

## INSTRUCTOR

Nichole Pinkard, PhD

Email: nicholepinkard@gmail.com

Office: 14 E Jackson, Room 200H

Office hours: Tuesday 1:30 - 2:30;

Monday 3:00 - 4:00; or by appointment

## COURSE INFORMATION

ISM 210 - Sections 801 + 4810

Class times: Tuesday 5:45 - 9:00pm

Location: 14 E Jackson, Room 206

Course homepage: <https://d2l.depaul.edu/>

Last day to drop the course with no penalty: **January 17, 2016**

Last day to withdraw: **February 21, 2016**

## COURSE DESCRIPTION

This course familiarizes students with the user interface development process, including user and task analysis, interaction design, prototyping and evaluation. Students study human perception, cognition and motor abilities as they relate to the design of interactive systems. In a series of projects, students design and revise prototypes as they apply a user-centered design process. Emphasized topics include user profiles, information architecture and usability testing. Students provide written analysis of their research and process.

Prerequisite(s): None

## 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

Classes will involve a combination of lectures, workshops, and discussions. In-class students will often be working in small groups on workshops and projects. Your participation in-class and online are critical to your grade.

## LEARNING OUTCOMES

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. (2013). The Design of Everyday Things, **Revised 3rd edition**. ISBN: 978-0465050659  
Note that this is a new edition of the book.

## EVALUATION & GRADING

	Grade Proportion
Participation (Readings, Workshops, etc)	<b>20%</b>
Homework Assignments (H1, H2, P1-3)	<b>50%</b>
Final Project (P4)	<b>20%</b>
Quizzes (Q1, Q2)	<b>10%</b>

**Participation.** The participation portion of the grade is based largely on the D2L submissions for readings and workshops, but for the in-class section attendance and contributions to class discussions will also be factored in. Each student can miss one Reading and one Workshop submission without affecting their grade.

**Assignments.** Assignment details will be posted in D2L. Be sure to submit your work to the D2L before class starts on the day it is due.

**Group Projects.** In-class students will work in groups of two or three on projects, specifically the final project. Online students will have the option to work in groups. All students are expected to contribute to groups equally. At the completion of the project, students must provide a peer review of their teammates, which will be factored into the final grade.

**Exams.** Two brief quizzes will be given. They will be multiple choice and based on the core vocabulary terms from the reading. Dates TBD.

## 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

### A: INTRODUCTION TO HCI AND INTERACTION DESIGN

1 Jan 5 In class:

- Syllabus, course overview and expectations
- *Topic*: What is interaction design?
- *Topic*: Approaches to Interaction Design
- *Workshop 1*: Hello Neighbor!

#### Homework:

- Course survey: <http://youtu.be/NSOM3qnXmFs>
- *Read*:
  - Saffer, Ch. 1 - What is Interaction Design?
  - (optional) Saffer, Ch. 2 - *The Four Approaches to Interaction Design*
  - Norman, Ch. 1 - The Psychopathology of Everyday Things
  - Norman, Ch 6 - Design Thinking
- *D2L* (after finishing the assigned homework, complete the accompanying assignments on D2L):
  1. W1 (Workshop 1)
  2. R1 (Reading 1)

### B: INTERACTION DESIGN PRINCIPLES

2 Jan 12

#### Due today:

- Course survey
- R1 + W1

#### In class:

- *Topics*: Interaction Design Principles (*discoverability, affordance, signifiers, mapping, feedback, conceptual models, the system image*); *Design Strategy*
- *Workshop 2*: Identifying Interaction Design Principles
- Discuss Design Principles Scavenger Hunt assignment.

#### Homework:

- *Read*:
  - Norman, Ch 2 - The Psychopathology of Everyday Actions
  - Norman, Ch 3 - Knowledge in the Head and in the Real World
  - (optional) Saffer, Ch. 3 - Design Strategy
- *D2L*:
  - R2 - Reading reply and questions.
  - W2 - Post documentation and comment on 2 classmates.

3 Jan 19

**Due today:**

- Design Principles Scavenger Hunt. Post to D2L before class.
- R2 + W2

**In class:**

- *Topics:* Applying Norman's seven principles in user interface design; Understanding and designing for error
- *Workshop 3:* Applying Interaction Design Principles
- Discuss Design Critique Paper

**Homework:**

- *Read:*
  - Norman, Ch 4 - Knowing What to Do
  - Norman, Ch 5 - Human Error? No, Bad Design
  - Saffer, Ch. 4 - Design Research
- *D2L:*
  - R3 - Reading reply and questions.
  - W3 - Post documentation and comment on 2 classmates.

## 1: DISCOVER: RESEARCH + UNDERSTANDING USER NEEDS

4 Jan 26

**Due today:**

- R3 + W3

**In class:**

- *Topic:* What is design research?; User research methods (*differentiation, competitive analysis, ethical conduct*)
- *Workshop 4:* Competitive Analysis
- Discuss Project 1: User Research, create interview questions

**Homework:**

- Conduct 3-5 user interviews
- *Read:*
  - Article link posted on D2L
- *D2L:*
  - R4 - Reading reply and questions.
  - W4 - Post documentation and comment on 2 classmates.

---

5 Feb 2

**Due today:**

- R4 + W4
- Design Critique Paper. Post to D2L before class.

**In class:**

- *Topic:* User research methods continued (*interviews, observations*)
- *Workshop 5:* User interview prep

**Homework:**

- *Read:*
  - Saffer, Ch. 5 - Structured Findings
- *D2L:*
  - R5 - Reading reply and questions.
  - W5 - Post documentation and comment on 2 classmates.

## 2: DEFINE: SYNTHESIS + MAKING SENSE OF USER RESEARCH

6 Feb 9

### Due today:

- Project 1: User Research
- R5 + W5

### In class:

- *Topic:* Tools and methods for analyzing user research data; Brainstorming, creating concepts, design principles
- *Workshop 6:* Turning Insights into Principles
- Discuss Project 2: Personas (form groups)

### Homework:

- *Read:*
  - Saffer, Ch. 6 - Ideation and Design Principles
- *D2L:*
  - R6 - Reading reply and questions.
  - W6 - Post documentation and comment on 2 classmates.

## 3: DESIGN: PROTOTYPING

7 Feb 16

### Due today:

- Project 2: Personas
- R6 + W6

### In class:

- *Topic:* Making ideas come alive, site maps, scenarios, sketches, storyboards, task flows, use cases
- *Workshop 7:* Ideation and Concept Exploration
- Discuss Project 3: Concept Explorations

### Homework:

- *Read:*
  - Saffer, Ch. 7 - Refinement
- *D2L:*
  - R7 - Reading reply and questions.
  - W7 - Post documentation and comment on 2 classmates.

---

8 Feb 23

### Due today:

- R7 + W7

### In class:

- *Topics:* Prototyping, what questions are we answering?; Gestalt Principles; wireframes; Shaping the user experience: Laws of interaction design
- *Workshop 8:* Applying Gestalt Principles

### Homework:

- *Read:*
  - Saffer, Ch. 8 - Prototyping, Testing, and Development
- *D2L:*
  - R8 - Reading reply and questions.
  - W8 - Post documentation and comment on 2 classmates.

## 4: DELIVER: TESTING, FEEDBACK + REFINEMENT

9 Mar 1

### Due today:

- R8 + W8
- Project 3: Concept Explorations
- Rough prototype

### In class:

- *Topic*: Does it do what we want it to do? Usability and User Testing
- *Workshop 9*: Evaluating and Refining Prototypes
- Discuss Project 4: Prototyping and Evaluation

### Homework:

- *Read*:
    - Article link posted on D2L
  - *D2L*:
    - R9 - Reading reply and questions.
    - W9 - Post documentation and comment on 2 classmates.
- 

10 Mar 8

### Due today:

- R9 + W9
- Refined prototype

### In class:

- Guest testing (Bonus points if you invite a guest to testing, max 2 guests/student)
- *Topic*: What did we learn? Feedback and refinement
- *Workshop 10*: Deciphering feedback, creating a refinement plan

### Homework:

- *Read*:
    - Article link posted on D2L
  - *D2L*:
    - R9 - Reading reply and questions.
    - W9 - Post documentation and comment on 2 classmates.
- 

11 Mar 15

### Final Exam: 5:45 -7:45 pm

### Due today:

- In-class: Final presentation, Project 4
- Online: Final report, Project 4

## POLICIES & EXPECTATIONS

### Guidelines for Class Behavior

- Be professional. Treat this class like a job.
- Be respectful towards others. Listen when others talk and share ideas.
- Attend every class. (Communicate with me if you must miss class for any reason, you wouldn't just fail to show up to a job.)
- Arrive on time to every class. Important information is communicated at the very beginning of class.
- Food and drink during class is ok.
- Keep your phones in silent mode, in your bag or pocket, and no texting in class. If you have a need to be available by phone (sick relative, etc.), please let me know.
- If you are not taking notes or viewing other class materials on your laptop, it should be closed. If you are found using your computer for purposes other than this class, you may lose the privilege to use your computer during class.
- Be engaged in class discussions and workshop activities, your participation grade depends on it:
  - 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

### 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. 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.

### Late Assignments

Late assignments will be accepted only if you **(1) contact me before the due date** with an explanation, and if I find the explanation acceptable, **(2) you turn in the assignment within three days** of the due date. For each day the assignment is late after the three day extension, your grade will decrease in point value by 10%. Late assignments may not include comments in addition to the grade (i.e. 4 days late -10%, 5 days late -20%, etc)

**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.

Please be sure when uploading assignments to D2L that the file has uploaded to the Dropbox. I will not accept the excuse that 'I thought I

uploaded it, it must not have gone through'. If you have trouble uploading, please contact me.

### Group Assignments

When working in groups, you are responsible for communication outside of class within your group. It is your responsibility to be proactive in reaching out to group members and working together to complete assignments. When a group assignment is handed in, it is assumed that the work represents the final deliverable for the whole group. The entire group should review the assignment before it is handed in. If your group is having trouble communicating and/or working together, please contact me as soon as possible to resolve 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.

### 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

## 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.

## 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

## 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 a Writing Center 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.

## Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be addressed during class, on D2L, and sent via email.