

Instructor

Denise C. Nacu, Ph.D.
 College of Computing & Digital Media, DePaul University
 Office: CDM 473
 Email: dnacu@cdm.depaul.edu • Office phone: 312-362-6526
 Office hours: Thursday 1-2:30 PM and by appointment

Course Information

ISM 220 Section 401
 Class times: Tuesdays and Thursdays, 11:50-1:20 PM
 Room: CDM 801 Campus: Loop
 Course homepage: <https://d2l.depaul.edu/>
 Last day to drop the course with no penalty: Sept. 24
 If dropped on or after Sept. 25, 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 interactive prototypes using Axure, and test and refine designs using evaluation methods.

Learning Objectives (LO)

1. Students will be able to create sketches, wireframes, and interactive prototypes by applying user research methods in a user-centered design process.
2. Students will recognize 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 design and prototype evaluation methods.

Required Texts

- Tidwell, Jennifer. (2011). *Designing Interfaces: Patterns for Effective Interaction Design* (2nd Edition). ISBN 1449379702
- Additional reading materials will be provided on D2L.

Prerequisites

ISM 210 Introduction to Human-Computer Interaction and GD 105 Introduction to Visual Design are recommended.

Class Format

Class meetings will involve a combination of lecture, discussions, hands-on activities, presentations of projects, and group work (during and outside of class). I will encourage and expect participation and cooperation from each student, as the success and enjoyment of this class depends on it!

Software

Coursework will involve the use of Axure RP, a wireframing and prototyping tool. Class time will be used for demonstration and practice using Axure; however, you will also be expected to seek help from peers and use online resources to build skills on your own.

Fall Quarter 2013 Version 9/5/2013

Software Access. Axure RP is installed on the computers in CDM 801. To install a copy on your computer, apply for a free license through Axure's "Good Student Program" here: <https://www.axure.com/free-software-for-students>. Please do this as soon as possible. You will need an unofficial transcript from Campus Connection. Axure RP resources are available online: <http://www.axure.com/learn>.

Evaluation & Grading

Coursework includes the following components.

	Grade Proportion
Participation/Axure RP practice	10%
Individual Assignments	30%
Design Pattern Presentations	10%
Design Project	40%
Quizzes	10%
<i>Total</i>	100%

Participation. This portion of the grade is based on attendance, being prepared to discuss assigned readings, contributions to class discussions/activities, and Axure skills practice. In some cases, satisfactory work from in-class activities (such as Axure practice) must be handed in or posted D2L in order to receive participation credit.

Individual Assignments. Students will practice user-centered design methods in individual assignments.

A1 User Study (LO1)

A2 Concept Exploration (LO1)

Design Pattern Presentations. Students will present examples of selected design patterns. (LO2)

Group Project. In groups or individually, students will address a common design challenge and produce a design for a web site/application. (LO1, LO2, LO3, LO4)

P1 Paper Prototype / Requirements

P2 Final Project & Presentation: Mid/high-fi Prototype

Quizzes. Short quizzes will assess understanding of design patterns and key ideas from the readings. (LO2)

Grading Scale

Letter grades will be given based on the following minimum percent of total points earned.

A	93.00%	Excellent/Outstanding effort
A-	90.00%	Very Good
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%	

Class Schedule

Assignments must be submitted to D2L **by 9:00 AM** on the due date indicated below, unless otherwise specified.

MODULE 1 IxD and the User-Centered Design Process

Th Sep 12 **Interaction design and the user-centered design process; Usability and core design principles**
Nielsen's 10 Usability Heuristics: <http://www.nngroup.com/articles/ten-usability-heuristics/>
Activity Digital application analysis

Sun Sep 15 **Due** Student Questionnaire

Tu Sep 17 **Design patterns as elements of interaction design**
Tidwell, Preface
Activity Recognizing and sketching design patterns

MODULE 2 Deep Dive into Understanding User Needs

Th Sep 19 **Learning about users**
Tidwell, Ch. 1 What Users Do
Observing the User Experience: A Practitioner's Guide to User Research, 2nd edition. Goodman, Kuniavsky & Moed
pp. 129-139 on Interviewing; *Will be provided.*
Activity Introduction to Design Challenge; User interviews

Tu Sep 24 **More user research methods**
Activity Card sorting, User journey maps, Task analysis
Universal Methods of Design. Martin & Hanington. *Excerpts will be provided.*

Th Sep 26 **Analysis & synthesis**
Activity Affinity diagramming; AEIOU
Universal Methods of Design. Martin & Hanington. *Excerpts will be provided.*
Due Research research results *You should have completed your user interviews by this date. Bring the results of your user interviews to class (i.e., printed notes). These are not graded, but required in class participation.*

Su Sept 29 **Due** A1 User Study
Due Group Formation Survey

MODULE 3 From Defining to Designing

Tu Oct 1 **Sketching and ideation**
Activity Begin group work; Ideation methods

Th Oct 3 **Establishing software requirements**
Activity Sharing of A2 (in progress); User stories
Due A2 Concept Exploration in progress

Su Oct 6 **Due** A2 Concept Exploration

MODULE 4 Shaping the User Experience / Working with Axure RP

Tu Oct 8 **Intro to prototyping and Axure RP; Creating organization and structure**
Tidwell, Ch. 2 Organizing Content: Information Architecture and Application Structure
Due Design Pattern Presentations for students scheduled to present

Th Oct 10 **Paper prototyping**
Rettig, Marc. "Prototyping for Tiny Fingers." *Communications of the ACM* 37, no. 4 (April 1994): 21-27.
Will be provided.
Activity Building paper prototypes

- Tu Oct 15 **Designing navigation**
Tidwell, Ch. 3 Getting Around: Navigation, Signposts, and Wayfinding
Due [Quiz 1](#)
Due [Design Pattern Presentations](#) for students scheduled to present
- Th Oct 17 **User testing with paper prototypes**
Due Bring [Paper Prototype](#) in progress
- Su Oct 20 **Due** [P1 Paper Prototype / Requirements](#)
- Tu Oct 22 **Organizing the page**
Tidwell, Ch. 4 Organizing the Page: Layout of Page Elements
Due [Design Pattern Presentations](#) for students scheduled to present
- Th Oct 24 **Working with lists**
Tidwell, Ch. 5 Lists of Things
Due [Design Pattern Presentations](#) for students scheduled to present

MODULE 5 Designing with Usability Principles in Mind

- Tu Oct 29 **Designing interaction with usability principles in mind**
Tidwell, Ch. 6 Doing Things: Actions and Commands
Due [Quiz 2](#)
Due [Design Pattern Presentations](#) for students scheduled to present
- Th Oct 31 **Designing for error**
Tidwell, Ch. 8 Getting Input from Users: Forms and Controls
Activity Heuristic evaluation
Due [Design Pattern Presentations](#) for students scheduled to present
- Tu Nov 5 **Designing for mobile and social interaction**
Tidwell, Ch. 9 Using Social Media
Tidwell, Ch. 10 Going Mobile
Due [Design Pattern Presentations](#) for students scheduled to present

MODULE 6 Projects: Putting it All Together

- Th Nov 7 **Project work**
- Tu Nov 12 **Project work**
- Th Nov 14 **Final presentations, Part 1**
Due [P2 Group presentations, first group](#)
- Tu Nov 19 **Final presentations, Part 2; Wrap-up** *Last class meeting*
Due [P2 Group presentations, second group](#)

-
- Su Nov 24 **Due** [P2 Final Project: Mid/high-fi Prototype](#)

Policies & Expectations

Guidelines for Class Behavior

- Be on time.
- Take an active role in class discussions and activities.
- Be a respectful participant by keeping phones in silent mode.
- When working in a computer lab, please keep eyes up (and off your individual monitors) when attention should be paid to the group discussion or presentation. It is unprofessional and disrespectful to the instructor and other students to be surfing the internet, chatting, or checking social media.
- Practice professionalism in your communications (face-to-face, emails, etc.) with the professor and fellow students.

Attitude

A professional and academic 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 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.

Attendance

Students are expected to attend each class and to remain for the duration. Attendance will be taken. Coming 15 minutes late or leaving 15 minutes early constitutes an absence for the student. **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. **Please communicate with me if you must be absent for any reason.** 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.

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/forms.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.

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 requirement independently in consultation with the instructor by the deadline indicated 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 (<http://campusconnect.depaul.edu>). 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

Coursework Grade Review Requests

Every effort is made to grade in a fair and consistent manner. Should a disagreement arise about a coursework 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.

Academic Integrity Policy and Plagiarism

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

The university and school policy on plagiarism can be summarized as follows: Students in this course 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 any 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.

Assignments submitted to D2L will be electronically checked for plagiarism (using specialized software built in to D2L).

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:

Student Center, LPC, Suite #370

Phone number: (773)325.1677

Fax: (773)325.3720

TTY: (773)325.7296

Online Instructor Evaluation

Instructor and course evaluations provide valuable feedback that can improve teaching and learning. The greater the level of participation, the more useful the results. As students, you are in the unique position to view the instructor over time. Your comments about what works and what doesn't can help faculty build on the elements of the course that are strong and improve those that are weak. Isolated comments from students and instructors' peers may also be helpful, but evaluation results based on high response rates may be statistically reliable (believable). As you experience this course and material, think about how your learning is impacted. Your honest opinions about your experience in and commitment to the course and your learning may help improve some components of the course for the next group of students. Positive comments also show the department chairs and college deans the commitment of instructors to the university and teaching evaluation results are one component used in annual performance reviews (including salary raises and promotion/tenure). The evaluation of the instructor and course provides you an opportunity to make your voice heard on an important issue – the quality of teaching at DePaul. Don't miss this opportunity to provide feedback!

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, posted under News in D2L and sent via email.