HCI/UX Capstone (Info 890/T780)
College of Computing & Informatics, Drexel University
Course Syllabus, Summer 2023

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Course Overview

My invitation to you

Welcome! The capstone experience is your chance to synthesize and further practice everything you've done so far in your master's degree. In this two-quarter sequence, you'll carry out a research or design project of your choosing—aligned with your learning and professional goals—and as a class we'll follow each other's progress and help each other along. My role as instructor of the capstone sequence is to aid you in carrying out your project, from planning to execution to reflection. Think of me as a consultant and mentor. In addition to me, you will be encouraged to enlist another mentor, supervisor or client who may have stronger domain expertise to help you further improve your work.

Course description

Over two quarters, students initiate and complete an in-depth capstone study emphasizing information processes, design thinking, or technology to service people and/or organizations. The capstone explores information and data-related issues and challenges involved in the application domain of the individual or team's choice. It applies a development process structure for project planning, specification, design, implementation and evaluation. Students may choose research or design projects; research capstones must have a designated faculty mentor in addition to a capstone faculty instructor.

Course purpose

This capstone course is a required core course for your master's degree, ideally taken in the final two quarters of your program. (That said, there are no official prerequisites for this course.) With this course, you are expected to integrate domain knowledge with communication, organization, research synthesis and other professional skills.

Learning targets

As a result of your experience in this course, you will be able to:
- Analyze a significant problem in the field of human-computer interaction.
- Apply knowledge and research from human-computer interaction and related fields to advance design, practice, or scholarship.
- Demonstrate effective professional written and verbal communication about research and design practice

In addition, as your instructor I will help you to:

- Self-reflect on your work and cultivate a growth mindset
- Receive and respond to feedback gracefully
- Build your confidence in presenting your ideas
- Develop your skills of good thinking and related habits of mind, such as love of learning, intellectual courage, intellectual humility, and practical wisdom
- Contribute to a team effort and learn what makes a team successful

Course mechanics

Course structure

This course has two sections under one roof: one online and asynchronous (section 900); and another that meets in person on Wednesdays (section 001). Note that the on-campus section does not meet every week —see the schedule on the final page of this syllabus.

Since the purpose of this class is to give you a platform to do your own work, there is not much new content. That said, we will have occasional readings, videos and discussions to help you master relevant issues. This content will appear online, and you can complete them according to your own schedule. For those in the in-person section of the course, our time together will be dedicated to discussion.

Time commitment

This is a graduate course in a professional school. Drexel estimates that the total workload (readings, assignments, notes, exercises) will take 12 to 15 hours per week. Be prepared for a serious commitment of attention and effort. It will pay off!

Contacting me

Student–instructor interaction is an important part of any course. I am available to you, and I want to help you succeed in this course, in your program at Drexel—and in life. Please come to me with any questions, problems, discoveries or anything else you'd like to share. If you have a question that may be of interest to others in the class (e.g., syllabus, readings, logistics, etc.), please ask it during class so that others can benefit. With personal or urgent questions, email me directly or speak to me before or after class.

I am available to meet with you by appointment, and feel free to email me at any time. I check email twice a day, and I don't do it at night or on weekends. In our always-on society, it is important to set boundaries—firstly because healthy lives require off-time, and also because our academic activities require uninterrupted periods of time for reading, writing and thinking. Moreover, taking time for rest and pursuing leisure activities have been shown to improve productivity, creativity and accomplishment, as Alex Pang discusses in his book <u>Rest: Why You Get More Done When You Work Less</u>. I hope you will join me in living with more balance.

Assignments and Grading

The major substance of this course is your capstone project, which is expected to be scoped to take two terms to complete. You will carry out the project over 6–8 milestones that you will define in an initial Project Proposal. Besides delivering each milestone on time, you will be asked to participate in occasional discussions, reflections and a final presentation.

Grading

<u>Research has demonstrated</u> that grades diminish students' learning, decrease students' interest in the subject matter, and prevent students from taking creative risks. Moreover, many students experience anxiety about grades. In this class, we are here to continue to practice our skills and to take some creative risks by trying new things (not just following a rubric)—and we certainly don't need more anxiety in our lives. So in this class, we will take a different approach to assessment.

My intention with this class is to help you to work in an organic way, as you will after graduation. So while you will get a final grade in the class, I will not put quantitative grades on individual assignments. Rather, when I review your work, I will ask questions and make comments meant to engage your work rather than simply evaluate it. You, too, will reflect deeply on your work and that of your peers throughout this quarter, and we will discuss your learning and effort as the course progresses. We will do this throughout the course, but there are two things I will ask you to do as anchors for this process:

- **Midterm Reflection**: During Week 5, I will provide you with a link to an online form that will guide you through a reflection on your work thus far—particularly with respect to the goals you set for yourself in your Project Proposal. At the end, you'll be asked what letter grade you would give yourself for your work to date. This is your chance to assess yourself realistically and challenge yourself to improve in the second half of the term. I will respond to your reflection, and we'll have a conversation if our respective assessments do not match.
- **Final Reflection**: Ahead of Exam Week, I will provide you with another link to an online form where you'll complete your final self-reflection for the term. Again, I'll ask you what grade you would give yourself. I prefer to give everyone the grade they would give themselves, I do reserve the right to make adjustments.

For reference, here is my interpretation of the letter grades:

- *A – Excellent:* You have demonstrated significant progress toward the learning targets for this course while exceeding expectations in effort, participation and results.
- *B – Good:* You have demonstrated progress toward the learning targets for the course while meeting expectations.
- *C – Acceptable:* You are making progress toward most of learning targets for the course.
- *D – Poor:* You do not meet the expectations of one or more of the learning targets for the course.
- *F – Failing:* You demonstrate no progress toward the learning targets for the course.

Policies

Academic integrity

You're here to learn, and the university environment is set up to help you do that in a structured way. Please conduct yourself respectfully, and ultimately you'll learn the most you can. This includes academic integrity. In this course, as with any Drexel course, be honest about the work you did, and do your best with it. All work you submit must be your own work. Of course, we often incorporate ideas and content from others in our work, and that is fine, but you need to cite your sources to give credit where it is due. Strive to make clear your personal contribution and where you drew from others. This goes for books and articles, other people, and also AI tools (discussed specifically in the following section).

In this class, any forms of academic dishonesty will not be tolerated. This includes plagiarism (using others' intellectual work without reference) and cheating. I am obligated to report incidents of academic dishonesty to Drexel administration, and this may result in consequences such as failing the course. Note that a student who is found in violation twice (even if in two different courses) will be expelled from the university. For more information, please refer to the <u>Provost academic integrity policy</u> or to resources regarding <u>Student Conduct and Community Standards</u>. Please take this opportunity to learn the most you can this quarter by upholding your academic integrity.

A note on AI tools

We're living at an exciting time. A plethora of exciting AI tools have been released in recent years, including Grammarly, Canva, ChatGPT, Microsoft 365 Copilot, Google Bard, Meta's LLaMA, and many more. Clearly these tools have the capacity to support human knowledge, work and creativity. However, these tools are not magic, and they have many limitations. In this class, you may choose to use these tools to support your work. Doing so responsibly and thoughtfully is a way to increase your learning; but using them haphazardly may actually undermine your learning. If you choose to use an AI tool in your work in this course, please:

1. **Explain which parts of the work came from you and which from the AI tool, and acknowledge the human labor that went into developing the AI tool you used**. If you use AI-generated content or ideas, please don't claim credit for them. AI models have been trained on the work of thousands—if not millions—of under- or unpaid writers and artists and further refined by crowd-workers. By crediting the AI tool and acknowledging the underlying human labor, you are (at least in a small way) giving credit where it is due, just like you'd want someone to credit you if they used your ideas later on.

2. **Explain how the AI tool helped improve the quality and/or creativity of your work**. Remember that AI models can only reproduce the past—they can't imagine new possibilities, whereas humans can. Leverage AI tools as a starting point for your creative process, not an end point. It may even be helpful to spend time generating ideas on your own before allowing your imagination to be directed by the AI tools. If you allow yourself to rely too much on AI tools, you may limit your future self from developing the skills (and neural pathways) needed to be creative on your own: generating new ideas, synthesizing existing ideas, writing compelling text, and designing other types of content. Strive for AI to be a partner, not a crutch.

3. **Fact check any claims you included from AI tools, and cite any primary/original sources**. Remember that AI is not magic. AI-generated content is frequently factually incorrect and often misleading because of inherent limitations in how these models are designed and currently work. Of particular note, generative AI systems often "hallucinate" claims and sources that are false or do not exist. Again, do not use AI-generated output as an endpoint.

Speaking of attribution, these ideas were developed in discussion with Dr. Sukrit Venkatagiri at the University of Washington. If you're interested in more discussion of these points, see his article here.

Dropping the course

If you are considering whether to continue your enrollment in the course, please refer to the Course Add/ Drop Policy and the Course Withdrawal Policy.

Changes to the syllabus

I reserve the right to make changes to this course or its syllabus during the quarter if circumstances warrant such a change. Topics, readings and dates are subject to change, but only if necessary. Additional topics may be discussed as issues and ideas arise in the news and in discussion. All changes will be provided to students in writing as far in advance as possible.

Student conduct

Drexel University adopted a student conduct policy requiring that all students have the responsibility to be aware of, and abide by, the University's policies, rules, regulations, and standards of conduct. The Student Conduct and Community Standards policy information is available in the Official Student Handbook.

Appropriate use of course materials

It is important to recognize that some or all of the course materials provided to you may be the intellectual property of Drexel University, the course instructor, or others. Use of this intellectual property is governed by Drexel University policies, including the <u>Acceptable Use Policy</u>. Briefly, this policy states that course materials, including recordings, provided by the course instructor may not be copied, reproduced, distributed or re-posted. Doing so may be considered a breach of this policy and will be investigated and addressed as possible academic dishonesty, among other potential violations. Improper use of such materials may also constitute a violation of the University's <u>Code of Conduct</u>.

Participating in course evaluations

Student evaluations are a required element of every course. Evaluation forms are completely anonymous. They are confidentially used to make improvements in our curriculum and teaching. They are also used by administration in evaluating faculty performance, and in decisions about promotion, tenure and retention. Please take part in course evaluations.

Support and Recommendations

If you are experiencing anxiety, depression or other issues

Drexel offers free and confidential support for anxiety-related problems, depression, family concerns, relationship issues, adjustment issues, eating disorders, alcohol- and drug-related problems, and questions about gender and sexual identity, all through the Drexel Counseling Center. The Counseling Center is located at Suite 201 in the Creese Student Center at 3210 Chestnut. The telephone number is (215) 895–1415. **For emergencies, or to reach an on-call counselor after regular business hours, please call (215) 416–3337**. Learn more on the Counseling Center website.

If you need technical support

Get 24/7 technical support for Blackboard Learn from the Instructional Technology group online or by calling (215) 895–1224. For any other technical support (email, logins, etc.), Drexel University IT is here for you. You can contact them through email at consult@drexel.edu, by phone at (215) 895–2020, or by submitting the online Problem Report Form.

Support for equality and diversity

Drexel University strives to promote an environment of equality of opportunity and compliance with university policies and federal, state and local laws prohibiting discrimination based upon race, color, religion, gender, marital status, pregnancy, national origin, age, disability and veteran status. If you have a question or complaint concerning discrimination, harassment, and/or retaliation, contact the Office of Equality and Diversity online or at (215) 895–1405.

Coaching, mentorship and tutoring

The Center for Learning and Academic Success Services (CLASS) serves as the organizing department for a variety of programs and services that promote coaching, peer mentoring and tutoring at Drexel. The Center is located on campus at the Creese Student Center (3210 Chestnut Street), Suite 050.

Campus activities and community

Find the Student Handbook, conduct and community standards, and the Counseling Center at on the Student Life website. Consult this site for information on campus activities and student programs.

English help

The English Language Center offers English language instruction and support services to students, especially those who speak English as a second language. They are located at 229 N. 33rd Street. The telephone number is (215) 895-2022.

If you have a disability or are facing other challenges

The Office of Disability Resources (ODR) team coordinates reasonable accommodations for all Drexel students with disabilities to ensure a level playing field on which they can succeed. ODR can also facilitate temporary adjustments for students with short-term impairments such as those due to accident, injury or illness. If you are a student with a disability, you are encouraged to register with ODR to request reasonable accommodations. This office is here to work with you, so reach out to them for assistance.

For any accommodations to be made, you will need to request a current Accommodations Verification Letter (AVL) in the ClockWork database (if you are new to the system, start by clicking "Online Intake"). These requests are received by ORD, who then issues the AVL to the appropriate contacts, such as

professors. For additional information, visit the DR website, reach them by phone at (215) 895-1401 or email at disability@drexel.edu, or visit them in person in Suite 228 in the Main Building.

Free health services

The Student Health Center is located at 3401 Market St, Ste 105. You can call them at (215) 220-4700.

Career counseling

CCI Career Services offers help with job placement, job postings and credentialing. Outside our college, the Steinbright Career Development Center (SDLC) offers individualized career counseling, career fairs, career programs and resume workshops. The office is located at 3201 Arch Street, Suite 250. The telephone number is (215) 895-2185.

Course Schedule

This course is organized into weeks running Monday–Sunday. Assignments are due at the end of the week listed (Sunday night, any time). In addition to the assignments listed here, you will have additional due dates for your project milestones, which you will specify yourself in your Project Proposal. I will help you make sure that your milestones are feasible and scoped appropriately.

Week	Dates	Meeting	Assignments Due (by End of Week)
1	Jun 26–Jul 2	Jun 28	Project Proposal
2	Jul 3–9	–	–
3	Jul 10–16	Jul 12	–
4	Jul 17–23	Jul 19	–
5	Jul 24–30	–	Midterm Reflection
6	Jul 31–Aug 6	Aug 2	–
7	Aug 7–13	–	–
8	Aug 14–20	Aug 16	–
9	Aug 21–27	–	–
10	Aug 28–Sep 3	Aug 30	Presentation/Report
Ex	–	–	Final Reflection *due Wed, Sep 6*