Course Syllabus: **Business Systems Analysis and Design**

Dillard College of Business Administration
MIS 4163 Section 270
Spring Semester 2025

Contact Information

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Zoom Link

https://msutexas-edu.zoom.us/j/96102591985?pwd=bTBFSWN5NHA3N2o3N01obDY3ZnpaUT09

Instructor Response Policy

Dr. Luo will try to response all emails within 24 hours on the weekdays.

Textbook & Instructional Materials

System Analysis and Design in a Changing World, 7th Edition, ISBN-13: 978-1-305-11720-4, by John Satzinger, Robert Jackson, and Dr. Stephen Burd

Books Recommended for Extra Reading:
Generative Analysis: The Power of Generative AI for Object-Oriented Software Engineering with UML, Jim Arlow and Lla Neustadt, Pearson Education Inc, 2024
"Scaling Lean & Agile Development: Thinking and Organizational Tools for Large-Scale Scrum," Craig Larman and Bas Vodde, Pearson Education Inc, 2009.
"Practices for Scaling Lean & Agile Development: large, Multisite and Offshore Product Development with Large-Scale Scrum," Craig Larman and Bas Vodde, Pearson Education Inc, 2010.
"Agile Software Development with Scrum," Ken Schwaber and Mike Beedle, Prentice Hall, 2002.
"UML Distilled: A Brief Guide to the Standard Object Modeling Language (3rd Edition)," Martin Fowler, 2008.
UML Documentation & White Papers: http://www-01.ibm.com/software/rational/uml/
A PC/laptop/tablet with webcam capability (Chromebooks won't work due to insufficient computing power)
Additional readings are posted to D2L.

Course Description

The major goal of this course is to learn the basics of systems analysis and design. Modern businesses need information systems to support their business processes. Whether one options for custom application development, or off-the-shelf information systems, it is important to understand the needs of a business to deliver a solution tailored to its requirements. The specification of a business' information needs is a non-trivial and complex task and is hardly an exact science. Fortunately, several tools exist that can guide the modern systems analyst in this job. This course introduces the systems analysis and design process, and the various tools that have been traditionally used to come up with the specification of the information needs of a business (or a business division) that drives the development of the information system(s). To reinforce the concepts, the students will form small teams and analyze and design a business information system of their choice. Details regarding the course contents, critical deadlines, etc. can be found in the following sections.

Course Objectives/Learning Outcomes/Course Competencies

I. General Learning Goals:

- Our students will be effective at problem solving and decision-making.
  Objective: Our graduates will demonstrate problem solving and decision-making abilities through the critical analysis, evaluation, and interpretation of business information.
- Our students will be effective communicators.
  Objective: Our graduates will be able to demonstrate a competency in speaking and writing for common business scenarios.
    2a: Our graduates will be able to demonstrate a competency in speaking for common business scenarios.
    2b: Our graduates will be able to demonstrate a competency in writing f or common business scenarios.
- Our students will be technologically prepared.
  Objective: Our graduates will be able to utilize available technology for business applications.
- Our students will be ethical decision makers.
  Objective: Our graduates will demonstrate ethical reasoning skills within a business environment.
- Our students will be effective team members.
  Objective: Our graduates will know how to use team building and collaboration to achieve group objectives.
- Our students will be multicultural and globally aware.
  Objective: Our graduates will understand the influence of global and multicultural issues on business activities.

These general learning goals are among those established by the Dillard College of Business Administration. General learning goals represent the skills that graduates will carry with them into their careers. While assessing student performance in obtaining these general learning goals, the Dillard College is assessing its programs. The assessments will assist us as we improve our curriculum and curriculum delivery.

II. Course Specific Learning Goals: After completing this course, students should be able to:

Describe the different phases of the system development life cycle.
State expected benefits from systems projects.
Explain three ways in which information systems support business requirements.
Describe how systems analysts interact with users, management, and other information systems professionals.
Develop data flow diagrams and decision tables.
Perform a feasibility study.
Evaluate systems development alternatives.
Solve realistic systems analysis problems.
Determine methods for evaluating the effectiveness and efficiency of a system.
Work as an effective team member on assigned projects.

Student Handbook

Refer to: Student Handbook-2021-22

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.
Office of Student Conduct

Grading/Assessment

- Examinations (300 points):

All exams are close-book close-notes exams. Exams will cover assigned chapters, in-class lectures, videos, and any assigned readings. Students are responsible for all assigned textbook material, even if it is not directly discussed in class.

- Team Project (300 points):

All students will participate in a team project. Details of the assignment will be provided, and team formation will be accomplished.

- In-class Exercises (100 points):

In-class exercises will generally not be announced in advance. Any points not assigned during the semester will be removed from the total possible for the course when calculating grade percentages.

- Homework (100 points):

100 points will be assigned to homework. Homework assignments are due before the beginning of class on the specified due date. There is NO PROVISION for late work on any assignment. All homework assignments are individual homework (not team/group/collaborative homework), unless otherwise specified by the instructor.

Points will be allocated using the following scheme. Grades will be based on the recorded points only. Personal reasons (e.g., need a specific grade to graduate, to keep financial aid, to keep straight A record, etc.) are not considered in the grade calculation.

Table 1: Points allocated to each assignment

Assignments	Points
Exam I	100
Exam II	100
Exam III	100
Team Project	300
In-class Exercises	100
Homework	100
Total Points	800

Table 2: Total points for final grade.

Grade	Points
A	720-800
B	640-719
C	560-639
D	480-559
F	<480

Late Work

Late homework less than one week after deadline maybe accepted, certain points will be deducted.

Make Up Work/Tests

Students with excused absences may make up missed examinations, quizzes (announced and unannounced), and in-class activities, but supporting documents are required. Arrangements must be made in advance if possible. In all cases, the instructor must be contacted no later than the day of the scheduled exam or no make-up will be allowed. At the instructor's discretion, a deduction may be assessed for a late exam.

Excused absences include active military/police/firefighter assignment, jury duty, university-authorized absences (for example, athlete events or study-abroad programs), and medical emergency for yourself or your immediate family member. For more information about university authorized absences, please refer to Midwestern State University Undergraduate Catalog:

https://catalog.msutexas.edu

Important Dates

Last day for term schedule changes: 01/21/2025-01/24/2025
Deadline to file for graduation: 02/17/2025
Last Day to drop with a grade of "W:" 03/05/2025, 04/30/2025
Check date on Academic Calendar.
Refer to: Drops, Withdrawals & Void

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into D2L through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Attendance

Students are expected to attend all meetings of the classes in which they are enrolled. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered as part of the grade, the instructor should so inform students of the specifics in writing at the beginning of the semester in a syllabus or separate attendance policy statement. An instructor who has an attendance policy must keep records on a daily basis. The instructor must give the student a verbal or written warning prior to being dropped from the class. Instructor's records will stand as evidence of absences. A student with excessive absences may be dropped from a course by the instructor. Any individual faculty member or college has the authority to establish an attendance policy, providing the policy is in accordance with the General University Policies.

Online Computer Requirements

Taking an online class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. ***Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.*** Computers are available on campus in various areas of the buildings as well as the Academic Success Center. ***Your computer being down is not an excuse for missing a deadline!!** There are many places to access your class! Our online classes can be accessed from any computer in the world that is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and

resource limitations however they are able to help you get connected to our online services. For help, log into D2L**.**

Instructor Class Policies

- No food or beverage is allowed in the classroom. This is a college policy.
- Please come to class on time. Take care of personal business prior to class. I do not expect you to leave and return to class (unless there was an emergency, and you explain it to me after class).
- Class time is not for surfing the Web, monitoring Facebook, texting, or catching up on email. You will be asked to leave the class if you continually violate this policy. The same thing applies to cell phone usage for messaging during class.
- Turn off or silence your cell phones and any other electronic devices and put them away. Please, no texting. I think we can all go a little over an hour without contact with the outside world! Leaving class to return calls and coming back is not acceptable. If you have an emergency that requires your cell phone to be on, let me know and we'll work something out.
- Dress appropriately and conduct yourself professionally and with respect toward your peers and the instructor. Please don't talk while the instructor or others are discussing course materials. Participating in the class is the best way to avoid disturbing the class.
- Follow MSU Covid19 behavioral policies and procedures

Change of Schedule

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

Refund and Repayment Policy

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exists in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to Disability Support Services.

College Policies

Campus Carry Rules/Policies

Refer to: Campus Carry Rules and Policies

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by MSU TEXAS Adult students may smoke only in the outside designated-smoking areas at each location.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes has prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit Campus Carry.

Active Shooter

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit MSUReady – Active Shooter. Students are encouraged to watch the video entitled "*Run. Hide. Fight.*" which may be electronically accessed via the University police department's webpage: *"Run. Hide. Fight."*

Grade Appeal Process

Update as needed. Students who wish to appeal a grade should consult the Midwestern State University MSU Catalog

Weather Procedure

In the event of inclement weather, in-person class meetings will be canceled. Alternative assignments, such as online tasks or video-based activities, will be provided to ensure continued learning.

AI-Tool Policy

We encourage students to harness AI tools, like ChatGPT, within the following guidelines:

- **English Writing**: Use AI for grammar and syntax improvement.
- **Drafting & Structuring**: Employ AI to help generate and structure case study drafts.
- **Summarization**: Use AI tools for concise summaries of lengthy case studies.
- **Systems Modeling**: Use AI to inspire and guide the creation of models in systems analysis and design classes, aiding in understanding and interpretation of system behaviors and interactions.

However:

- **Original Thought**: While using AI for assistance, students must develop and present their own unique opinions on cases.
- **Academic Integrity**: Understand and support any content from AI tools. Avoid over-reliance and ensure originality. Misrepresentation will face academic consequences.

Leverage AI benefits responsibly and prioritize genuine understanding and original thinking.

Notice

Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

Course Schedule:

Please keep this syllabus as a reference! Students are responsible for all information contained in the syllabus and for any changes to the syllabus, which will be announced in class.

Course Schedule

MIS 4163 Spring 2025 Course Schedule				
Week	**Date**	**Day**	**Chapter**	**Topic**
1	01/20/2025	Monday	Martin Luther King's Day	No classes
	01/22/2025	Wednesday	Introduction	Class overview
2	01/27/2025	Monday	1	An Overview of Systems Analysis and Design
	01/29/2025	Wednesday	2	Investigating System Requirements
3	02/03/2025	Monday	2	Investigating System Requirements (cont.)
	02/05/2025	Wednesday	3	Identifying User Stories and Use Cases
4	02/10/2025	Monday	3	Identifying User Stories and Use Cases (cont.)
	02/12/2025	Wednesday	4	Domain Modeling
5	02/17/2025	Monday	4	Domain Modeling (cont.)
	02/19/2025	Wednesday	5	Use Case Modeling
6	02/24/2025	Monday	5	Use Case Modeling (cont.)
	02/26/2025	Wednesday	**Exam1 Chapters 1-4**	
7	03/03/2025	Monday	6	Foundations for System Design
	03/05/2025	Wednesday	7	Defining the System Architecture
8	03/10/2025	Monday	Spring Break	No classes
	03/12/2025	Wednesday	Spring Break	No classes
9	03/17/2025	Monday	7	Defining the System Architecture (cont.)
	03/19/2025	Wednesday	8	Designing User Interface
10	03/24/2025	Monday	8	Designing User Interface (cont.)
	03/26/2025	Wednesday	9	Designing the Database
11	03/31/2025	Monday	9	Designing the Database (cont.)
	04/02/2025	Wednesday	**Exam2 Chapters 6-9**	
12	04/07/2025	Monday	10	Approaches to System Development
	04/09/2025	Wednesday	11	Project Planning and Project Management
13	04/14/2025	Monday	12	Object-Oriented Design: Fundamentals
	04/16/2025	Wednesday	12	Object-Oriented Design: Fundamentals (cont.)
14	04/21/2025	Monday	13	Object-Oriented Design: Use Case Realization
	04/23/2025	Wednesday	13	Object-Oriented Design: Use Case Realization (cont.)
15	04/28/2025	Monday	14	Deploying the New System
	04/30/2025	Wednesday		Team Project Presentations
16	05/05/2025	Monday		Team Project Presentations
	05/07/2025	Wednesday		Team Project Presentations
Final	05/14/2025	Wednesday	**Exam3 chapters 9-12**	**Final exam**