

Course MIS4330 Systems Analysis and Design

**Instructor** Dawn Owens **Term** Fall 2013

**Meetings** Thursday, 7:00 – 9:45 p.m., Room JSOM 4.102

**Instructor** Dr. Dawn Owens Office JSOM 2.702

Email dawn.owens@utdallas.edu Office Hours M/W 10:00 – 2:00 PM

or by appointment

**Phone** 972-883-4901

#### Prerequisites

MIS 4300 Database Fundamentals

# Course Description

To provide the student with an in-depth knowledge of object oriented systems analysis and design procedures. Software project management techniques will be covered. At the end of the course, the student will be able to analyze business situations and design computer based information systems using object-oriented methodologies. (3 semester hours)

This is a Communication-Enhanced Course (CEC). CECs are courses in which you will strengthen your writing and speaking skills while you deepen your understanding of key material in your major. Both studies and employers tell us that your ability to write clearly and speak well about topics in your field will strongly increase your chances of professional success. CECs will help you to develop as a professional communicator and demonstrate your abilities both to your instructor and to potential employers. JSOM undergraduates will take 2 CECs before they graduate. You are encouraged to seek help with your speaking and writing at the Business Communication Center (<a href="http://bcc.utdallas.edu">http://bcc.utdallas.edu</a>).

# **Learning Outcomes**

- 1. Understand object oriented analysis and design methods.
- 2. Be able to model an information system using Unified Modeling Language (UML) diagrams.
- 3. Be able to analyze an existing system and identify the causes of an information related problem, and design a new system to mitigate these problems.
- 4. Understand the unique issues of managing information systems development projects.

## Required Texts & Materials

Systems Analysis and Design with UML Version 2.0 by Dennis, Wixom, and Tegarden, Wiley Fourth Edition.

#### Suggested Materials:

Those interested in pursuing a career in systems analysis and design should learn to use Rational Software Modeler or Visual Paradigm for their project. Others can do the project using Microsoft Visio. Visual Paradigm will be available for download from the eLearning page.

# Course Schedule, Assignments, and Due Dates

This is a tentative class schedule; changes to the schedule will be posted in eLearning.

WEEK	CONTENT / READINGS	ASSIGNMENTS
Week 1	Introduction to the Course Chapter 1: The Systems Analyst and Information Systems Development	
Week 2	Basic Concepts in Object Orientation Chapter 2: Project Initiation	Writing Assignment 1
Week 3	Chapter 4: Requirements Definition Chapter 5: Functional Modeling	Assignment 1 (Object Concepts) Group Project Module 1
Week 4	Chapter 5 Continued	
Week 5	Chapter 6: Structural Modeling	Assignment 2 (Use Case Diagrams)
Week 6	Behavioral Modeling	Assignment 3 (Class Diagrams)
Week 7	Review and Project Work	Assignment 4 (Sequence Diagrams) Group Project Module 2
Week 8	Exam 1	
Week 8 Week 9	Project Presentations Analysis of UML Diagrams	
	Project Presentations	Assignment 5 (Analysis) Group Project Module 3
Week 9	Project Presentations Analysis of UML Diagrams Chapter 8: Moving into Design	
Week 9 Week 10	Project Presentations Analysis of UML Diagrams Chapter 8: Moving into Design Chapter 9: Class and Method Design	Group Project Module 3  Assignment 6 (Software
Week 9 Week 10 Week 11	Project Presentations Analysis of UML Diagrams  Chapter 8: Moving into Design Chapter 9: Class and Method Design  Chapter 10: Data Management Layer – Design  Chapter 12: Physical Architecture Design	Group Project Module 3  Assignment 6 (Software Testing)  Assignment 7 (Database
Week 9 Week 10 Week 11 Week 12	Project Presentations Analysis of UML Diagrams  Chapter 8: Moving into Design Chapter 9: Class and Method Design  Chapter 10: Data Management Layer – Design  Chapter 12: Physical Architecture Design  Chapter 2: Project Selection and Management	Group Project Module 3  Assignment 6 (Software Testing)  Assignment 7 (Database Design)  Writing Assignment 2
Week 9 Week 10 Week 11 Week 12	Project Presentations Analysis of UML Diagrams  Chapter 8: Moving into Design Chapter 9: Class and Method Design  Chapter 10: Data Management Layer – Design  Chapter 12: Physical Architecture Design  Chapter 2: Project Selection and Management  Chapter 14: Installation and Operations	Group Project Module 3  Assignment 6 (Software Testing)  Assignment 7 (Database Design)  Writing Assignment 2

## **Assignment Guidelines**

- All reading is to be completed before class on the date posted.
- All written assignments must be submitted at the beginning of class.
- Assignments must adhere to the APA style guide of formatting, citing, and referencing.
- Descriptions of assignments will be posted as they are assigned.
- The exams will consist of multiple choice, fill-in-the-blank, and short essay questions. The final exam is not comprehensive. Make-up exams will be in the form of essays.
- No extra credit assignments are available
- General grading criteria can be found in eLearning. Assignment specific grading criteria will be included with the assignment instructions.

# Grading

This course will feature a mix of activities and written and verbal assignments that may be in class or on campus. Homework will include readings from the text, assignments, and activities that usually require the student to complete some type of task. The instructor will provide detailed instructions as well as the grading criteria for each assignment. Please consult the course schedule for deadlines.

#### **Grading Scheme**

Grade Component	Percentage
Assignments	25%
Writing Assignment	10%
Exams	35%
Group Project	20%
Miscellaneous	
Course Attendance	5%
Course Participation	5%
Total	100%

# **Scoring**

Final Point Total	Letter Grade
97-100+	<b>A</b> +
95-96	A
90-94	<b>A-</b>
87-89	B+
84-86	В
80-83	В-
77-79	C+
74-76	C
70-73	C-
68-69	D+
67-67	D
66-66	D-
0-65	F

#### Course & Instructor Policies

**eLearning** will be used for class content (e.g., class slides and assignment descriptions) and the recording of grades. Slides will be posted in before class is held. Class announcements (e.g., change in assignment dates) will be sent to the student email on record in eLearning. It is the students' responsibility to regularly check their email accounts.

**Instructor Response Policy:** The instructor will respond to all student inquiries (emails, voice messages, etc.) within 48 hours (excluding holidays and weekends).

**Attendance Policy:** Attendance is extremely important. Students are expected to attend all classes in order to achieve maximum success. Attendance will be taken and used in consideration for the Participation grade; however, this grade will also reflect the instructor's judgment of the value of contributions to class discussion. There is no makeup for missed in-class assignments.

**Late Work:** All assignments are due at the beginning of class (not during and not after), on the specified date. I do not accept late assignments unless *prior* arrangements have been made with the instructor. A penalty of 20% per day (including weekends) will be assessed on late assignments.

Academic Integrity: The University is committed to academic excellence and expects academic honesty from all members of the University community and believes that it is essential for academic excellence and integrity. Academic honesty includes adherence to guidelines established by the instructor in a particular course for both individual and group work. It prohibits representing the work of others to be one's own (plagiarism); receiving unauthorized aid on an assignment (cheating); and using similar papers or other work products to fulfill the obligations of different classes without the instructor's permission. Penalties for academic dishonesty may include a grade of "F" on the work in question or for the course. In addition, any student engaged in academic dishonesty will be subject to disciplinary action. Please refer to the General Polices website (see below) for detailed information pertaining to academic dishonesty, including procedures for determining disciplinary action.

#### General Policies & Procedures

For information regarding general University policies and procedures, please go to <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a>. These policies include the following:

- Technical Support
- Field Trip Policies, Off-Campus Instruction and Course Activities
- Student Conduct and Discipline
- Academic Integrity
- Copyright Notice
- Email Use
- Withdrawal from Class
- Student Grievance Procedures
- Incomplete Grade Policy
- Disability Services
- Religious Holy Days
- Avoiding Plagiarism