HCI 594 HCI Capstone

Instructor

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Course Information

HCI 594 Section 920 & 921
Class times: N/A
Room: N/A
Campus: N/A
Course homepage: https://d2l.depaul.edu/
Last day to drop with no financial penalty: Apr 13; after Apr 13, a grade of "W" will be assigned.

Course Summary

HCI 594 is a team-based course, in which students build and reflect upon skills, methods, and techniques learned in previous HCI courses. Everyone registered in the class is expected to be a member of a three- or four-person team. Course participation includes research paper discussions, project exercises, peer reviews, and contributions to general course discussions. Course participation is demonstrated by participating in various online discussion forums.

The course project is a comprehensive work that draws upon principles and methods learned in the foundation and advanced courses. It should include the research and design of an actual application or portion of an application, using HCI principles and methods. The project work must include: a competitive review of similar Web sites, applications, or product; a basic literature review to guide and support your design innovations; 'live' user research, such as contextual inquiry or interviews, early in the project; appropriate user-centered design processes such as information architecture analysis and design; multiple methods for designing or evaluating the interactive materials, e.g., paper prototype, low-fidelity clickable prototype, and a mid- or high-fidelity prototype; and, at least two rounds of prototyping/ usability evaluation, using the collected data for revising the design.The project is summarized in the final report.

Students choose their projects with the advice and consent of the instructor.

The project must be an original work and may not be applied for academic credit in another course or be part of a student's employment duties.

Students are expected to share project proposals, reading summaries, and project exercise reports with the rest of the class.

Learning Objectives (LO)

1. Students will demonstrate mastery of individual HCI skills and techniques by performing activities supporting other students' projects. (LO1)
2. Students will demonstrate mastery of coordinated HCI skills by completing a comprehensive user-centered design project. (LO2)
3. Students will read about and then critically evaluate new HCI methods by writing summaries of HCI research and practice, with follow-up discussions. (LO3)
4. Students will apply and critically evaluate new HCI methods by implementing them in their course project. (LO4)
5. Students will communicate their work effectively in a professional manner through written reports. (LO5)

Required Texts

Selected readings, mostly from the ACM Digital Library and the Web. Access to these articles are free from DePaul computers and from any computer using DePaul proxy servers through the library Web site.

Article information and reading assignments are provided in the HCI 594 Course Guide and Course Checklist posted on D2L.

Prerequisites

The following prerequisite requirement is listed for this class:

- HCI 445 and HCI 430 and HCI 450 and HCI 460 and (HCI 454 or HCI 457)

Please contact the instructor if you have any questions or concerns about the prerequisite requirement.

Class Format

This course and arranged office hours via phone, Skype, or Zoom, are delivered entirely online. There are no scheduled in-person or virtual meetings of the whole class and there are no recorded lectures to view. Individual students and teams may schedule in-person or virtual meetings with the instructor, as needed.

Evaluation & Grading

Major Coursework Component	Major Component Proportion	Coursework Sub-component	Point Value
Administration	~7 % (15 points)	Introduction posting and activity	5 points
		Academic integrity quiz (mandatory)	5 points
		CITI IRB/Human Subjects research training certification (mandatory)	5 points
Individual Participation	~27% (60 points)	Project proposal reviews (2)	20 points (10 points per project)
		Project activity participation (3)	15 points (5 points per activity)
		Reading summaries and discussion (5)	25 points (5 points per paper)
Capstone Project	~67% (150 points)	Team composition and product vision	10 points
		Project proposal	30 points
		Weekly status reports (6)	30 points (5 points per report)
		Project proposal team peer review	5 points
		Essential project requirements fulfillment	30 points
		Final report	40 points
		Final team peer review	5 points
		Total	225 points

Administration

I*ntroduction Posting and Activity*. All students must post a personal introduction and participate in self-organizing into teams of 3 or 4 people.

*Academic integrity quiz***.** All students must review available academic integrity resources and complete a short online affirmation of their awareness of these resources. This coursework component is mandatory.

*CITI IRB/Human Subjects research training certification***.** All students must provide evidence of completing the CITI IRB/Human Subjects research training certification (see https://offices.depaul.edu/research-services/research-protections/irb/training/Pages/default.aspx for details). Certification earned in a previous class can be be applied to this—students do not need to be re-certified. This coursework component is mandatory.

Individual Participation

*Project proposal reviews***.** Students review two (2) project proposals and provide feedback to the team posting the proposal (worth 10 points per review). Outline and review questions are provided in the Course Guide. (LO3)

Project activity participation. Teams develop a class activity based on their projects. Examples include pilot testing, card sorting, competitive design analysis, design critiques, and expert evaluation. The remaining students participate in the activity and post a short summary of their activity experience. Each student should participate in three (3) activities, for a maximum of 15 points (worth 5 points per activity). (LO1)

Reading summaries and discussion. Six (6) papers are available for reading and discussion. Each paper corresponds to a weekly topic in the schedule. Each student must summarize and discuss a total of any five (5) papers over the quarter. After reading a paper, the student posts a short summary of the paper (worth 3 points), which must be submitted *before* reading any other summary. Two additional points are earned by contributing to the discussion (worth 1 point per question or discussion point). (LO3)

Capstone Project

Team Composition and Product Vision. Teams submit a document defining their team membership and a brief 'elevator statement' of their product's vision.

*Project Proposal***.** The project proposal is a report that provides: an overview of the project; a summary of project goals; a list of proposed methods to be used (*e.g.*, interviews, usability tests); a project-related activity that involves other members of the class; and, a detailed schedule of methods, milestones and deliverables. (LO1, LO2, LO4, LO5)

Weekly status reports. Weekly status reports act as progress reports on project work. Status reports follow a simple format: accomplishments in the past week; plans for the next week; impediments (challenges, set-backs, issues) encountered in the past week; and essential project requirements fulfilled. Each status report should compare actual accomplishments with the planned accomplishments of the previous week and identify reasons for any impediments, as well as plans to respond to them. (LO4, LO5)

Project proposal team peer review. The project proposal team peer review is intended as an early-warning 'health check' for team dynamics and participation. The project proposal team peer review is a confidential review of fellow team members used, in part, to determine each student's Project Proposal grade. If you are aware of any existing or potential problems with a team member, please report them in the Project Proposal Team Peer Review—do not give a team member 'the benefit of the doubt' or otherwise dismiss underachievement or failure.

Essential Project Requirements Fulfillment. The essential project requirements encompass a competitive review, a literature review, live user research, two rounds of prototyping and usability evaluation, and the Class Activity. This coursework component ensures that students are aware of the necessity of fulfilling the essential Learning Objectives of the course. (LO1, LO2, LO4)

Final Report. The final project report is a final summary report on the project, containing items from the status reports, as well as a presentation of the major project accomplishments. These include the methods that were applied (*e.g.*, interviews, survey, card sort, wireframes, usability tests, etc.). (LO5)

*Final Team Peer Review.*The final team peer review is a confidential review of fellow team members used, in part, to determine each student's Capstone Project grade.

Time Budget

HCI Capstone is a time-intensive, team-based course. Students should allow for a minimum of 12-15 hours of course-related work each week. Team meetings and project collaboration efforts may increase the amount of time required to 20 hours per week.

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

If the final numeric grade is less than:	and greater than or equal to:	the final letter grade is:
-	93	A
93	90	A-
90	87	B+
87	83	B
83	80	B-
80	77	C+
77	73	C
73	70	C-
70	67	D+
67	60	D
60	0	F

The maximum number of coursework points possible is 225. The major grade-tier boundaries and corresponding point totals are:

Points	Normalized Numeric Grade	Letter Grade
202.5	90	A-
180	80	B-
157.5	70	C-
135	60	D

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.

Student Support & Communication. Support for students is provided through arranged Skype office hours dedicated to the course and through online question-and-answer discussion forums on D2L. A

convenient time for arranged office hours is determined mutually by the requesting students and instructor. Online discussion forums are available to all students 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-specific coursework questions. Make all questions clear and specific.

> **Please include the course number (*e.g.*, HCI 594) in the email *Subject:* field and include your full name in the *body* of the email.**

Please copy ALL members of the the team for any questions about general team-project related issues, such as project suitability, goals, methods, project logistics challenges, etc.

Note: The instructor does not perform preliminary evaluation of assignments.

Class Schedule

A detailed course schedule with assignments and due dates is provided in the Checklist on D2L. The D2L Checklist represents the definitive class schedule for all coursework and will be updated, if necessary, as the quarter progresses.

Policies & Expectations

An asterisk '' following a heading indicates an instructor-specific policy*

General Guidelines for Course Behavior

- Take an active role in class discussions and activities.
- Practice professionalism in your communications with the professor and fellow students.

Attitude

A professional and academic attitude is expected throughout this course.

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 element 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, you must redo the peer review but you will not receive credit for it—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. Note that the second and fourth deduction steps are steep: a full 20% reduction in the corresponding grade component (Proposal or Capstone Project):

- Average score of 15 to 25 points: 100% of coursework element grade (no reduction)

- Average score of 11 to 14 points: 80% of coursework element grade (20% reduction)
- Average score of 6 to 10 points: 70% of coursework element grade (30% reduction)
- Average score of 3 to 5 points: 50% of coursework element grade (50% reduction)
- Average score of < 3 points will be investigated (variable reduction, up to 100%)

Students who have their grades reduced as a result of the Peer Review process receive an explanatory email from the instructor shortly after the unreduced assignment grade is posted.

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. BE EXPLICIT WITH THE PROBLEMATIC TEAM MEMBER: *let the problematic team member know that there is a problem and work with them to resolve the problem*. Do not simply make vague or oblique statements or suggestions. 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 or samples of the problematic team member's contributions), 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 behavioral situations or under tight time constraints, the instructor may remove the problematic team member immediately, without an email warning. Removal from a team is at the instructor's discretion. A removed student must complete in full 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. Students who have anticipated exceptional circumstances such as secular or religious holiday observances, scheduled medical treatment, or travel should notify the instructor as early as possible **in advance** 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.

Instructor Request: Withdrawal*

Because of the strong inter-dependency among team members and teams, please notify me and, if you choose, your other team members, as soon as possible after any decision to withdraw from the course. This will allow me to make appropriate adjustments to teams to accommodate the loss of a team member.

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—requests submitted after 48 hours are not considered. 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 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*

Appropriate 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!

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.