

# IS 215 Spring 2019

## Analysis and Design Techniques

*Section 601/610 (on-line) meets TuTh 15:10 – 16:40 in LEWIS 01515*

Dr. Steve Rubinow

Email: [srubinow@depaul.edu](mailto:srubinow@depaul.edu) (see email guidelines below)

Office hours: TuTh immediately before or after class or by appointment

Office location: CDM 303

Course information can be found on D2L: <https://d2l.depaul.edu/>

### SUMMARY OF THE COURSE

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.

### PREREQUISITES

No previous knowledge of computers is assumed, or necessary.

### LEARNING OUTCOMES

Students will be able to:

1. Explain the software development life cycle (SDLC) and why it is important.
2. Explain project management in support of system analysis projects.
3. Develop a business case and system requirements.
4. Develop process models, such as data flow diagrams (DFDs) and context diagrams.
5. Explain object modeling.
6. Develop Entity-Relationship Diagrams (ERDs).

### REQUIRED TEXTBOOKS

Tilley, Scott and Rosenblatt, Harry J., (2017). Systems Analysis and Design, 11th Edition, ISBN-10: 1-30549460-1; ISBN-13: 978-1-305-49460-2, Cengage Learning.

### CONTACT INFORMATION

Instructor Contact Info/Email Guidelines:

- Email is the primary mode of off-line communication with the class
- Please make certain that your preferred email address is correctly listed on Campus Connect
- When emailing, please write the subject of your email as follows: IS 215 – *purpose of email*

### ASSIGNMENTS AND GRADING

All work must be submitted either in class, or on D2L, as specified.

*Only exception to the rule: If you are having trouble submitting on D2L, you may email your work. This will indicate that you completed the work on time.*

Grading: Detailed instructions for all assignments will be posted on D2L.

Value	Assignment	Comments
45%	Assignments (10 assignments, 4.5% each)	There is one mandatory assignment for each chapter plus a mandatory hands-on Lab Assignment (10 assignments in total). Assignments include case-style questions from the content of the pertinent chapter to enable the students to apply their knowledge of the chapter to a more practical context. Assignments must be submitted as PDF files to D2L by the deadlines as explained in the course schedule at the end of this document. Each assignment is worth 4.5% credit (total of 45% credit for 10 assignments). All assignments are <i>Turnitin</i> submissions, which means that they are automatically checked for plagiarism.
18%	Quizzes (9 mandatory quizzes, 2% each)	There is one mandatory quiz per each chapter of the textbook on D2L (total of 9 quizzes). Quizzes can help you prepare for the closed book exams. The exam questions will be comparable with quiz questions in terms of format, level of difficulty, and focus. The credit for each mandatory quiz is 2% for on-campus students (total of 18%). <b>Each quiz can be taken for a maximum of 2 times and the highest score will be considered for grading.</b>
12%	Closed Book Exam 1 (there will be no make-up exam)	There are two closed book exams in this course: closed-book exam 1 (chapters 1, 2, 4, 5, and 6) and closed-book exam 2 (chapters 3, 7, 8, and 9), as explained in the course schedule. The exams will be administered online, via D2L, for on-campus students. Exams should be proctored for online students via COL. Note the date, time, and location for the exams in the course schedule.
16%	Closed Book Exam 2 (there will be no make-up exam)	See above.
9%	Class Participation ( <i>Online students will participate via the D2L discussion feature.</i> )	In-class work and professionalism. <ul style="list-style-type: none"> <li>Do the reading/viewing before class. Please be prepared to engage in meaningful and respectful class discussion. The entire class will benefit greatly if all voices are heard.</li> <li>Handle in-class assignments professionally and respectfully.</li> <li>Do not use electronic devices in class (see policy below).</li> <li>Arrive on time and stay in the classroom until the class is over.</li> <li>Group work and group evaluations.</li> <li>On-campus students are expected to attend each class and to remain for the duration. The overall grade for participation drops one-third after any absence. Three absences for any reason, whether excused or not, may constitute failure for the course.</li> </ul>

## TENTATIVE COURSE SCHEDULE

Week	Date	Class Focus & Content	Deliverables	Due at 11:59 PM (CT) (See the Due Dates below)
1	2, 4 Apr	<ul style="list-style-type: none"> <li>Introduction to the Course</li> <li>Introduction to Systems Analysis and Design – Chapter 1</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 1 Quiz</li> <li>Chapter 1 Assignment</li> </ul>	7 Apr
2	9, 11 Apr	<ul style="list-style-type: none"> <li>Analyzing the Business Case – Chapter 2</li> <li>Requirements Modeling – Chapter 4</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 2 Quiz</li> <li>Chapter 2 Assignment</li> </ul>	14 Apr
3	16, 18 Apr	<ul style="list-style-type: none"> <li>Requirements Modeling – Chapter 4 (continued)</li> <li>Data &amp; Process Modeling – Chapter 5</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 4 Quiz</li> <li>Chapter 4 Assignment</li> </ul>	21 Apr
4	23, 25 Apr	<ul style="list-style-type: none"> <li>Data &amp; Process Modeling – Chapter 5 (continued)</li> <li>Hands-on Lab Assignment</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 5 Quiz</li> <li>Hands-on Lab Assignment</li> </ul>	28 Apr
5	30 Apr 2 May	<ul style="list-style-type: none"> <li>Object Modeling – Chapter 6</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 6 Quiz</li> <li>Chapter 6 Assignment</li> </ul>	5 May
6	7 May	<p><b><u>Meet at Daley 505 (computer lab)</u></b></p> <ul style="list-style-type: none"> <li><b>Closed Book Exam 1</b> (via D2L for on-campus students) from Chapters 1, 2, 4, 5, and 6.</li> </ul>		
	9 May	<ul style="list-style-type: none"> <li>Development Strategies – Chapter 7</li> </ul>		
7	14, 16 May	<ul style="list-style-type: none"> <li>Development Strategies – Chapter 7 (continued)</li> <li>Data Design – Chapter 9</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 7 Quiz</li> <li>Chapter 7 Assignment</li> </ul>	19 May
8	21 May	<ul style="list-style-type: none"> <li>Data Design – Chapter 9 (continued)</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 9 Quiz</li> <li>Chapter 9 Assignment</li> </ul>	26 May
	23 May	<p><b><u>Meet at Daley 505 (computer lab)</u></b></p> <ul style="list-style-type: none"> <li>Hands-on Lab Assignment</li> </ul>	<ul style="list-style-type: none"> <li>Hands-on Lab Assignment</li> </ul>	
9	28, 30 May	<ul style="list-style-type: none"> <li>Managing Systems Projects – Chapter 3</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 3 Quiz</li> <li>Chapter 3 Assignment</li> </ul>	2 Jun
10	4, 6 Jun	<ul style="list-style-type: none"> <li>User Interface Design – Chapter 8</li> <li>Review of Chapters 3, 7, 8, and 9 for the Closed Book Exam 2</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 8 Quiz</li> <li>Chapter 8 Assignment</li> </ul>	9 Jun
11	11 Jun	<p><b><u>Meet at CDM 801 (computer lab) at 14:30-16:45</u></b></p> <ul style="list-style-type: none"> <li><b>Closed Book Exam 2</b> (via D2L for on-campus students) from Chapters 3, 7, 8, and 9.</li> </ul>		

### LATE WORK POLICY

- In order to maintain 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, unless an extension/exception is announced.
- Late assignments will be subject to a 10% penalty for each day of late submission (i.e., from one second to 24 hours late). Assignments that are more than three (3) days late will not receive any credit; no work will be accepted after the last day our class meets.
  - This policy is strictly enforced, unless informed of a documented emergency at least 24 hours before the deadline (i.e., all health problems should be supported by a proper doctor's note).
  - The only exception is the 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)
- The assignment submission folder on D2L will automatically close three (3) days after the submission deadline. Once a folder is closed, no submission will be accepted.

#### GRADING SCALE

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

#### CHANGES TO SYLLABUS

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

#### ELECTRONICS/BEHAVIOR POLICY IN THE CLASSROOM

- Out of respect for others in the class, please remember to turn off all electronic devices during class. Failing to follow this policy results in penalties toward class participation credit.
- The class is discussion based. Thus, students are expected to prepare for class, arrive on time and remain in the classroom until the class is over, attend every class to progress satisfactorily towards course objectives, and behave in a respectful manner. 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.
- Failure to comply will affect your class participation grade.

#### RELIGIOUS OBSERVATIONS

Accommodations will be made to allow students to fully express their faith. Please provide notice in advance by email if you will be absent, or need extensions on assignments, due to religious observations.

#### SCHOOL ACTIVITIES

Every effort to accommodate student participation in school activities, such as athletic competitions, will be made. Please provide notice in advance by email if you will be absent, or need extensions on assignments, due to school activities.

#### CIVIL DISCOURSE

DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be socially responsible leaders. It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility can jeopardize a student's ability to be successful in the course. The professor will collaborate with the Dean of Students Office to assist in managing such issues.

#### RESOURCES FOR STUDENTS WITH DISABILITIES

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately, during office hours, 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: Student Center, LPC, Suite #370 Phone number: (773)325.1677; Fax: (773)325.3720; TTY: (773)325.7296.

### ACADEMIC POLICIES/ABSENCES

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:

<https://www.cdm.depaul.edu/Current%20Students/Pages/Enrollment-Policies.aspx>

In the case of illness, or other excused absences, a student may contact the Dean of Students to request a formally approved absence. Upon receipt of documentation, the dean's office will notify all instructors of the student that an approved absence has occurred. The notification will maintain student privacy by not including the reasons for the absence. Contact information may be found at:

<http://studentaffairs.depaul.edu/dos/contactus.html>

### UNIVERSITY POLICIES

#### Incomplete Grades

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.

#### Academic Integrity Policy

This course will be subject to the faculty council rules on the [Academic Integrity Policy web site](#).

#### Plagiarism

The university and school policy on plagiarism can be summarized as follows: Students in this course, as well as all other courses in which independent research or writing play a vital part in the course requirements should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work a report, examination paper, computer file, lab report, or other assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

#### 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. They are a requirement of the course and are key to providing you with the highest quality of teaching. 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 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 complete the evaluation online in Campus Connect.