

## Instructor

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## Course Information

Class number: 22963, Section 501  
 Class times: Mondays, 1:30PM - 4:45PM  
 Room: 14 E. Jackson 206 (Daley Building, Loop Campus)  
 Course homepage: <https://d2l.depaul.edu/>  
 Last day to drop the course with no penalty: January 17, 2016. If dropped on or after January 18, 2016, grade of "W" will be assigned.

## Course Summary

What does it take to create a digital application that is useful and usable? This course focuses on conceptualizing, designing, and prototyping interactive applications. Students will apply design principles and patterns in a user-centered design process, build and refine interactive prototypes using the Axure prototyping tool.

## Learning Objectives

1. Students will be able to create sketches, wireframes, and interactive prototypes of interaction designs as part of a user-centered design process.
2. Students will develop an understanding of common design patterns and practice applying them.
3. Students will be able to produce a coherent interaction design that reflects design and usability principles.
4. Students will be able to refine interaction designs by applying evaluation methods.

## Texts

- Tidwell, Jennifer. (2011). *Designing Interfaces: Patterns for Effective Interaction Design* (2nd Edition).
- Neil, Theresa. (2014). *Mobile Design Pattern Gallery: UI Patterns for Smartphone Apps*.
- Additional reading materials will be provided on D2L.

## Prerequisites

ISM 210 or GD 200

## Software & Computers

This class meets in a room that is equipped with laptops for student use during class time. Students may use these laptops or bring their own devices. Students will be expected to understand and follow all related policies and procedures.

The course involves Axure RP, a wireframing and prototyping tool. I will provide some demos and tutorials; however, you are expected to use learning resources on your own as well. Axure RP is installed on the computers in: CDM 801 Lab, CDM 1st Floor Lab, CDM 819 Lab, LPC SC 364. Apply for a free license ASAP here: <https://www.axure.com/edu>. Axure RP support and learning resources: <http://www.axure.com/learn>.

## Grading

	Grade Proportion
<b>Individual Work</b>	
Attendance & Class Participation	10%
Design Exercises (3)	20%
Design Pattern Presentation	10%
Quizzes (2)	12%
Portfolio Piece	4%
<b>Group Project</b>	
P1 User Study	12%
P2 Concept Exploration	5%
P3 Low Fidelity Prototype	12%
P4 Mid-High Fidelity Prototype/Presentation	15%
<i>Total</i>	100%

- **Attendance and Class Participation.** Class meetings will involve a combination of lecture, discussions, hands-on activities, presentations, and group work. Assigned readings should be completed before class. The Attendance and Class Participation portion of the grade is based on attendance, contributions to discussions, and participation/completion of in-class activities. See Attendance Policy.
- **Design Exercises.** Assignments involve applying design patterns in user interface wireframes/prototypes.
- **Design Pattern Presentations.** Students will present examples and analyses of selected design patterns in use.
- **Quizzes.** Short quizzes (via D2L) will assess understanding of topics from the assigned readings and class presentations.
- **Group Project.** In small groups, students will conduct user research and produce a design for a website or mobile app. All students are expected to contribute equally.
- **Portfolio Piece.** Each student will construct a project summary to highlight skills and products developed in the class, which may be used in a professional portfolio.
- **Extra Credit.** Opportunities for extra credit may be offered, ex.: participation in CDM user studies, job/internship show and tell, and special topic mini-presentations.

**Grading Scale.** Letter grades are based on the following minimum percent of total points earned.

A	93.00%	Excellent
A-	90.00%	
B+	88.00%	
B	83.00%	Good
B-	80.00%	
C+	78.00%	
C	73.00%	Satisfactory
C-	70.00%	
D+	68.00%	
D	60.00%	
F	0.00%	Poor

## Class Schedule

Date	Before Class Required Reading	In Class Topics and Activities	After Class Deadlines and Activities
<b>Module 1 Introduction / Design Patterns</b>			
Jan 4 Class 1	<b>Read</b> <ul style="list-style-type: none"> <li>Tidwell, <i>Preface</i></li> <li>Nielsen's 10 Usability Heuristics</li> </ul>	<ul style="list-style-type: none"> <li><b>User-centered design, usability, and design patterns</b></li> <li><b>Activities:</b> System analysis with usability heuristics; Recognizing and sketching design patterns; Start <a href="#">Design Exercise 1 - Design Pattern Application</a>, complete for homework.</li> </ul>	<p><b>Due Fri Jan 8: Group Formation Survey</b></p> <p><b>Due Mon Jan 11 in class: Design Exercise 1.</b> Bring to class.</p>
<b>Module 2 Understanding Users and Context</b>			
Jan 11 Class 2	<b>Read</b> <ul style="list-style-type: none"> <li>Chapter on interviewing from <i>Observing the User Experience: A Practitioner's Guide to User Research</i></li> <li>Needfinding handout</li> <li>Optional: <i>Field Visit</i> excerpt from <i>101 Design Methods: A Structured Approach for Driving Innovation in Your Organization</i> (Vijay Kumar, 2012)</li> </ul>	<ul style="list-style-type: none"> <li><b>Learning about users and context</b></li> <li><b>User research and analysis</b></li> <li><b>Activities:</b> Sharing of <a href="#">Design Exercise 1</a>, Introduction to <a href="#">Design Challenge</a>; Explanation of <a href="#">P1 User Study</a>; Launch group work; Planning user interviews and observations</li> <li>Sign up for <a href="#">Design Pattern Presentations</a>.</li> <li>Post <a href="#">Group Organization Plan</a>.</li> <li>Explanation of <a href="#">Design Exercise 2 - Axure Practice</a></li> </ul>	<p><b>Due Fri Jan 15: Revised Design Exercise 1.</b> Submit to D2L.</p> <p><b>Due Feb 1 in class: User Research Results:</b> In your groups, conduct user interviews and observations. Bring the results of your research to class (i.e., printed notes) - I will check them. These are not graded, but required in class participation.</p>
Jan 18	Martin Luther King Day - University officially closed. No class meeting.		
<b>Module 3 Exploring Concepts &amp; Solutions</b>			
Jan 25 Class 3		<ul style="list-style-type: none"> <li><b>Axure RP Prototyping tool</b></li> <li>No class meeting as I will be traveling for a research conference. In place of class, choose an option for getting an introduction to Axure RP.</li> <li><b>Watch/Do (required):</b> <ol style="list-style-type: none"> <li><a href="#">Lynda.com</a> course <b>UX Design Tools: Axure:</b> Chapters 1 through 10 (Chapter 11 optional) OR,</li> <li><b>Axure online training</b> (<a href="http://www.axure.com/learn">http://www.axure.com/learn</a>) <i>Core Training Tutorials</i> 1 through 6, and browse tutorials in the <i>More Adventures</i> section: <i>More Prototyping Basics</i>, <i>Mastering Masters</i>, <i>Dynamic Panels</i>, and <i>iPhone Apps</i></li> </ol> </li> </ul>	<p><b>Due Fri Jan 29: Design Exercise 2 - Axure Practice.</b> Post to D2L dropbox.</p> <p>Be sure to complete user research interviews and observations, and bring your research notes to class on Feb. 1.</p>
Feb 1 Class 4	<b>Read</b> <ul style="list-style-type: none"> <li>Excerpts from (Kumar, 2012): <i>Observations to Insights, Insights Sorting, Design Principles Generation</i></li> </ul>	<ul style="list-style-type: none"> <li><b>Analysis, synthesis &amp; ideation.</b> Bring your user research notes!</li> <li><b>Defining requirements with user stories</b></li> <li><b>Activities:</b> Generating insights and design principles from user research, Affinity diagramming; Ideation and representation methods; Explanation of <a href="#">P2 Concept Exploration</a>; Writing user stories</li> </ul>	<p><b>Due Fri Feb 5: P1 User Study</b> Post to D2L dropbox.</p>

Module 4 Designing the User Experience			
Feb 8 Class 5	<p><b>Read</b></p> <ul style="list-style-type: none"> <li>Tidwell, Ch. 2 Organizing Content: Information Architecture and Application Structure</li> <li>Tidwell, Ch. 3 Getting Around: Navigation, Signposts, and Wayfinding</li> <li>Tidwell, Ch. 4 Organizing the Page: Layout of Page Elements</li> <li>Neil, Ch. 1 Navigation</li> </ul>	<ul style="list-style-type: none"> <li><b>NAVIGATION. Creating organization and structure</b></li> <li><b>Due: Design Pattern Presentations (1)</b></li> <li><b>Creating and testing low fidelity prototypes</b></li> <li><b>Activities:</b> Designing navigation; Paper prototyping; Explanation of P3 Low-Fidelity Prototype</li> </ul>	<p><b>Due Fri Feb 12:</b> <b>P2 Concept Exploration</b> Post to D2L dropbox.</p> <p>Study for Quiz 1 (guide provided).</p>
Feb 15 Class 6	<p><b>Read</b></p> <ul style="list-style-type: none"> <li><i>Prototyping for Tiny Fingers</i> (Marc Rettig, 1994)</li> <li>Tidwell, Ch. 5 Lists of Things</li> <li>Neil, Ch. 4 Search, Sort, and Filter</li> <li>Optional: <i>The Skeptic's Guide To Low-Fidelity Prototyping</i> (Busche, 2014)</li> </ul>	<ul style="list-style-type: none"> <li><b>QUIZ 1:</b> Given in class via D2L. Don't be late.</li> <li><b>SEARCH, SORT, AND FILTER</b></li> <li><b>Due: Design Pattern Presentations (2)</b></li> <li><b>Activities:</b> Designing search, sort, and filter; User testing prototypes; Axure techniques</li> </ul>	<p><b>Due Fri Feb 19:</b> <b>P3 Low Fidelity Prototype.</b> Post to D2L dropbox.</p>
Feb 22 Class 7	<p><b>Read</b></p> <ul style="list-style-type: none"> <li>Tidwell, Ch. 8 Getting Input from Users: Forms and Controls</li> <li>Neil, Ch. 2 Forms</li> </ul> <p><b>Watch/Do</b></p> <ul style="list-style-type: none"> <li>Browse Axure mobile tutorials (<a href="http://www.axure.com/learn/iphone-app">http://www.axure.com/learn/iphone-app</a>)</li> </ul>	<ul style="list-style-type: none"> <li><b>FORMS</b></li> <li><b>Due: Design Pattern Presentations (3)</b></li> <li><b>Activities:</b> User testing with paper prototypes, Axure techniques; Start <u>Design Exercise 3</u>, complete for homework.</li> </ul>	<p><b>Due Mon Feb 29 Design Exercise 3</b> <i>Bring to class.</i></p> <p>Study for Quiz 2 (guide provided).</p>
Feb 29 Class 8	<p><b>Read</b></p> <ul style="list-style-type: none"> <li>Tidwell, Ch. 9 Using Social Media</li> <li>Neil, Ch. 8 Social Patterns</li> </ul>	<ul style="list-style-type: none"> <li><b>SOCIAL PATTERNS</b></li> <li><b>Due: Design Pattern Presentations (4)</b></li> <li><b>QUIZ 2:</b> Given in class via D2L. Don't be late.</li> <li><b>Activities:</b> Project work and team check-ins.</li> </ul>	<p><b>Due Fri Mar 4 Revised Design Exercise 3.</b> Submit to D2L with any revisions.</p>
Module 5 Testing and Refinement			
Mar 7 Class 9		<ul style="list-style-type: none"> <li><b>User testing of high fidelity prototypes.</b> Bring testable prototypes to class.</li> </ul>	
Mar 14		<ul style="list-style-type: none"> <li>Class will meet during the Final Exam Period: 2:30pm - 4:45pm</li> <li><b>Final Presentations</b></li> </ul>	<p><b>Due Mar 15:</b> <b>P4 Mid-High Fidelity Prototype.</b> Post to D2L dropbox.</p> <p><b>Due Mar 19:</b> <b>Portfolio Piece.</b> Post to D2L dropbox.</p>

The P4 and Portfolio Piece assignments are the final, culminating projects. There is no final exam in this course.

## Group Projects

Group projects will comprise a significant portion of this class. Plan for weekly time allocated to group work for this class once group work starts. Detailed instructions will be provided for each project. While the group may assign a primary role to each group member, all group members are jointly responsible for the entire assignment and presentation.

Generally, each group member will receive the same grade for a project, which is based on the overall quality of the project and presentation that was produced. However, in some cases, additional credit may go to those who make an exceptional contribution to a project and reduced credit to those who contribute little to a project.

**Team work and process.** Students will complete a Group Formation Survey which I will use to form groups. Group members will be expected to establish their own norms for communicating expectations, plans, check-ins, and deadlines. I encourage groups to use collaboration tools such as [Google docs](#), [Asana](#), and [Trello](#) to manage tasks and facilitate communication. This is a basic aspect of professional work and the ability to work well with others is key. In order to complete quality work that is completed by deadlines, I encourage groups to contact me with any questions so I can help. Do not wait until the last minute to ask for help! Here is [a great resource](#) for tips on working successfully in a group.

**Problems working in groups.** Ideally, working in a group is fun and allows individuals to learn from each other. As you probably have experienced, it can also be time-consuming and stressful. Please make an effort to stay positive, encouraging to others, flexible, and respectful. I encourage team members to address and confusions or tensions as early as possible. I am willing to step in to aid collaboration if needed; groups members should contact me. As soon as you encounter subpar performance by a teammate: talk to them and accurately record their performance in your team assessment. If groups are having difficulty working together, I reserve the right to assign roles and to be cc'd on all group communication related to the project (ex., cc me on emails and send me meeting notes/decisions). If you speak up early, I can help. If you wait until late in the quarter to speak up, you share responsibility for the problem — and there's little I can do. Since there is a lot of group work in this class, we need to make great efforts for individuals to work well together.

## Policies & Expectations

### Attendance

Students are expected to attend each class and to remain for the duration. Attendance will be taken and is reflected in the Class Participation and Attendance portion of the course grade. Your active participation and engagement in the class is expected and is required to get credit for this portion of the course grade.

### Absence

- Attend every class.
- One excused or unexcused absence will not negatively affect the Attendance and Class Participation grade.
- For each unexcused absence after the first one, the Attendance and Participation grade is reduced by 15%.
- Three absences for any reason, whether excused or not, may constitute failure for the course.
- Communicate with me if you must miss class for any reason. I appreciate a quick email to let me know.
- Students are individually responsible for material they may have missed due to absence or tardiness.
- Please notify me in advance if there are any special needs.

### Late Policy

- Arrive on time to every class.
- Being present and arriving on time to every class is my expectation for everyone. Important information is communicated at the very beginning of class. If there is a reason why you cannot consistently arrive on time to class, please let me know.
- Communicate with me if you must be late to class for any reason. I appreciate it when you let me know.
- Tardiness that exceeds 30 minutes is counted as an absence.

### Excused Absence

In order to petition for an excused absence, students who miss class due to illness or significant personal circumstances should complete the Absence Notification process through the Dean of Students office. The form can be accessed at <http://studentaffairs.depaul.edu/dos/academicprocesses.html>. Students must submit supporting documentation alongside the form. The professor reserves the sole right whether to offer an excused absence and/or academic accommodations for an excused absence.

### Late Assignments

Completing assignments on time and having them ready for discussion and critique in class is essential for this class. Thus, to encourage accountability, late assignments will not receive credit unless acceptable reasons are documented (sickness, family emergency) and communicated to me within 24 hours of the due date.

### Class Behavior

- Food and drink during class is ok.
- **Internet surfing and checking email, etc. during class when your attention is expected is disrespectful and unprofessional.** I am asking for your cooperation and attention during class time.
- **Be a respectful participant by keeping phones in silent mode and do not text in class.** If you have a need to be available by phone (sick relative, etc.), please let me know.

- Be engaged in class discussions and workshop activities:
  - Participate with enthusiasm
  - Show genuine effort to cooperate with others
  - Show leadership and take initiative in group efforts
  - Frequently and eagerly offer your thoughts, perspectives, and responses to instructor/classmates
  - Make contributions that reflect excellent preparation (i.e., complete required reading)
- Practice professionalism
  - Communicate (face-to-face, emails, etc.) with the professor and fellow students in a professional and appropriate manner
  - Use body language (ex., eyes, posture) that shows active listening during instructor/student presentations
  - Be careful not to distract others (socializing, sleeping, leaving early or during class, reading unrelated material, doing homework for another class or wearing inappropriate attire);
  - Be respectful towards others

### Email Policy

On weekdays, you can expect me to return emails within 24 hours. Expect a delayed response on weekends. In the spirit of practicing professional communication, make an effort to write email messages in a formal, professional tone (e.g., proper greeting, correct spelling, etc.).

### Attitude

A professional attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another's opinion, cell phones ringing, emailing, texting or using the internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

### Civil Discourse

DePaul University is a community that thrives on open 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 partner with the Dean of Students Office to assist in managing such issues.

### Coursework Grade Review Requests

Every effort is made to grade in a fair and consistent manner. Should a disagreement arise about a course grade, the student may submit a grade review request in writing to the instructor. The request must be submitted within 48 hours after the assignment grade has been posted. The request must include the student's argument for a different grade evaluation, based on verifiable evidence presented by the student. The instructor handles grade review requests and responds to the student with a review decision as soon as possible.

### 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. CDM policy requires the student to initiate the request for incomplete grade before the end of the term in which the course is taken. Prior to submitting the incomplete request, the student must discuss the circumstances with the instructor. Students may initiate the incomplete request process in MyCDM.

- All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval.
- If approved, students are required to complete all remaining course requirements independently in consultation with the instructor by the deadline on the incomplete request form.
- By default, an incomplete grade will automatically change to a grade of F after two quarters have elapsed (excluding summer) unless another grade is recorded by the instructor.
- An incomplete grade does NOT grant the student permission to attend the same course in a future quarter.

### **Withdrawal**

Students who withdraw from the course do so by using the Campus Connection system. Withdrawals processed via this system are effective the day on which they are made. Simply ceasing to attend, or notifying the instructor, or nonpayment of tuition, does not constitute an official withdrawal from class and will result in academic as well as financial penalty.

### **Retroactive Withdrawal**

This policy exists to assist students for whom extenuating circumstances prevented them from meeting the withdrawal deadline. During their college career students may be allowed one medical/personal administrative withdrawal and one college office administrative withdrawal, each for one or more courses in a single term. Repeated requests will not be considered. Submitting an appeal for retroactive withdrawal does not guarantee approval.

College office appeals for CDM students must be submitted online via MyCDM. The deadlines for submitting appeals are as follows:

- Autumn Quarter: Last day of the last final exam of the subsequent winter quarter
- Winter Quarter: Last day of the last final exam of the subsequent spring quarter
- Spring Quarter: Last day of the last final exam of the subsequent autumn quarter
- Summer Terms: Last day of the last final exam of the subsequent autumn quarter

### **Academic Integrity & Plagiarism**

This course will be subject to the academic integrity policy passed by faculty. More information can be found at <http://academicintegrity.depaul.edu/>.

### **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>

### **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 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](mailto:csd@depaul.edu).

Lewis Center 1420, 25 East Jackson Blvd.

Phone number: (312) 362-8002

Fax: (312) 362-6544

TTY: (773) 325-7296

### **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 continue to provide 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 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 complete the evaluation online in CampusConnect.

### **Visit the Writing Center**

Consider visiting the Writing Center to discuss your written assignments for this course. Writing Center Tutors are specially trained undergraduate and graduate students who can help you at any stage of your writing project. They can help you focus and develop your ideas, review your drafts, and polish your writing, as well as answer questions about grammar, mechanics, style, and citation. You may schedule appointments on an as-needed or weekly basis. In addition to Face-to-Face appointments, the Writing Center also provides Written Feedback by Email and Online Appointments. Be sure to schedule your appointment with enough time to think about and incorporate the feedback you'll receive. Bring/upload your assignment handout and/or any other relevant materials to your appointment. To schedule a Face-to-Face, Written Feedback by Email, or Online Appointment, visit [www.depaul.edu/writing](http://www.depaul.edu/writing). You can also call one of our offices: (312) 362-6726 (Loop Office, 1600 Lewis Center) or (773) 325-4272 (LPC Office, 250 McGaw Hall). When possible, the Writing Center accepts walk-in requests, but it's always a good idea to schedule your appointment ahead of time. You may schedule tutorials on an as-needed basis or as weekly standing appointments up to 3 hours per week. All Writing Center services are free to the DePaul community.