

# IS 215 Autumn 2021

## Analysis and Design Techniques

Section 401/410 (on-line) meets  
LEWIS 1105 MW 15:10 – 16:40

Dr. Steve Rubinow

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

Office location: CDM 303



### 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.

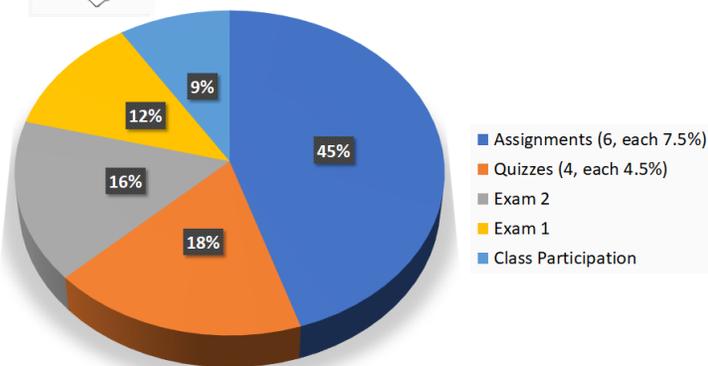
### Prerequisites

No previous knowledge of computers is assumed, or necessary.

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



### Grading / Evaluation



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		



### Contact Information

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



### Organization of the Course



### Learning Outcomes

Students will be able to:

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



### Required Textbooks

Tilley, Scott and Rosenblatt, Harry J., (2020). Systems Analysis and Design, 12th Edition, Cengage Learning.



## Course Schedule: Topics

<b>WEEK 1: SEP 8/13</b> Introduction to the Course Ch 1: Introduction to Systems Analysis and Design	<b>WEEK 2: SEP 15/20</b> Ch 2: Analyzing the Business Case Ch 4: Requirements Engineering	<b>WEEK 3: SEP 22/27</b> Ch 4: Requirements Engineering (continued) Hands-on Lab Assignment (instructor will not be present on Sep 27)	<b>WEEK 4: SEP 29/OCT 4</b> Ch 5: Data & Process Modeling	<b>WEEK 5: OCT 6/11</b> Ch 6: Object Modeling
<b>WEEK 6: OCT 13/18</b> Exam 1 Ch 7: Development Strategies	<b>WEEK 7: OCT 20/25</b> Ch 7: Development Strategies (continued) Ch 9: Data Design	<b>WEEK 8: OCT 27/NOV 1</b> Ch 9: Data Design (continued) Hands-on Lab Assignment	<b>WEEK 9: NOV 3/8</b> Ch 3: Managing Systems Projects	<b>WEEK 10: NOV 10/15</b> Ch 8: User Interface Design



## Course Schedule: Deliverables

<b>WEEK 1: DUE SEP 19</b> Ch 1: Assignment	<b>WEEK 2: DUE SEP 26</b> Ch 1, 2: Quiz	<b>WEEK 3: DUE OCT 3</b> Ch 1,2,4: Hands-on Lab Assignment	<b>WEEK 4: DUE OCT 10</b> Ch 4, 5: Quiz	<b>WEEK 5: DUE OCT 17</b> Ch 6: Assignment
<b>WEEK 6: OCT 13</b> Ch 1, 2, 4, 5, 6: Closed Book Exam 1 (via D2L)	<b>WEEK 7: DUE OCT 31</b> Ch 6, 7: Quiz	<b>WEEK 8: DUE NOV 7</b> Ch 9: Assignment Ch 5,9: Hands-on Lab Assignment	<b>WEEK 9: DUE NOV 14</b> Ch 9, 3 Quiz	<b>WEEK 10: DUE NOV 21</b> Ch3: Assignment
<b>WEEK 11: NOV 22</b> Ch 3, 7, 8, 9: Closed Book Exam 2 (via D2L)				



## 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 Hands-On Lab Assignments, 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.

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.*

Assignment	Comments
Assignments (6 assignments, 7.5% each)	<p>There is a mandatory assignment for many chapters plus two mandatory hands-on Lab Assignments (6 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, <i>at the discretion of the instructor</i>:</p> <ol style="list-style-type: none"> <li>1. <b>PDF</b> files to D2L by the deadlines as explained in the course schedule at the end of this document.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>2. <b>Assignment Discussion Boards:</b> Students are required to post at least two responses under each of the designated D2L discussion boards. The evaluation will consider both the quality of contributions and the frequency of participation. Posting on prior week's boards will not allow for stimulating discussions with your classmates. The faculty role is as an observer and facilitator. I will be reading all messages and I will participate in the discussion as appropriate. The deadlines are the same as for 1 above.</li> </ol> <p>Each assignment is worth 7.5% credit (total of 45% credit for 6 assignments). All assignments are <i>Turnitin</i> submissions, which means that they are automatically checked for plagiarism.</p>
Quizzes (4 mandatory quizzes, 4.5% each)	<p>There is a mandatory quiz for most chapters of the textbook on D2L (total of 4 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 4.5% 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></p>
Closed Book Exam 1 (12%) / Closed Book Exam 2 (16%) (there will be no make-up exam)	<p>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. Note the date and time for the exams in the course schedule.</p>
Class Participation (9%) <i>(Students will participate via the D2L discussion feature.)</i>	<p><b>Class Participation Discussion Boards:</b> Students are required to post on relevant class topics (also see above under Assignment Discussion Boards). This will be graded in two parts – at the end of the 5<sup>th</sup> week and the end of the 10<sup>th</sup> week.</p> <p><b>AND</b></p> <p>Virtual in-class work and professionalism:</p> <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> </ul> <p>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.</p>

## EXAMS AND PROCTORING

For students registered in the *in-class* section, you will take the exam during the scheduled class time as specified in the syllabus.

For students registered in the *on-line* section, you can schedule a time to take the exam via one of the following options:

- CDM offers on-campus, in-person, exam proctoring. This service is available through Tuesday November 23, 2021. The exam times are as follows (although the schedule may vary):
  - Monday - Thursday: 10am, 2pm and 6pm
  - Friday - Sunday: 10am and 2pm
- Examity, the on-line proctoring service.

## 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 (except computer for class) 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 a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at <http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

### 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.

### Students with Disabilities

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus (312) 362-8002
- Lincoln Park Campus (773) 325-1677
- Email: [csd@depaul.edu](mailto:csd@depaul.edu)

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible. Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.

## RESPECT FOR DIVERSITY AND INCLUSION AT DEPAUL UNIVERSITY AS ALIGNED WITH OUR VINCENTIAN VALUES

At DePaul, our mission calls us to explore “what must be done” in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.

## PREFERRED NAME & GENDER PRONOUNS

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at <http://policies.depaul.edu/policy/policy.aspx?pid=332>

## COVID-19 HEALTH AND SAFETY PRECAUTIONS

Keeping our DePaul community safe is of utmost importance in the pandemic. Students, faculty and staff are expected to:

- (1) wear a mask as required at all times while indoors on campus;
- (2) refrain from eating and drinking in classrooms;
- (3) keep current with their COVID-19 vaccinations or exemptions;
- (4) stay home if sick;
- (5) participate in any required COVID-19 testing;
- (6) complete the online Health and Safety Guidelines for Returning to Campus training;
- (7) abide by the City of Chicago Emergency Travel Advisory.

By doing these things, we are Taking Care of DePaul, Together. The recommendations may change as local, state, and federal guidelines evolve. Students who do not abide by the mask requirement may be subject to the student conduct process and will be referred to the Dean of Students Office. Students who have a medical reason for not complying with any requirements should register with DePaul’s Center for Student with Disabilities (CSD).