

# Information System Analysis and Design

## Course Information

Lecture Schedule: Monday 2:20 pm – 5:20pm

Teaching Room: Room 202, Building II, College of Management

Language: English

## Lecturer

Name Carol Hsu

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## Teaching Assistant

Name James Huang

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## Course Objectives:

- This course provides an introduction to analyzing various types of systems with the emphasis on information systems.
- There are three major aspects to this course:
  - The first aspect is determining what systems to pursue and developing the business justifications for the system. This includes problem identification and scope.
  - The second aspect is learning how to gather the information required to develop the new system. This includes questionnaire, interviews, document analysis, etc.
  - The third aspect is documenting the gathered information into standard formats used in system analysis such as Use Cases and Class Diagrams.

## Textbooks:

Dennis, A., Wixom, B.H., and Roth, R.M., *Systems Analysis and Design*, Third Edition, John Wiley & Sons, Inc., 2007.

- Expect to use this book in every class so make sure you bring it to class.

## Class Attendance Policy

Students are expected to attend all lecture sessions on time. Attendance will be taken during the class. If a student misses class, he or she is responsible for any material covered during his or her absence.

**Grading Policy:**

Activity	Percentage
<b>Class participation</b>	<b>10%</b>
<b>Quizzes</b>	<b>20%</b>
<b>Project Presentation</b>	<b>30%</b>
<b>Mid-Term Examination</b>	<b>20%</b>
<b>Final Examination</b>	<b>20%</b>

**Assessment:*****Class Participation:***

In assigning the class participation grade, the lecturer will take into account: 1) lecture attendance; and 2) quantity and quality of comments contributed in the class.

***Quizzes:***

There will be a number of ad-hoc quizzes during the semester. The purpose of the quizzes is to ensure that students have understood the lecture materials on a weekly basis. Students will be expected to take 8-12 quizzes during the semester. Quiz will be in the format of multi-choices and short questions and will not take longer than 15 minutes to answer. To avoid constant anxiety about the quizzes, the worst 2 quizzes for each student will be disregarded for the final computation of the grade.

***Project:***

Since the best way to learn the process of system analysis is to actually perform a system analysis, every student will be involved in a project over the course of the semester.

1. Form a group of 4-5 students.
2. Since you will be developing the project essentially in a vacuum, your group will have to do research to determine the generic requirements for the system to be developed. This is another reason to pick a project that aligns with your career goals so you can gain more value from your research. You can also find ideas from your family, friends and relatives who have might have a “real” organisational problem requiring system solutions.
3. Evaluation will consist of two presentations and two documents.
  - a. Initial project proposal: 1-2 page project proposal
  - b. Project presentation I:
    - i. 10 minutes
    - ii. Describe the project (context, problem, and information gathering methods)

- c. Final project presentation II:
  - i. 10-15 minutes
  - ii. Analyse the process, data, and behaviour models. Identify new processes, data, and data flows for the new system
- d. Project report: 15-20 page report

Teaching Plan: (Provisional)

Week	Date	Lecture Topic	Reading
1	18-Feb	Course Overview and Introduction	
2	25-Feb	Introduction to System Analysis and Design	Chapter 1
3	3-Mar	Planning Phase - Feasibility Study	Chapter 2
4	10-Mar	Planning Phae - Project Management <b>Project Proposal Due on 14 March</b>	Chapter 3
5	17-Mar	Planning Phae - Project Management	Chapter 3
6	24-Mar	Analysis Phase - Gathering Requirement	Chapter 4
7	31-Mar	Analysis Phase -Use Case Analysis	Chapter 5
8	7-Apr	Analysis Phase - Data Flow Diagram	Chapter 6
9	14-Apr	<b>Mid-Term Exam</b>	
10	21-Apr	Analysis Phase - Data Modeling	Chapter 7
11	28-Apr	<b>Project Presentation 1 - Project Motivation</b>	Chapter 9/10
12	5-May	Design Phase - User Interface Design/Architecture Design	Chapter 9/10
13	12-May	Design Phase - Programme/ Data Storage Design	Chapter 11/12
14	19-May	Implementation Phase - Testing	Chapter 13
15	26-May	Implementation Phase - Migration	Chapter 14
16	2-Jun	Introduction to Object Oriented Analysis	Chapter 15
17	9-Jun	<b>Final Project Presentation Project documentation due</b>	
18	16-Jun	<b>Final Exam</b>	