

IS 215 Analysis and Design Techniques Spring 2017

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Office; Phone:	CDM 738; 312-362-5841
Office Hours (Room):	Tuesdays: 1:00pm – 2:30pm (CDM 738); please take an appointment 24 hours in advance
Class Day & Time:	Tuesdays & Thursdays: 3:10pm– 4:40pm
Section Numbers:	601 (on-campus section) & 610 (online section)
Class Room:	Class number for the regular classes: LEWIS 1515 (Loop Campus)

Course Description

- Formerly IT 215, this course presents a structured approach to analysis and design of an information system for a business. The systems development life cycle will be defined and described. Process descriptions, user and task analysis for interface development, prototyping, data flow and entity relationship diagramming will be presented.
- Prerequisite: None

Learning Outcomes

- Students will be able to explain software development life cycle and why it is important.
- Students will be able to explain project management in support of system analysis projects.
- Students will be able to articulate the responsibilities and key skillsets of an effective systems analyst
- Students will be able to develop a business case and system requirements.
- Students will be able to develop process models, such as data flow diagrams (DFDs) and context diagrams.
- Students will be able to explain logic and object modeling.
- Students will be able to develop Entity-Relationship Diagrams (ERDs).

Required Textbook

- Tilley, Scott. and Rosenblatt, Harry. J., (2017). *Systems Analysis and Design*, 11th Edition, ISBN-10: 1-305-49460-1; ISBN-13: 978-1-305-49460-2, Cengage Learning.

Grading

- 45% Group Assignments (Group activity; 15% each assignment)
- 20% Closed Book Midterm Exam (individual; there will be no make-up exam)
- 25% Closed Book Final Exam (individual; there will be no make-up exam)
- 10% Class Participation

Grading Scale: A: 93-100; A-: 90-92; B+: 87-89; B: 83-86; B-: 80-82; C+: 77-79; C: 73-76; C-: 70-72; D+: 67-69; D: 60-66; F: 0-59.

Class Participation

On-campus students are expected to attend each class and to remain for the duration. Students are accountable for material covered and assignments/announcements made in any class sessions that they miss. Students are expected to be active learners, coming to class prepared to participate in discussion of the topics under

consideration, asking good questions and making valuable observations. Three absences for any reason, whether excused or not, may constitute failure for the course.

Online students' participation will be assessed based on their attention to the assignments and their contributions to the group projects.

Team Formation for Group Assignments

Students should form teams of up to 4 students for the team activities (see Assignments and Exams Information section). Each team should elect a contact person, who is responsible for the communications with me on behalf of the group. The contact person should submit the members' full names along with their project proposal in a word file to the pertinent Dropbox on D2L by the deadline indicated in the course schedule, at the end of this document.

Assignments & Exams Information

- **Closed Book Exams & Quizzes (Individual Activity):**

There are two closed book exams in this course: a midterm (chapters 1, 2, 4, 5, and 6) and a final exam (chapters 3, 7, 8, and 9), as explained in the course schedule at the end of this course syllabus document. The exams will be administered online, via D2L, for n-campus students. Exams should be proctored for online students via COL.

Note the date, time, and location for the exams in the course schedule at the end of this document.

There is one quiz per each chapter of the textbook on D2L (see Content area). While completing quizzes do not earn you a credit, they can help you prepare for the closed book exams. The exams questions will be comparable with quiz questions in terms of format, level of difficulty, and focus. You can take the quizzes as many times as you wish.

- **Group Assignments (Group Activity; Turnitin Submissions):**

Group Assignment 1:

These group assignments should address a real-life situation. Search the Internet for B2C electronic commerce (online) systems that you can analyze by observing them online. For example, the following are good sources:

- Online ticket purchase system (airline, train, cruise, concert, or other).
- Online shopping systems (e.g., Amazon.com, Walmart.com, eBay.com, AliBaba.com)
- Online banks and financial institutions systems
- Online insurance purchase system (life, medical, homeowner, and others)
- Rentals system (car, video, audio, and others)
- Sharing economy online/mobile systems (e.g., Uber, Lyft, Airbnb).
- You can also use traditional (brick-and-mortar) companies if you can get the required permissions from the appropriate people (it is students' responsibility to ensure all permissions are properly received before starting the project). You can work on their offline systems if you have the access and appropriate permissions.

For the system you have chosen, identify the major functions that a visitor/customer can perform on the system by navigating through it. (e.g., navigating through the online system you have selected for your project and familiarize yourself with all aspects of the system needed for your analysis). You may have to register at the site or the system (or get special permissions, if it is not a publicly-available system) to get access to the more important functions of the system.

Develop a preliminary investigation report (PIR) for the system you have selected based on the concepts discussed in Chapter 2 of the textbook. In particular, describe (1) the system you have selected, (2) the

business needs for the system, (3) the advantages of the system for the business needs, and (4) the constraints of the system for the business needs, and (5) suggest a development plan to improve/mitigate the constraints in the system.

Submit your responses in a “word” file to the Dropbox on D2L.

Group Assignment 2:

Based your response to Group Assignment 1, draw the context diagram (level 0 diagram) and data flow diagram (DFD; level 1 diagram) for the improved system (the system you selected that includes your suggested improvements in group assignment 1).

You can find related concepts in Chapter 7 of the textbook.

You should use a tool for drawing your diagrams. Some suggested tools to use are Microsoft Visio and www.draw.io (a free online tool for drawing diagrams).

Submit your responses in a “word” file to the Dropbox on D2L.

Group Assignment 3:

Based your responses to Group Assignments 1 and 2, draw the Entity Relationship Diagram (ERD) for the improved system (the improved system you submitted context diagrams and DFDs for in Group Assignment 2).

You can find related concepts in Chapter 9 of the textbook.

You should use a tool for drawing your diagrams. Some suggested tools to use are Microsoft Visio and www.draw.io (a free online tool for drawing diagrams).

Submit your responses in a “word” file to the Dropbox on D2L.

Submission Timeline and Deadlines (Important Note)

- All submissions in this course must be in an electronic format and should be submitted to the pertinent Dropbox on D2L. Also, always keep a copy of your assignments for yourself in case they are not submitted correctly. **No hardcopy and/or emailed submission is accepted.**
- In order to maintain a good performance in this course, it is crucial to submit the deliverables on time. Deliverables are due on a specified date and time, as stated in the course schedule, at the end of this document, unless an extension/exception is announced.
- Late assignments will be subject to 10% penalty for each day of late submission (i.e., from one second to 24 hours late). Assignments that are more than THREE days late will NOT receive any credits.
 - This policy is strictly enforced, unless I am informed of a documented emergency at least 24 hours before the deadline (i.e., all health problems should be supported by a proper doctor note).
 - The only exception is Group Project Presentation and Report, where NO late submission will be accepted.
 - It is students' responsibility to know when the assignments are due (see the course schedule, at the end of this document).
 - The assignment Dropbox on D2L will automatically close three (3) days after the submission deadline. Once a Dropbox is closed, no submission will be accepted.

Academic integrity and plagiarism

- There will be **ZERO tolerance** for any type of plagiarism in this course.
- The use of others' publication, software and/or web content (text, graphics, codes) is regarded as plagiarism without giving credit.
- When you directly quote someone's work, you must put it in quotation marks followed by its reference.

- The use of materials prepared for purposes other than this course needs the instructor's prior permission.
- Please familiarize yourself with the university's academic integrity policy:
<http://academicintegrity.depaul.edu>.

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class and posted under Announcements in D2L.

Online Course Evaluations

- Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students.
- The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation.
- Students will complete the course evaluation online in Campus Connect.

Academic Policies

- All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar.
- Information on enrollment, withdrawal, grading and incompletes can be found at:
<http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: csd@depaul.edu.

Lewis Center 1420, 25 East Jackson Blvd.

Phone number: (312)362-8002

Fax: (312)362-6544

TTY: (773)325.7296

Tentative Course Schedule (subject to change)

Week & Date		Class Focus & Content	Deliverables <i>Due at <u>11:59 PM (CT)</u></i> <i>(See the Due Dates below)</i>	
1	28, 30 Mar	1. Introduction to the Course 2. Introduction to Systems Analysis and Design – Chapter 1		
2	4, 6 Apr	Analyzing the Business Case – Chapter 2		
3	11, 13 Apr	Requirements Modeling – Chapter 4	Submit Your Team Members Information (Word File)	Due: 17-Apr
4	18, 20 Apr	Data & Process Modeling – Chapter 5		
5	25, 27 Apr	Object Modeling – Chapter 6	Group Assignment 1	Due: 1-May
6	2-May	Review of Chapters 1, 2, 4, 5, and 6 for the Exam		
	4-May	<u>Meet at CDM 819 (computer lab)</u> Closed Book Midterm Exam (via D2L for on-campus students) from Chapters 1, 2, 4, 5, and 6.		
7	9, 11 May	Development Strategies – Chapter 7	Group Assignment 2	Due: 15-May
8	16, 18 May	Data Design – Chapter 9		
9	23, 25 May	Managing Systems Project – Chapter 3	Group Assignment 3	Due: 29-May
10	30-May, 1-June	1. User Interface Design – Chapter 8 2. Review of Chapters 3, 7, 8, and 9 for the Exam		
11	6-June	<u>Meet at CDM 819 (computer lab)</u> <u>at 2:30 pm</u> Closed Book Final Exam (via D2L for on-campus students) from Chapters 3, 7, 8, and 9.		