Foundations Spring 2023

CCA IXDSN 2000-1 Core IxD: Foundations

M/TH 4-7 PM, January 17-May 5, 2023

SF Main Building Room 140 - IXD Studio

Instructor Erin Malone   (she/her)

Teaching Assistant: Kennedi Watkins █████████████████

Office hours █████████████ at our mutual convenience

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Course Description

This course examines the fundamental principles and materials underlying the interactions between people, artifacts, and systems.

Course work will introduce students to a variety of new tools and techniques that will facilitate the crafting of design interactions from user interfaces to user experiences. Through design of interactive canvases such as mobile, desktop, kiosk, and apps, students will gain an appreciation for the application of interaction design principles and tools, their respective strengths and weaknesses, and the prior and subsequent steps to using them.

By examining existing situations and objects, and using newly acquired interaction design sensibilities and vocabulary, students will begin to develop their own

contextualized design perspectives and devise new solutions and strategies for addressing contemporary design issues.

Learning Outcomes

Interaction Design in Context
- Students should be able to understand the scope of interaction design, including the concepts, methods and tools used to identify human needs and create effective solutions to meet those needs.
- Students will be able to conduct research to understand users, provide guidance and framing, and to inform and inspire meaningful responses to human needs.

Interaction Design Skills
- Students will be able to communicate ideas clearly and concisely using relevant vocabulary,hand sketching and interaction design tools. Specific attention will be placed on visual communication and clearly articulating your ideas during design reviews.
- Students will be able to tackle ambiguous design challenges by applying a holistic understanding of design methods and processes. Being a designer requires confidence designing an unknown future.

Iterative Prototyping & Ability to Make Ideas Tangible
- Students will be able to build design prototypes in physical or digital form to explore and evaluate interactions. Emphasis will be placed on hands-on making to explore and learn, as well as validating your designs with real people.

Exhibit Professionalism
- Present your work in a professional manner to industry experts across relevant disciplines (UX designers, design managers, developers, product managers)

Time Expectations and Engagement

This is a three-unit course. Therefore, you should expect to spend an **average of nine hours per week** between instructional time and time during which you study and complete course assignments on your own or in groups. I expect from each student regular and sustained participation throughout the semester. This includes:

- **Submitting work on time.** Make sure you come to class and group meetings meaningfully prepared and ready to focus.

- **Craft, quality, care.** Your work must be clear, effective, and demonstrate attention to detail. For each assignment and activity, please follow instructions carefully and don't hesitate to ask questions if you need clarification.

- **Responding and communicating.** Discussion and critique will be a key part of our course.

- **Collaborating.** Your classmates will rely on you to show up.

Attendance, Deadlines, and Grading

This is a studio course that requires hands-on practice envisioning and building interactive projects, and critical reflection on the content introduced. Students are expected to participate fully in-class and provide thoughtful feedback to their peers in interim and final critiques.

There are a total of 100 points possible in this course:

Participation

General attendance, involvement in discussions and group work, motivation, and being fully and meaningfully prepared for each class. Students are expected to have considered work that shows progress and thoughtful incorporation of feedback and to participate in the regular design critiques. Unless otherwise approved, only FOUNDATIONS work may be done in class.

We will be meeting in person regularly for class critiques, group exercises and feedback sessions. All lectures and studio work time will be done asynchronously within your own schedule.

Reading Sketchnotes & Weekly Sketchbook Assignments

Students are expected to complete their homework and turn it in on time. Homework consists of sketchnoting readings throughout the course as well as weekly sketchbook exercises designed to help the student see and analyze related interaction design concepts and techniques.

Sketchnotes may be turned in up to one week after the assignment due date.

Sketchnotes and sketchbook assignments are intended to help you practice and master the materials and processes. They will not be graded but you are highly encouraged to do the work and turn it in so we can have conversations about where you still need to practice and where there may be confusion about the material.

100% Possible for Projects

There are 3 main projects for this class, each building on the skills and techniques learned over the course of the class.

- Project 1 - Elder Social: 25%
- Project 2 - Digital to Analog Game: 45%
- Project 3 - Favorite Artists App   30%

Late projects will not be accepted after two weeks past the original due date & time & no late projects will be accepted for the final project.

Letter Grades:

The course rubric outlines expectations associated with each letter grade. Below a C- is considered failing. Students will receive letter grades at the end of each unit, mid-term, and at the close of the course.

A C- at mid-term is considered a warning and reported to the department. Students have the opportunity to improve their overall course grade by the end of the course.

All course work must be completed by the final day of class, extensions cannot be offered.

Homework

Any assigned work needs to be prepared and ready for review and/or discussion at the beginning of class.

All work for critiques must be printed and ready for review as well as turned into Classroom BEFORE class.

Feedback & Critiques

Students will receive feedback in the form of class critiques (from fellow students, the instructors, and guests), 1:1 meetings with the instructors, and letter grades. Students will receive most feedback from class crits, supplemented by several 1:1 sessions with the instructor throughout the course. Students are expected to consider all feedback, whether from fellow students, instructors or guests, and provide constructive feedback to their peers.

One of the main learning exercises in this course is the design critique.

The goal of design critiques is to learn to present design work, learn to view design work, and engage in a critical conversation. To participate in a design critique, one must pay attention to what is being presented, and verbalize questions and comments.

We will be building this skill throughout the semester with in-progress critiques and final critiques. Most assignments will be critiqued once or more in process and with a final critique.

Class Culture

Get familiar with the CCA Student Handbook and the guidelines it contains for how to conduct yourself in our physical and digital spaces. In class, we strictly honor CCA's Academic Policies and Code of Conduct. Below are some more details and additional norms for our class.

Device Use

When we are together in the studio, please minimize digital distractions by keeping your phone silenced and stashed out of sight (just seeing it impacts your ability to focus and pay attention). If you need to use your computer during class or a group meeting, close unnecessary software and browser tabs.

Get Consent to Record, Capture, or Share

Unless you have a special accommodation need and have already received permission, please do not record our classroom activity. Do not take any screenshots, photography, video or audio recording of me, your classmates, or any external participants without explicit consent. Do not share class materials with anyone outside of our class without my permission.
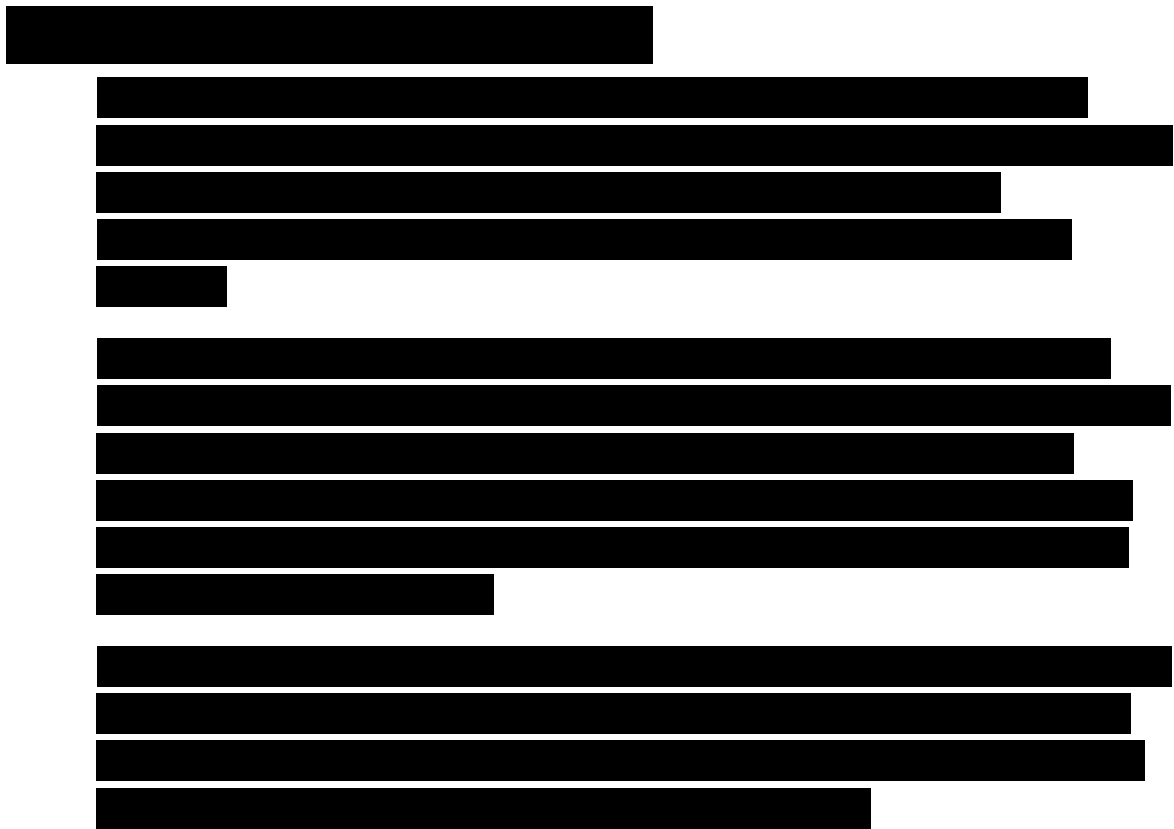
Schedule

Our class calendar on Classroom is the source of truth for all deadlines throughout the semester. Please make sure you check it regularly. Below is a high-level outline of our schedule, and is subject to change.

Course Outline*

UX Basics

UI Sketching, Sketchnoting, Observing Users, Affordances & Feedback

Class 01 01/19	Class Introduction Sketchnoting & Sketching UI Intro to Project 1 Provisional Personas
Class 02 01/23	Affordances & Feedback Observing Users Inclusive Design Storyboarding

Telling A Story

Scenarios, User Task Flows, Storyboards

Class 03 01/26	*IXD Faculty interview candidates workshops - on Zoom* Test storyboards and sketches - revisions
Class 04 01/30	Writing Scenarios and Use Cases Testing concepts, User Flow diagrams

Making it Real

Wireframes, Prototyping, Testing

Class 05 02/02	*IXD Faculty interview candidates workshops - on Zoom*
Class 06 02/6	Wireframes Writing test scripts for usability Review test scripts
Class 7 02/09	Review Wireframes User research practice Writing Your Case Study
Class 8 02/13	Intro to Project 2 Game design fundamentals Play Games

Make it Fun - Digital to Analog

Low Fidelity to High Fidelity - Design, Test, Iterate - repeat

Class 09 02/16	Play games - game mechanics analysis The importance of Play Physical prototyping
Class 10 02/20	First draft game design - paper prototype Documenting testing
Class 11 02/23	Playtesting and iterating - document feedback Formal game elements analysis

Class 12 02/27	*Erin In Zurich - Interaction 23*
Class 13 03/02	*Erin In Zurich - Interaction 23* Play testing
Class 14 03/06	How to write how-to's First draft game rules Play testing
Class 15 03/09	Game Assessment exercises Play testing
Class 16 03/13	Game Assessment exercises Play testing
Class 17 03/16	Start Process book Develop Final game rules Play testing
03/20-03/25	SPRING BREAK - Playtest and make revisions
Class 19 03/27	Small final iterations Play testing
Class 20 03/30	*Erin In New Orleans - IA Conference 23* Work on Process book Work on game production - high fidelity Play testing
Class 21 04/03	*Erin In New Orleans - IA Conference 23* Last in class play testing Play test and make final tweaks
Class 22 04/06	Game extravaganza Project reflection

Getting into Details

Microinteractions & Specifications

Class 23 04/10		Intro to Project 3 Artist research review Competitive Analysis
Class 24 04/13		Information Architecture - Facets and Metadata
Class 25 04/17		Review draft information architectures & component sketches Sitemaps due
Class 26 04/20		Revised sitemaps Defining Components and Microinteractions
Class 27 04/24		Wireframes and Specifications
Class 28 04/27		Write test scripts for usability
Class 29 05/01		Revisions based on testing 2nd & 3rd order effects of your work Final Specifications
Class 30 05/04		Critique Project 3 (guest reviewers) Project reflection

Readings For Each Project

PROJECT 1: ELDER SOCIAL

Week 1
SKETCHNOTING & SKETCHING
- 7 Ways of Seeing from Pencil Me In, Christina Wodtke
- 97 Things Every UX Practitioner Should Know - pp. 74-75
- "What is the Design Process?", Andrew Aquino, https://medium.com/intro-to-digital-product-design/lecture-2-accidentally-uploaded-from-phone-c23ef4aca05c

Week 2
INTERVIEWING - INCLUSIVE DESIGN - DESIGN JUSTICE
- Interviewing Users, Steve Portigal, ch 2, 3
- Video - August de los Reyes - DLS Fall 2020 https://ccarts.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=69253129-4ee5-4436-9b0a-ac3e01203ce6&start=3.165485
- "Explore Inclusive Design" https://trailhead.salesforce.com/en/content/learn/modules/inclusive-design/explore-inclusive-design
- Design Justice Network Principles (keep these in mind when designing and understanding who you are designing for/with) https://designjustice.org/read-the-principles
- Creating Paper Prototypes, https://medium.com/digital-experience-design/a-guide-to-paper-prototyping-testing-for-web-interfaces-49e542ba765f

Week 3
USER TESTING - STORYBOARDING
- 97 Things Every UX Practitioner Should Know - pp. 70-71
- User testing handbook, Dana Chisnell
- Second and Third Order Thinking How Smart People Make Better Decisions (medium article)
- REFERENCE: Step by step guide on making storyboards and scenarios from the Austin Center 4 Design.
- "The Narrative Storyboard: Telling a story about use and context over time", Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt and Bill Buxton
- "The 3 phases of user research in product design" https://medium.com/@FieldGuideApp/the-3-phases-of-user-research-in-product-design-1db8539f2477

PROJECT 2: DIGITAL TO ANALOG GAME

Week 5 & 6
DESIGNING TO BE PLAY CENTRIC
- Read chapters 4 & 5 of Game Design Workshop - A playcentric approach to creating innovative games - 2nd Edition
- Game Design Workshop-A playcentric approach to creating innovative games-2nd Edition-ch4-5.pdf
- Article - Loops and Arcs
  http://www.lostgarden.com/2012/04/loops-and-arcs.html

Week 7
GAME DESIGN
- Read Chapter 9 of Game Design Workshop - A playcentric approach to creating innovative games - 2nd Edition

Week 8
GAME DESIGN
- Read these chapters on Skill and Chance. - Challenges for Game Designers - Skill, Chance

Week 9 & 10
GAME DESIGN
- Read Chapter 10 of Game Design Workshop
- Read chapter 10 of Game Design workshop this week - the more you read sooner, the more exercises
  - Work through these exercises as you playtest.
  - 10.1
  - 10.2
  - 10.5
  - 10.10
  - 10.11
- Take notes after each playtest and iteration about what you changed and what worked. Remember not to change too many things at a time so that you know what variables made improvements or not.

PROJECT 3: FAVORITE ARTISTS APPLICATION

Week 12
SITE MAPS - METADATA - SITEMAPS
- Chapters 4 & 5 of Communicating Design by Dan Brown.

- "4 Simple Steps to Conduct Competitive Analysis," by Freda Higgs
  https://medium.com/@fredahiggs/4-simple-steps-to-conduct-competitive-analysis-in-ux-design-375b0d23e053
- "Four Modes of Seeking Information and How to Design for Them," by Donna Spencer
  https://boxesandarrows.com/four-modes-of-seeking-information-and-how-to-design-for-them/
- Chapters 1, 2 & 3 - How to Make Sense of Any Mess, Abby Covert, (the whole book is online) http://www.howtomakesenseofanymess.com
- HATS by Richard Saul Wurman - Design Quarterly #145
- How to Make Sense of Any Mess, Abby Covert, (the whole book is online) http://www.howtomakesenseofanymess.com , ch4, ch 5, ch6

Week 13
MICROINTERACTIONS - COMPONENTS - PATTERNS
- Microinteractions, Dan Saffer, chapters 1, 2, 3
- Atomic Design by Brad Frost, chapter 2
- Pattern and Component reference sites
  - Atomic Design by Brad Frost - http://bradfrost.com/blog/post/atomic-web-design/
  - UI Design Patterns - http://ui-patterns.com/patterns
  - Welie - http://www.welie.com/
  - Pattern Tap - https://zurb.com/patterntap
  - Android Design Patterns - https://unitid.nl/androidpatterns/
  - Mobile patterns - http://www.mobile-patterns.com/
  - Pttrns - https://pttrns.com/
  - Social Patterns - http://www.designingsocialinterfaces.com/patterns/Main_Page
  - Patternry - http://patternry.com/patterns/

Week 14
DELIVERABLES
- Scent of Information - http://www.uis.edu/webservices/wp-content/uploads/sites/8/2013/02/Designing_for_Scent.pdf
- 97 Things Every UX Practitioner Should Know - pp. 63-64
- Chapter 8 - Deliverable Basics - Dan Brown Communicating Design

Deliverables/Artifact/Documentation Checklist

"Clarity, clarity, surely clarity is the most beautiful thing in the world, A limited, limiting clarity I have not and never did have any motive of poetry But to achieve clarity."
-George Oppen

The basics

- ☐ Your name and date on every item delivered. Everything.
- ☐ A title, label or header on every item delivered. Simple, basic titles are best. No need to get fancy.
- ☐ The name of the project or prompt on every item delivered. Working with words
- ☐ All sentences are complete, grammatically correct, readable sentences.
- ☐ Proofread. Use Spell check. Use Grammarly. Get a second person to read your work.
- ☐ Use the resources available at CCA: https://www.cca.edu/students/resources/writing

Working with images

- ☐ Photos are in focus and oriented correctly and readable without turning.
- ☐ If you have multiple images (such as a sketchnote) you can post the images sequentially on the post. Make sure they are in the proper order!
- ☐ All images (especially screenshots) are clear, and big enough to make your point. Crop and zoom as needed. Use arrows and other callouts to point to the item you are discussing.

Working with files

- ☐ Multi-page deliverables (such as long form docs, presentation PDFs or sketchnotes) are gathered into a single document with a Cover page that has your name and the name of the prompt.
- ☐ Documents have a footer with your name, date, assignment name and page numbers.
- ☐ Filenames include your name and the prompt or topic name, i.e. FirstName_LastName_Topic
- ☐ File extensions are common and cross-platform, i.e. pdf, powerpoint, html

Supporting your work

- ☐ All statements are supported by your reasoning, i.e. "The menu is confusing BECAUSE there is no visual hierarchy." "I choose orange as an accent BECAUSE it contrasts with the main color, which is blue." "I asked for registration after they have made a drawing BECAUSE the user sees the value in the app and is more likely to sign up." NOTHING is obvious.
- ☐ Support decisions with data whenever possible.
- ☐ In research references, ALWAYS list demographics and number of people you spoke with. Only use names or identifying details of interview participants with permission.
- ☐ All sources (books, articles, videos, images) from secondary research must be credited. Check out these two guides from the CCA library for citing work either in Chicago style or MLA style. You may also use a free site like http://mybib.com or http://www.citationmachine.net/

A Final Tip: TRY TO REMEMBER I'M NOT IN YOUR HEAD. Explain yourself clearly and thoroughly. If I have to guess, I guess I'll give you a D. Work not following these checklist items will be considered incomplete.

Documentation of your projects

You will need to keep thorough documentation of your projects - that means all sketches, all iterations of design work as well as notes for why you made changes and the design rationale for each decision.

Take screenshots, make pdf files of work in progress. All this will be used to help you create process case studies of your project.

Design managers don't care about the final outcome WITHOUT the evidence of your process to get there. Why did you change that way of doing things? Who did you learn from to get to that decision?

We will practice this through both PROCESS books - which gather all work product together including the final designs into a single PDF as well as CASE STUDY presentations of your work to the class and/or to guest reviewers.

Work in progress will be turned in during the project each week onto Google Classroom.

You may also consider creating a personal website to capture your process for each project but that is not required.

Part of each project is a final reflection about that project. (150-200 words) about what you learned during the project. Focus on personal learnings, not just content learnings.

For example:

- Less reflective: "I learned how to prototype in Figma."
- More reflective (thus better): "I was surprised that my prototype made so much sense to me and yet people struggled with using it. By listening to their reasoning, it made a lot of sense why the text I used in the buttons were confusing, and I was able to use this new information to improve my work.