

## Instructor

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## Course Information

ISM 210 Section 401  
 Class times: Mon and Wed, 10:10-11:40 AM  
 Room: CDM 220 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

Why study Human-Computer Interaction? As more and more of our everyday lives become mediated by interactive systems, it becomes even more pressing to understand how to create an effective user experience. This course will help you understand what makes interactive systems such as web sites, mobile apps, and games easy to use, efficient, useful, and enjoyable. Students in this class will draw upon theory, principles, user research methods, and case examples to develop perspectives and skills for designing interactive systems.

## Class Format

Class meetings will involve a combination of lecture, discussions, hands-on activities, presentations of projects, and group work. I will encourage and expect participation and cooperation from each student, as the success and enjoyment of this class depends on it! I find that students will get more from the course if they are willing to collaborate and learning from each other.

## Learning Outcomes (LO)

1. Students will be able to critique a software application or device using principles of interaction design.
2. Students will be able to apply user-centered research methods for need finding, generating insights, and developing concepts for interactive systems.
3. Students will be able to apply user research to design a digital application (website or mobile app) and create an interactive prototype.
4. Students will be able to apply usability and evaluation methods to improve and refine a design.

## Required Texts

- Saffer, Dan (2009). *Designing for Interaction: Creating Innovative Applications and Devices* (2nd Edition). ISBN: 0321643399
- Norman, Donald A. (1988). *The Design of Everyday Things* (2002 Edition). ISBN: 9780465067107

## Evaluation & Grading

Coursework includes the following components.

	Grade Proportion
Participation	5%
Homework Assignments (individual)	30%
Group Project	30%
Midterm Exam	20%
Take-home Final Exam	15%
<i>Total</i>	100%

**Participation.** The participation portion of the grade is based on attendance and on contributions to class discussions and activities. Assigned readings are due on the date listed in the class schedule. Read, and review the material, take notes on it and be ready to discuss it. In some cases, satisfactory work from in-class activities must be handed in order to receive participation credit.

**Homework Assignments.** Homework assignments are expected to be individual efforts. Details about each of these assignments will be posted in D2L.

- HW1 Design Critique I (LO1)
- HW2 Design Critique II (LO1)
- HW3 Principles Presentation (LO1)

**Group Project.** Students will work in groups of two or three to design a new web site or mobile app. All students are expected to contribute equally to the project. At the completion of the project, students working in a group must provide a peer review of their teammates. The review is used, in part, in determining each student's team project participation score, which constitutes a portion of the student's overall final grade.

- P1 User Research Protocol (LO2)
- P2 Personas (LO2)
- P3 Concept Exploration (LO3)
- P4 Prototyping and Evaluation (LO4)

**Exams.** The midterm and final exams will assess understanding of key concepts covered in the course.

## 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 **by 9:00 AM** on the due date indicated below, unless announced otherwise. All assignments should be submitted to D2L. Readings should be completed by the date listed.

### MODULE 1 Introduction to HCI and Interaction Design

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W Sep 11 **Intro to interaction design and user experience**  
Saffer, Ch. 1 What is Interaction Design?  
Saffer, Ch. 2 The Four Approaches to Interaction Design

### MODULE 2 Essential Interaction Design Principles

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M Sep 16 ***It's not your fault! Why so-called human errors are actually errors of design***  
*For this module, focus your reading on the key concepts. (Bring your The Design of Everyday Things book to class.)*  
Norman, Prefaces  
Norman, Ch. 1 The Psychopathology of Everyday Things  
Key concepts: affordance, conceptual models  
Norman, Ch. 2 The Psychology of Everyday Actions  
Key concepts: learned helplessness, 7 stages of action, gulf of execution, gulf of evaluation  
**Due** [Student Questionnaire](#)

W Sep 18 ***How do you know what to do? IxD principles continued: visibility, constraints, feedback***  
Norman, Ch. 3 Knowledge in the Head and in the World  
Key concepts: memory, natural mappings, knowledge in the head, knowledge in the world  
Norman, Ch. 4 Knowing What to Do  
Key concepts: constraints, visibility, feedback  
**Activity** Examining everyday objects; Sharing of HW1  
**Due** [HW1: Design Critique I](#)

M Sep 23 ***Oops! Understanding and designing for error***  
Norman, Ch. 5 To Err is Human  
Key concepts: errors, slips, mistakes, structure of tasks, forcing functions  
Norman, Ch. 6 The Design Challenge  
Key concepts: designers/clients are not users, selective attention, creeping featurism, explorable systems  
**Activity** Design task

W Sep 25 **Applying Norman's seven principles in user interface design**  
Norman, Ch. 7 User-centered Design  
Key concepts: Norman's seven principles  
**Due** [Principles presentations](#)

### MODULE 3 Understanding User Needs

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M Sep 30 ***What should we design and why? Methods for problem framing***  
Saffer, Ch. 3 Design Strategy  
**Activity** Design challenge brief; Competitive analysis  
**Due** [Group Formation Survey](#)

W Oct 2 ***What do users need? User research methods: ethical conduct, interviews, observations***  
Saffer, Ch. 4 Design Research  
**Activity** Launch group work; User interviews  
**Due** [HW2: Design Critique II](#)

M Oct 7 **Group project work: User research; Midterm review/questions**  
**Due** [P1: User research protocol](#) *Bring printed copy to class.*

W Oct 9 **MIDTERM EXAM**

## MODULE 4 Making Sense of User Research

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- M Oct 14 **Now What? Tools and methods for analyzing user research data**  
Saffer, Ch. 5 Structured Findings  
**Activity** Turning insights to design principles  
**Due** Research research results *Bring the results of your user interviews to class (i.e., printed notes). These are not graded, but required in class participation.*
- W Oct 16 **Group project work: Analyzing research**  
**Activity** Developing personas
- M Oct 21 **What should it do? Brainstorming, creating concepts, design principles**  
Saffer, Ch. 6 Ideation and Design Principles  
**Activity** Ideation methods

## MODULE 5 Design, Prototyping, and Testing

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- W Oct 23 **Making your ideas come alive. Methods for documenting and refining design**  
**Site maps, scenarios, sketches, storyboards, task flows, use cases**  
**Reading** Saffer Ch. 7 Refinement (focus on methods for documenting and refining a design)  
**Activity** Sharing of P2; Sketching  
**Due** P2:Personas *Bring a printed copy to class and post to D2L.*
- M Oct 28 **How should it work? Prototyping**  
**Reading** Saffer Ch. 8 Prototyping, Testing, and Development  
**Activity** Paper prototype
- W Oct 30 **Shaping the user experience: Laws of interaction design; Gestalt principles; Wireframes**  
**LAB TBA**  
**Introduction to Balsamiq Mockups**  
**Reading** Saffer Ch. 7 Refinement (focus on design principles)  
**Activity** Sharing of P3; Applying Gestalt principles  
**Due** P3: Concept Exploration *Bring a printed copy to class and post to D2L.*
- M Nov 4 **Checking for usability: Heuristic evaluation; More work with Balsamiq Mockups**  
**LAB TBA**  
**Activity** Evaluating and refining group projects
- W Nov 6 **Does it do what we want it to do? Usability and User Testing**  
**LAB TBA**  
**Activity** Evaluating and refining group projects

## MODULE 6 Projects: Putting it all Together

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- M Nov 11 **Project work**
- W Nov 13 **Final presentations, Part 1**  
**Due** Group presentations, first group
- M Nov 18 **Final presentations, Part 2; Wrap-up** *Last class meeting*  
**Due** Group presentations, second group  
**Due** P4: Prototype and Evaluation
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- W Nov 20 **Due:** Take-home Final Exam

## 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 & 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.