

HCI 440: Introduction to User-Centered Design

[Wed 5:45 pm - 9:00 pm, Lewis 1217 Loop Campus]

Instructor

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Office Hours: Wednesday, 5:00 pm - 5:45 pm; 9:00 pm - 9:45 pm - In our classroom

D2L Chat Hours: Wednesday, 5:15 pm - 5:45 pm

Course Summary

This course presents the principles and practices of user-centered interaction design (UCID), which include: user and task analysis; conceptual modeling and design; detailed design; prototyping; and evaluation. Students apply these UCID principles and practices in a series of individual and team assignments. The course introduces the essential elements of these practices and sets the context for further study of them in other foundation and advanced courses. Topics covered in the course include:

- The fundamentals and process of UCID
- User research and establishing requirements, including task description and analysis
- Conceptualizing and modeling interaction
- Interaction design, prototyping, and construction
- Evaluation and evaluation frameworks

Coursework consists of:

- Lectures
- Class-time activities
- Reading assignments
- An individual assignment
- Team assignments
- Three online quizzes

Students perform UCID activities on a team-selected project throughout all team assignments.

Learning Objectives (LO)

1. Students will demonstrate understanding of the vocabulary, principles, practices, and disciplines involved in user-center interaction design and its areas of application in a series of team assignments and quizzes. (LO1)
2. Students will implement the essential elements of the user-centered design process in a series of team assignments. (LO2)
3. Students will apply research methods such as competitive analysis, user observation, and user interviews to establish interaction design requirements for team assignments. (LO3)
4. Students will apply the principles of user-centered interaction design to create coherent interaction designs that implement requirements and reflect design and usability principles. (LO4)
5. Students will apply iterative design and prototype evaluation methods to refine their interaction designs in successive team assignments. (LO5)
6. Students will communicate the results of their work in an effective and professional manner through written reports and recorded video presentations. (LO6)
7. Students will apply effective interpersonal skills in order to participate and contribute to the efforts of a multidisciplinary team. (LO7)

Required Text. Hartson, R. and P.S. Pyla (2012). *The UX Book: Process and Guidelines for Ensuring a Quality User Experience*, Morgan Kaufmann/Elsevier Science, 2012. ISBN: 978-0123852410

This text is also available online at the DePaul Libraries Web site, <http://library.depaul.edu/>, in the Safari database. Campus Connection login is required to access the Safari eBook.

Class Format. Class meetings involve a combination of lecture, discussions, and class-time activities.

Evaluation and Grading. Coursework includes the following components:

Coursework	Grade Proportion
Participation	10 %
Individual Assignment	10%
Team Assignments	40%
Team Participation	10%
Quizzes	30%
TOTAL	100%

Weekly participation. In-class students are expected to attend every class session; OL students are expected to view the COL recording of the class as soon as possible, usually within 2-3 days of the in-class meeting. All students must post at least one substantive comment, relevant to the class topics and activities for the week, to the online participation forum. A substantive comment is one that further explores a topic covered in-class or one posted by another student. A “thank you” or “that’s interesting” does not constitute a substantive comment, nor does simply posting a URL without a substantive discussion of its relevance. Participation forums are NOT reopened after the participation due date. (LO1)

Individual Assignment. The individual assignment acts as a foundation exercise for the rest of the coursework, particularly the team assignments. (LO1-LO3)

Team Assignments / Participation. These are done as part of a team consisting of three or four students. Team assignments consist of practical exercises in performing various user-centered interaction design activities. Each team must complete a team working agreement. All students on each team are expected to contribute equally to every assignment. If a student does not contribute their fair portion to an assignment, that student’s grade on the assignment is reduced. (See the ‘Team Management and Behavior’ subsection under ‘Policies & Expectations’ below for additional team policy details.) At the completion of each assignment, students must complete an online peer review of their Coursework Grade Proportion teammates. The review is used, if necessary, to adjust a student’s grade on the assignment, and in determining each student's final team assignment participation grade component. Peer Reviews are NOT reopened after the Peer Review due date. (LO1-LO7)

Quizzes. Quizzes provide the student with the opportunity to test her or his basic comprehension of course material. Each quiz is available online in D2L for several days, so that the student may take the quiz at a convenient time. No time extensions are granted for quizzes without prior permission. (LO1-LO3)

Time Budget. Students should allow approximately 3-4 hours of work outside of class for each scheduled hour of class; this works out to 10-12 hours each week (on average) for most students. Team meetings and team assignment collaboration may increase the amount of time required.

Grading Scale. Final letter grades will be given based on the following minimum percent of total points earned:

A	93% - 100%
A-	90% - 92%
B+	87% - 89%
B	83% - 86%
B-	80% - 82%
C+	77% - 79%
C	73% - 78%
C-	70% - 72%
D+	67% - 69%
D	60% - 66%
F	0% – 59%

Grading and Final Grade Posting. Grading during the quarter is completed as soon as possible, usually within one week of assignment submission. Final grades will be posted as soon as possible after the end of the quarter.

Late Assignment Submission Policy: Assignments may be submitted up to 48 hours late with a 20% grade deduction. Assignments submitted more than 48 hours late receive no credit but will be graded as time permits.

Grade Responsibility. Every effort is made to provide the student with the resources and support needed to succeed in the course. Grades are assigned fairly and impartially based on the coursework submitted by the student, without regard to external circumstances such as GPA goals or employer tuition reimbursement minimum grade requirements. It is the student's responsibility to earn his or her final grade. Please do not ask for a grade which you do not earn.

In-Class and Online Sections. Every effort is made to accommodate and be inclusive of online students. Since the quizzes are delivered online, OL students do not need to make proctoring arrangements for these. Adequate time is given to complete all assignments, so in-class and OL students must submit assignments by the same day and time.

Student Support & Communication. Support for both in-class and online students is provided through weekly office hours dedicated to the course and through online question-and-answer discussion forums on D2L. Students in the Chicago area may come to the instructor's posted office hours. Online students may call during these posted office hours; however, it is recommended that such calls be scheduled in advance in order to ensure a place in the queue. Online discussion forums are available to all students and should be used for posting general coursework questions and comments. The instructor makes every effort to respond to postings within 24 hours. However, due to schedule issues, it occasionally may take longer to receive an instructor response. Email should be used only for personal issues or for student or team-specific coursework questions. Make all questions clear and specific.

Please include the course number and section (e.g., HCI 440 - OL) in the email

Subject: field and include your full name in the ***body*** of the email.

Note: The instructor does not preview homework assignments. However, the instructor does answer specific questions about assignments.

Tentative Class Schedule. Schedule for all coursework and will be updated, if necessary, as the quarter progresses.

Week	Day	Module	Text Reading Due	What is Due
1	03/30	Module 0: Logistics	Course Syllabus	
2	04/06	Module 1: IxD Intro	Hartson & Pyla Ch. 1	Week 1 Participation Introductions Participation Academic Integrity Quiz Team Formation Questionnaire
3	04/13	Module 2: IxD Process	Hartson & Pyla Ch. 2	Week 2 Participation A1 Integrated Experience A2 Team Working Agreement
4	04/20	Module 3: Contextual Inquiry and Analysis	Hartson & Pyla Ch. 3 & 4	Week 3 Participation
5	04/27	Module 4: Requirements and Models	Hartson & Pyla Ch. 5 & 6	Week 4 Participation A3 Contextual Inquiry A3 Peer Review Quiz 1 (Modules 1 – 3)
6	05/04	Module 5: Conceptual Design Foundations	Hartson & Pyla Ch. 7 & 8 Plus Ch's 1-3 Conceptual Models: Core to Good Design, J. Johnson & A. Henderson, Morgan & Claypool, 2011. [The full PDF text of this book is available through the DePaul Library Web site 'Synthesis Computer & Information Science Collection' under 'Human-Centered Informatics.].	Week 5 Participation
7	05/11	Module 6: Conceptual Design Realization	Hartson & Pyla Ch. 9 & 10	Week 6 Participation A4 Requirements Models A4 Peer Review
8	05/18	Module 7: Prototyping	Hartson & Pyla Ch. 11	Week 7 Participation Quiz 2 (Modules 4 – 6)
9	05/25	Module 8: Usability Evaluation	Hartson & Pyla Ch. 12	Week 8 Participation A5 Conceptual Design A5 Peer Review
10	06/01	Module 9: Evaluation without Users	Hartson & Pyla Ch. 13	Week 9 Participation A6 Presentation
11	06/08	[No class]		Week 10 Participation A6 Prototype and Evaluation Report A6 Peer Review Quiz 3 (Modules 7 – 9)

Policies & Expectations

An asterisk '' following a heading indicates that the section includes an instructor-specific policy*

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.
- ***Please keep eyes up (and off your electronic devices) 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, playing games, 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 nonacademic 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, game playing, or using the internet whether on a phone, tablet, 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.

Team Management and Behavior*

Teamwork is an integral part of this course. The primary purpose of teams in this course is to provide diverse perspectives and skills for the coursework, *not* to reduce the amount of work done by individual students. Whenever possible, all team members should attempt every element of the coursework, then the team as whole should combine the individual efforts into the final product for submission. This gives all students experience in every elements of the coursework, and provides a richer and more coherent final product.

Since team sizes are small, teams are encouraged to use a consensus approach to decision making:

- Discuss and weigh the pros and cons of each decision option;
- Work toward the options that have the most benefit for the project;
- When it is clear which option is most suitable, work with its opponents to help them accept it — persuade, do not dictate.

Consensus takes more time than majority rule by vote, but reduces team friction and generally is more effective for small teams. It is expected that all members of a team participate fully and equally in all team planning efforts, meetings, decisions, and coursework. To encourage and assess this participation, the course utilizes a confidential online Peer Review system. The following team member participation criteria are evaluated in the Peer Review:

Initiative: Was the individual a leader in organizing the project effort or did the individual take initial actions to successfully get the project started?

Reliability: Did the individual attend required meetings, promptly answer email, and provide materials when they were due?

Amount of work: Did the individual contribute an average (expected) amount of work, contribute more work than other team members, or contribute less work than others?

Quality of work: Did the individual contribute work that required little additional editing or few corrections?

Support of learning: Did team members learn from the individual, possibly through informed discussion or constructive feedback? Did the person contribute to a supportive environment where thoughts and ideas were welcomed?

Students receive credit for completing each Peer Review. However, if you rate everyone a 25 or a 0, your evaluations will not be counted and you will not receive credit for the peer review—the instructor expects

thoughtful evaluations.

For the results of Peer Reviews that are applied toward coursework grades, the following grade adjustment policy applies:

The average of the scores you receive from your team members acts as a multiplier for the relevant coursework. The scores you give to yourself are not included in the average. The following gives the resulting percentage of the coursework element grade you receive based on your average Peer Review score from your team members:

- Average score of 15 to 25 points: 100% of coursework element grade
- Average score of 11 to 14 points: 90% of coursework element grade
- Average score of 6 to 10 points: 80% of coursework element grade
- Average score of 1 to 5 points: 70% of coursework element grade
- Average score of 0 points will be investigated

Students who have their grades reduced as a result of the Peer Review process receive an explanatory email from the instructor. Teams that have significant participation, behavioral, or other difficulties with a team member first should attempt to resolve the problems with the problematic team member causing the difficulties. If the team member refuses input or persists in failing to participate, exhibiting inappropriate behavior, or causing other disruptive conditions, the team should contact the instructor via email—copying all other team members except the problematic member—rather than wait to raise the issue via the Peer Review process. The team should provide the instructor with a clear description of the issue(s), evidence supporting their issue claims (such as emails), and a suggested action by the instructor. In most cases, the instructor will attempt to resolve the issue with the least amount of disruption to the team. Most problematic team members will receive one written email warning from the instructor. After the warning, if the disruptive behavior persists and the team feels it is warranted, it may request that the instructor remove the team member from the team. In exceptional situations, the instructor may remove the problematic team member immediately. Removal from a team is at the instructor's discretion. A removed student must complete all remaining team assignments individually and incurs a 20% grade penalty on all remaining team assignments.

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.

Exceptional Circumstances*

Every effort is made to accommodate students who encounter exceptional personal circumstances during the quarter. Students who experience unanticipated personal, work, health, or family emergencies should notify the instructor by email or phone as soon as possible after the emergency with a brief explanation of the circumstances and any anticipated impact these might have on coursework. All such exchanges are treated as strictly confidential. Students who have anticipated exceptional circumstances such as secular or religious holiday observances, medical treatment, or travel should notify the instructor as early as possible of these circumstances and any anticipated impact these might have on coursework. In both unanticipated and anticipated cases, a suitable plan for dealing with the coursework impact is agreed upon by the student and instructor. In some cases, suitable documentation of the exceptional circumstances may be requested by the instructor.

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 exceptional 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 or team 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 or team'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 grade of '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.

Instructor Policy Extensions: Academic Integrity Policy and Plagiarism*

All assignment submissions to D2L are subjected to automated plagiarism analysis using *Turnitin*.

Originality analysis results are visible to the student.

Students must complete a short *Academic Integrity Awareness Quiz* before submitting their first assignment. If you have any questions about what constitutes an academic integrity violation or what its consequences might be, please be sure to have these questions answered before submitting your first assignment.

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!