 1

- User Interface Design [Chapter 10]
- Data storage design Relational Databases [Chapter 11]
- Program Design, Structure Charts [Chapter 12]
- System Implementation [Chapter 13, 14]
 - Testing, Installation, Conversion
- Object-oriented analysis and design: Introduction [Chapter 15]
- System architecture [Chapter 9]
- Feasibility, Cost-Benefit Analysis [Chapter 2]

EXAM 2

College of Business Administration

University of Illinois at Chicago

January 2003

Honor Code for the College of Business Administration

As an academic community the College of Business Administration at the University of Illinois at Chicago is committed to providing an environment in which teaching, learning, research, and scholarship can flourish and in which all endeavors are guided by academic and professional integrity. All members of the college community – students, faculty, staff, and administrators – share the responsibility of insuring that high standards of integrity are upheld so that such an environment exists.

In pursuit of these high ideas and standards of academic life, as a student I hereby commit myself to respect and uphold the University of Illinois at Chicago (UIC) College of Business Administration Honor Code during my entire matriculation at UIC. I agree to maintain the highest moral and ethical standards in all academic and business endeavors and to conduct myself honorably as a responsible member of the college academic community. This includes the following:

- Not to seek unfair advantage over other students, including, but not limited to giving or receiving unauthorized aid during completion of academic requirements;
- To represent fact and self truthfully at all times;
- To respect the property and personal rights of all members of the academic community.

An abbreviated version of the Honor Code pledge may be printed on course syllabi, exam booklets, and other uses as deemed appropriate. The abbreviated version is as follows:

This course and its associated coursework are being administered under the policies of the University of Illinois at Chicago (UIC) College of Business Administration Honor Code. All students are expected to respect and uphold this code.

Honor Code Violations and Enforcement

Violations of the Honor Code are just causes for discipline under the University of Illinois at Chicago Student Disciplinary Procedure, and all allegations of Honor Code violations shall be handled pursuant to that Procedure.

(For a complete description of just causes for discipline, disciplinary procedures, and sanctions, see the pamphlet “Student Disciplinary Procedure of the Senate Committee on Student Discipline,” available from the Office of the Dean of Students, SSB, Suite 3030, 1200 W. Harrison St., M/C 318.)