MIS 215

College of Business Administration |Department of Management Information Systems
Course Syllabus
2nd semester 2020

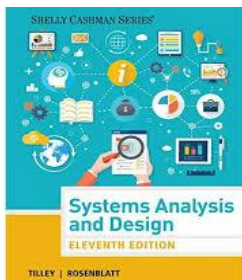## Course Information

Course title:	Systems Analysis and Design (1)
Course code:	MIS 215
Meeting time:	Sections 52772\28675, Sun-Tue-Thu 9-9:50, and 10-10:50
Prerequisite:	MIS 211, and MIS 214

Instructor Information

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Required Textbook

Harry J. Rosenblatt, and Scott Tilley (2016). "Systems Analysis and Design" (Shelly Cashman Series) 11th Edition. Cengage Learning. ISBN: 978-1-305-49460-2

Recommended Resources for Course

- Object-Oriented Analysis and Design Using UML, Simon Bennett; Steve McRobb; and Ray Farmer; McGraw-Hill Education; 4th Revised ed. edition (April 1, 2010)
- Recommended online readings (Self -learning) :
  - Trello - https://trello.com/guide
  - Lucidchart - https://www.lucidchart.com/pages/beginners-guide-to-lucidchart
  - proto.io - https://support.proto.io/hc/en-us/articles/221499147-Step-by-step-Tutorial-Getting-Started
  - inVision - https://www.invisionapp.com/

Course Description

This course offers a practical, streamlined, and updated approach to information systems development. It emphasizes the role of the systems analyst in a dynamic, business-related environment. In this course, real-world examples emphasize critical thinking and IT skills in a dynamic, business-related environment. Upon completion, students should be able to translate business requirements into information systems that support a company's short- and long-term objectives.

Course Outlines

- Discuss systems analysis and design and the role of a systems analyst in an organization
- Introduce project management concepts used early in the systems development process
- Provide multi-method coverage, including a comparison of structured, object-oriented, and agile systems development methods.
- Explain how IT supports business requirements in today's intensely competitive environment, and describe major IT developments and trends.

Course Topics

Learning Unit	Description
Chapter 1: Introduction to Systems Analysis and Design	Introduces systems analysis and design by describing the role of information technology in today's dynamic business environment.
Chapter 2: Analyzing the Business Case	Explains how systems projects get started and how to evaluate a project proposal to determine its feasibility
Chapter 4: Requirements Modeling	Describes the requirements modeling process: gathering facts about a systems project, preparing documentation, and creating models that will be used to design and develop the system.
Chapter 6: Object Modeling	Discusses object modeling techniques that analysts use to create a logical model.
Chapter 7: Development Strategies	Considers various development strategies for the new system, and plans for the transition to the systems design phase
Chapter 8: User Interface Design	Explains how to design an effective user interface, and how to handle data security and control issues.
Chapter 11: Managing Systems Implementation	Describes application development, documentation, testing, training, data conversion, and system change over.
Chapter 12: Managing Systems Support and Security	Describes systems support and security tasks that continue throughout the useful life of the system, including maintenance, security, backup and disaster recovery, performance measurement, and system obsolescence.

Grading

Grading will be based on a scale from A+ to F. The grading policy is based on the university-wide grading system. Please refer to Student Handbook or approach me to get the table of the grading system. Points less than 60% will be awarded a fail grade in the course.

Item	Description	Weight (Percentage)
Participation & Attendance	Class participation and attendance	2%
Quizzes	2 quizzes according to schedule	10%
Course Project	3 Interconnected assignments throughout semester represented as three project milestones (see class schedule for each millstone due date)	23%
Midterm Exam	One midterm exam according to schedule	25%
Final Exam	Final exam is relatively similar to the format of the midterm	40%
Total		**100%**

Course Policies

1. **Quizzes:** A total of 2 quizzes are administered during regular class according to schedule (last page).

2. **Course Project:** Each student will participate as a member of an assigned team to complete the project. Students can expect to encounter a variety of interesting challenges in learning the concepts of system analysis and design. Learning to effectively use a system modeling tool will also be part of the project process.

   - Teams will work on satisfying the requirements for each project millstone, look below for more details of each millstone and its requirements:

     Milestone 1: Project Proposal: The first milestone will allow the students to work as part of a team (5 students for each team) to write up a project proposal directed to a client. Students will have to work on: (1) Identifying the project goals and the business process. (2) Planning and gathering business requirements through the interview process. The report will include the functional and non-functional requirements; in addition to the interview's questions and answers. (3) Maintain a line of communication with the client using email or Face-to-Face meetings.

     Milestone 2: Analyzing: The second milestone require the students to discover and understand project details using different analyses techniques learned during class lectures following UML standards and using different modeling tools (like Visio, Lucid Chart, Creately). Students will have to work on: (1) Identifying the project Use cases. (2) Submitting three Use case Specifications. (3) Submitting a completed Class Diagram that illustrates the object classes and relationships involved in the Use Cases identified for the project solution. (4) Drafting the Data Flow Diagrams (DFDs). This will include both the context and Level 0 diagrams.

Milestone 3: Designing: The third and final milestone in this course will require the students to design a system solution for the client problem following different tools (like Proto.io, InVision and Visual Basic). Students will have to work on: (1) Creating an Activity Diagrams that shows the sequence of actions and events for the proposed solution. (2) Present a prototype for the user interface design intended for the new system solution.

- During the 13th week of the semester, each team will present their solution verbally in class for the course project using visual aid tools, like MS Power point or other tools, to enhance their presented work.

3. **Midterm exam:** the midterm exam focuses primarily on materials covered in class and from the textbook will be administered during the semester according to schedule (last page). In order to perform well on the test, students must be familiar with the definitions listed in the Key Terms section, and do all the questions listed in the Review Questions section. Students who cannot take the scheduled tests must discuss with the instructor in advance. Makeup tests and exam will not be given except with prior notification and under extenuating and unavoidable circumstances. The burden of proof of said circumstances is on the student.

4. **Final exam:** a comprehensive exam will be given during the KSU University exam schedule. The format of the final exam is relatively similar to the format of the midterm test.

5. **Attendance:** the attendance policy follows the guidelines stated in the KSU Catalogue. Students must assume full responsibility for any loss incurred because of absence, whether excused or unexcused. All work missed because of absences will receive a grade of zero. Excused absences are those resulting from the student's participation in a University-sponsored activity, from recognizable emergencies, or from serious illness. Students are encouraged to participate actively in class discussion and presentation.

6. **KSU honor code:** all students must obey the KSU Honor Code diligently. The Honor Code is based on the need for trust in an academic community. KSU's Honor Code is a system developed by and maintained for the welfare of its students, and all students should make sure that they read and understand the provisions outlined in the Student Handbook (read http://www.ksu.edu.sa). All work completed for this course will be considered pledged.

7. **Cheating is absolutely not tolerated**. Plagiarism is a violation of the Honor code. All papers submitted in this course are subject to evaluation using plagiarism detection software.

8. **Academic dishonesty policy:** cheating in any form will not be tolerated. If the instructor determines that a student has cheated on an assignment, the grade of "F" may be assigned for the entire course. "Cheating" is the use of unauthorized resources and/or work of others including but not limited to homework, tests, papers, presentations and exams. Unless specifically instructed otherwise, students are to assume that all coursework is to be the work of the individual student alone. If a student is unsure as to whether collaboration is permitted, the instructor should be contacted in advance of performing the work. If a faculty member penalizes a student in a course for an Honor Code violation, they should also bring formal charges against the student with the University Honor Board.

9. **Learning disabilities**: Any student who feels that he may need accommodations based on the impact of a physical, psychological, medical, or learning disability should contact Students' Affair Office.

10. **Inclement weather policy**: In cases of inclement weather, commuter and campus based disabled students will be permitted to make decisions about whether or not to attend classes without penalty. If the University is open, it is expected that residence students will attend all classes being held that day. Cancelled classes will not be rescheduled since students should utilize the cancelled class period as computer lab time.

11. **Student responsibilities**: students are responsible for all materials covered in class as well as materials in the textbook. If you must be absent, the instructor assumes that you have obtained notes from posted course materials and referenced textbooks. Any student having difficulties with the materials should use the office hours or make an appointment to see the instructor.

12. **Class policy**: private conversations between students are disruptive and annoying to both the instructor and other students. Therefore, students with disruptive and annoying behaviors are dismissed from class. Repetitive violations are escalated to vice dean of academic affairs at the college.

Class schedule

Week	Dates	Lecture Topics	Lab Topics	Due
1	January 19	Course and Class Introductions		
2	January 26	Chapter 1: Introduction to Systems Analysis and Design	Assign teams members +Sign up for Trello (Project Tasks Management)	
3	February 2	Chapter 2: Analyzing the Business Case	Monitor Project Progress	
4	February 9	Chapter 2: Analyzing the Business Case	Monitor Project Progress	**Quiz 1 13/2/2020**
5	February 16	Chapter 4: Requirements Modeling	Monitor Project Progress	
6	February 23	Chapter 4: Requirements Modeling	Course Project – Milestone 1	
7	March 1	Chapter 6: Object Modeling	UML modeling diagrams (MS Visio, Lucidchart) Self -learning	
8	March 8	Chapter 6: Object Modeling	UML modeling diagrams (MS Visio, Lucidchart) Self -learning	**Midterm Exam Date: 8/3/2020 From 12-1**
9	March 15	Chapter 7: Development Strategies	Monitor Project Progress	
10	March 22	Chapter 8: User Interface Design	Course Project – Milestone 2	
11	March 29	Chapter 8: User Interface Design	User Interface Design (Proto.io) Self –learning Monitor Project Progress	
12	April 5	Chapter 11: Managing Systems Implementation	**Quiz 2 April-6-2020**	
13	April 12	Chapter 12: Managing Systems Support and Security	Course Project-Milestone 3(Final deliverables)+ Final Presentation	
14	April 19	Project presentations		
15	April 26	Revision		
16	May 3	Final Exam		