Instructor

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Office hours: Wednesdays 1-2:30 PM and by appointment

Course Information

ISM 220 Section 401 • Class number 10447
Class times: Tue and Thu, 11:50 AM - 1:20 PM
Room: CDM 801   Campus: Loop
Course homepage: https://d2l.depaul.edu/
Last day to drop the course with no penalty: Sept. 23, 2014
If dropped on or after Sept. 25, 2014, 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.

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

Software

Coursework will involve the use of Axure RP, a wireframing and prototyping tool. I will introduce the tool; however, you will need to use the learning resources on your own as well.

Axure RP is installed on the computers in CDM 801. So that you can install your own copy on your computer, apply for a free license ASAP through Axure's "Good Student Program" here: https://www.axure.com/free-software-for-students. Axure RP support and learning resources: http://www.axure.com/learn.

Grading

	Grade Proportion
Individual Work	
Class Participation & Axure Work	9%
Design Pattern Presentation	15%
Quizzes	12%
Portfolio Piece	8%
Group Project	
P1 User Study	15%
P2 Concept Exploration	6%
P3 Low Fidelity Prototype	15%
P4 Mid-High Fidelity Prototype	20%
Total	100%

Participation. The course will involve completing readings before class. Class meetings will involve a combination of lecture, discussions, hands-on activities, presentations, and group work. The participation portion of the grade is based on attendance, contributions to discussions, and participation in activities. 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.

Design Pattern Examples. To enrich our class discussions, students will present examples of selected design patterns.

Quizzes. Short quizzes will be given in class (via D2L) to assess understanding of key ideas from the assigned readings.

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. A peer review of teammates' contributions will be required.

Portfolio Piece. Each student will create short reflection that highlights skills and products developed in the class.

Extra Credit. (1) For going above and beyond helping other students (in a different group) on particular assignments, 1 to 10% of points may be awarded at discretion of instructor. The student who was helped must email the instructor and summarize the help that was provided. (2) Extra credit can be earned by participating is the CDM User Research Participant Pool. Details TBA. (3) Other options TBA.

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

A	93.00%	186 points	Excellent
A-	90.00%	180 points	
B+	88.00%	176 points	
B	83.00%	166 points	Good
B-	80.00%	160 points	
C+	78.00%	156 points	
C	73.00%	146 points	Satisfactory
C-	70.00%	140 points	
D+	68.00%	136 points	
D	60.00%	120 points	
F	0.00%	0 points	Poor

Class Schedule

Module 1 — Introduction to UCD and Design Patterns

Th Sep 11   **Interaction design and the user-centered design process; Usability and core design principles**
Read   Nielsen's 10 Usability Heuristics: http://www.nngroup.com/articles/ten-usability-heuristics/
Activity   Digital application analysis and redesign

Tu Sep 16   **Design patterns as elements of interaction design**
Read   Tidwell, Preface
Activity   Recognizing and sketching design patterns; Design exercise
Due   **Group Formation Survey**

Module 2 — Understanding Users and Context

Th Sep 18   **Learning about users and context**
Introduction to Design Challenge; Explanation of P1; Launch group work; User interviews; Observations
Read   Tidwell, Ch. 1 What Users Do
Read   Chapter on interviewing from *Observing the User Experience: A Practitioner's Guide to User Research*
Activity   User interviews; Observations

Tu Sep 23   **Analysis & Synthesis; Creating insights and design principles from user research**
Read   Excerpts from *101 Design Methods: A Structured Approach for Driving Innovation in Your Organization*
Activity   Affinity diagramming
Due   **Research results** *You should have completed your research by this date.*
Bring the results of your research to class (i.e., printed notes). These are not graded, but required in class participation.

Module 3 — Exploring Concepts & Solutions

Th Sep 25   **Sketching, ideation, and representing concepts; Establishing software requirements**
Explanation of P2
Activity   Ideation and representation methods; Writing user stories

Su Sep 28   **Due** **P1 User Study** *Post to D2L dropbox and discussion topic by 12:00 PM.*

Tu Sep 30   **Creating organization and structure; Low fidelity prototyping**
Explanation of P3
Read   Tidwell, Ch. 2 Organizing Content: Information Architecture and Application Structure
Read   Rettig, Marc. "Prototyping for Tiny Fingers." *Communications of the ACM 37,* no. 4 (April 1994): 21-27.
Optional Denkov, S. "Building Clickthrough Prototypes To Support Participatory Design"
Activity   Building paper prototypes
Due   **Design Pattern Presentations** for students scheduled to present

Th Oct 2   **Intro to Axure RP; Wireframing**
Read   Tidwell, Ch. 4 Organizing the Page: Layout of Page Elements
Due   **Quiz 1**

Su Oct 5   **Due** **P2 Concept Exploration** *Post to D2L dropbox and discussion topic by 12:00 PM*

Module 4 — Designing the User Experience / Working with Axure RP

Tu Oct 7   **NAVIGATION**
Read   Tidwell, Ch. 3 Getting Around: Navigation, Signposts, and Wayfinding
Due   **Design Pattern Presentations** for students scheduled to present

Th Oct 9   Designing navigation; Axure techniques
Read   Neil, Ch. 1 Navigation
Due   **Design Pattern Presentations** for students scheduled to present

Tu Oct 14	**SEARCH, SORT, AND FILTER**	
	Read	Tidwell, Ch. 5 Lists of Things
	Due	**Design Pattern Presentations** for students scheduled to present

Th Oct 16	Designing search, sort, and filter; Axure techniques	
	Read	Neil, Ch. 4 Search, Sort, and Filter
	Due	**Design Pattern Presentations** for students scheduled to present

| *Su Oct 19* | **Due** | **P3 Low Fidelity Prototype** *Post to D2L dropbox and discussion topic by 12:00 PM* |

Tu Oct 21	**FORMS**	
	Explanation of P4	
	Read	Tidwell, Ch. 8 Getting Input from Users: Forms and Controls
	Due	**Design Pattern Presentations** for students scheduled to present

| Th Oct 23 | Designing forms; Axure techniques | |
| | **Read** | Neil, Ch. 2 Forms |

Tu Oct 28	**ACTIONS, TOOLS, AND COMMANDS**	
	Read	Tidwell, Ch. 6 Doing Things: Actions and Commands
	Due	**Design Pattern Presentations** for students scheduled to present

Th Oct 30	Designing actions, tools, and commands; Axure techniques	
	Read	Neil, Ch. 5 Tools
	Due	**Design Pattern Presentations** for students scheduled to present
	Due	**Quiz 2**

Tu Nov 4	**SOCIAL PATTERNS**	
	Read	Tidwell, Ch. 9 Using Social Media
	Read	Neil, Ch. 8 Social Patterns
	Due	**Design Pattern Presentations** for students scheduled to present

| **Module 5** | **Putting it All Together** |

| Th Nov 6 | **Project work** |

| Tu Nov 11 | **Project work** |

| Th Nov 13 | **Final presentations, Part 1** | |
| | **Due** | **Project presentations,** first group |

| Tu Nov 18 | **Final presentations, Part 2; Wrap-up**   *Last class meeting* | |
| | **Due** | **Project presentations**, second group |

| *Su Nov 23* | **Due** | **P4 Mid-High Fidelity Prototype** |
| | **Due** | **Portfolio Piece** |

Policies & Expectations

Guidelines for Class Behavior
• Food and drink during class is ok
• *Attend every class*. (Communicate with me if you must miss class for any reason)
• *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.
• *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

Late Assignments
Late assignments will be accepted only if you (1) contact me at least two hours before the due date with an explanation, and (2) turn in the assignment within three days of the due date. Each day the assignment is late after three days will decrease the possible point value by 10%. Late assignments may not include comments in addition to the grade. *If you do not communicate with me at all within 24 hours of the due date, I will not accept the assignment and no credit for the assignment will be given.* My policy is intended to encourage communication with me regarding any difficulty handing the assignment in on time. Civil Discourse

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. Three absences for any reason, whether excused or not, may constitute failure for the course. *Please communicate with me if you must be absent or late 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/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.

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.

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.

Academic Integrity Policy & 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).*

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.

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!

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.

How do I schedule an appointment? To schedule a Face-to-Face, Written Feedback by Email, or Online Appointment, visit 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.

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.