California College of the Arts

BFA Interaction Design

IXDSN-320-02

IXD Time Studio: Behavior

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[redacted]
Office Hours:
During class
Alternative times on a case by case basis - email me to schedule

[redacted]

Course Description

Time Studio 2 builds on the narrative skills introduced in Time Studio 1, exploring how interactive systems and people interact to shape behavior. We will explore the application of behavior design principles to shape the micro and macro interactions between individuals and designed systems. This relationship will be a particular focus of the course, with special attention paid to the elements of interface narrative-building that promote communication and interplay between the system and the participant, including: triggers, motivation, ability, flow, anticipation, discovery, learning, error and recovery, delivery, etc.

Our goal will be to understand people's innate/cultural prior experiences and expectations, from a cognitive psychology perspective, and design systems that teach them what they need to know to be successful.

This will be a prototyping-intensive studio course using time-based tools such as Keynote, Pixate, Flinto, Principle, Framer, and After-Effects, introduced through individual and group-oriented projects geared towards personal creativity and collaborative experimentation.

Course Learning Outcomes

By the end of this course, students should be able to:

Express behaviors, i.e., demonstrate the ability to understand, craft and explain intentional interactive human and machine behaviors with particular focus on time as material, design principles and actor interplay.

Architect behaviors, i.e., demonstrate the ability to understand, craft and explain how spatial navigation, sensory elements, time and architecture work together to create understanding and experience.

Build behaviors, i.e., demonstrate competence in the key time-based tools for creating and expressing interaction, design reference and code.

Validate behaviors, i.e., deploy prototype systems to test and evaluate their effectiveness when used by people.

Grades

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.

Grading Breakdown

Attendance:	5%
Class participation:	20%
Class projects:	75%
Project 1:	10%
Project 2:	10%
Project 3:	15%
Project 4:	25%
Project 5:	15%

Attendance and Participation
Students are expected to attend class, arrive on time, participate effectively on a team, and offer comments on readings. Most critically, students are expected to offer criticism of their classmates' work that helps the design team improve their design.

If students need to miss a class, they should email the instructor ahead of time and be sure to inform their teammates they will not be attending. Three unauthorized or unexplained absences will result in a failing grade.

Deadlines
Deadlines manage the process for any organization. Students are expected to have all their assignments delivered on time by the start of class on the due date. Grades will be reduced by 10% for each day late, counting from the start of class (i.e., 4:00 p.m.).

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 to post on the walls as well as uploaded into Classroom BEFORE class.**

Late assignments will not be accepted.

Feedback & Critiques

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.

For all final critiques the following rules will be enforced:

Be there. Project 1-5 critique days are mandatory attendance. Please do not book plane tickets home (or whatever) that prevent you from attending these final critiques.

Be respectful. Please close all laptops and put away all tablets and mobile phones. Give the attention to your classmates you expect them to give to you and your work. Everyone is expected to participate in the discussion.

Communication with Faculty

Your professor is available for all questions and concerns outside of course studio hours by email, Monday— Friday and will generally respond within 24 hours (exclusive of weekends). Faculty can be reached at the email address listed at the top of the syllabus.

Attendance Policy

Students must be present in the classroom for the entire class period for each scheduled class in order to fully develop skills and ideas.

The responsibility for work missed due to any type of absence rests with the student. We will keep records of attendance and tardiness every class. Excused absences include a death in the family, sickness (with doctor's note) and religious commitments. Personal issues must be discussed with the instructors and reported to CCA counseling services to determine if they are considered excused or unexcused.

Three unexcused absences will result in a student failing the class. Being late three times (more than 10 minutes) is equivalent to one unexcused absence.

Sketching, Process Documentation & Materials

Your are required to keep detailed records of your working process, in the form of drawings, storyboards, photos, writing and collage.
The size or format is up to you and it should be understandable and meaningful and descriptive drawings/diagrams.

A dedicated journal or sketchbook is recommended.

Additional required supplies include:

- Black sharpies of at least 3 different weights (fine, medium, and chisel),
- Yellow or Blue Copic Sketch Marker
- Grey Copic Sketch Marker
- Scissors
- Glue stick
- Ruler
- Pencil/Eraser
- 5X8 blank index cards are recommended

Tools: Keynote, Sketch, Illustrator, Invision, Principle, FIgma, Quicktime, Premiere, as well as other prototyping tools

Studio Etiquette

Accommodation
Any student who feels she/he/they may need an accommodation based on the impact of a disability should contact Access & Wellness Services (AWS) to discuss specific needs. Please contact Suzanne Guevarra, Director of AWS, at 510-594-3775, via email at sguevarra@cca.edu, or stop by the office (Irwin Student Center) to coordinate reasonable accommodations for students with documented disabilities. To reduce the instances of requests for last-minute accommodations, concerned students should consult with the AWS staff within the first few weeks of the semester.

Recording
No student may record or tape any classroom activity without the instructor's express written consent. If a student believes that she/he/they is disabled and needs to record or tape classroom activities, she/he/they should contact AWS to request an appropriate accommodation.

Engagement
Students must respect the time and efforts of their classmates. When student teams are presenting their work, it is expected that everyone's laptop will be closed, phones will be off, and that all students will be giving their full attention to their classmates.

Pace
In the professional world, designers never have enough time or resources to do their work. If you feel a bit overwhelmed by the pace of the class and the amount of work assigned, then you are right where we want you. A big part of this class is to gain a visceral feeling for what designers experience every day. We want you to work fast and to bring an attitude of play and playfulness to your design actions. The more you make the work fun, the better the design work you will produce.

Code of Conduct
Please read and familiarize yourself with the College's code of conduct:
http://www.cca.edu/students/handbook/conduct
In particular CCA's Integrity Code:
http://www.cca.edu/students/handbook/integritycode

Studio Etiquette

CCA classrooms, shops and other facilities exist to create an efficient learning environment that many people share and use. There is no storage for your belongings.

Most of the time your Studio classes are about building a community and "plugging in" obstructs your ability to be part of the class. Should there be an opportunity for an exception, your Core Studio faculty will let you know.

Turn your devices off in class. The use of cell phones, texting, or social media is prohibited in the classroom unless you have made special emergency contact arrangements with your teacher. You will be asked to leave by the teaching assistant if you are caught using these devices.

Additionally, when guest speakers are present and when your classmates present their work, you are requested to refrain from using your laptop.

Responsible Expression

CCA does not condone expressions that single out a specific people or groups for gratuitous insult or that interferes with the learning experience of other member(s) of the college community. Abusive or disruptive expression in a manner that violates the college's policies against unlawful discrimination and harassment may lead to disciplinary action.

Social Media policy:

While at times digital social tools (Facebook, Twitter, Instagram, Snapchat, Tumblr, etc….) may be part of the content of this course, it is not acceptable during lectures, presentations or studio work times and will affect your grade.

Absolutely NO photography, video or audio recording of faculty without express permission by your professor.

Learning Center

If you need help with any aspect of this class, whether it is taking lecture notes, completing writing assignments, preparing for the exams, or reading a text critically, your first resource should be the Learning Resource Center, which is located in Irwin Hall, Room #207. Further resources can be found on their webpage (http://www.cca.edu/students/resources), or you may contact them via phone: (510) 594-3756.

Course Outline*

Unit 1: Controls

Controls redesign poster

Class 01 09/04	Class Introduction **Introduce Project 1**
Class 02 09/9	Discussion - Project 1 sketches Behavior tracking for projects 4 & 5
Class 03 09/11	**Project 1 Critique -** Poster designs **Introduce Project 2**

Unit 2: Motions In Interaction

Informational demo using keynote and video

Class 04 09/16	Keynote Transitions Microinteractions
Class 05 09/18	Discuss Principles of Animation Using storyboards Group Critique - Wireframes
Class 06 09/23	Group Critique - Transitions & Animations Review storyboards/scripts
Class 07 09/25	**Project 2 Critique** - final videos and process documentation

Unit 3: Digital Prototyping Tools & Interaction Mashup

Mashup of 2 apps to illustrate new interactions & learn new tools

Class 08 09/30	**Introduce Project 3** Working session - play with different tools Discuss prototyping tools - tradeoffs, pros & cons
Class 09 10/02	Discussion of apps & chosen micro-interactions to prototype & mashup
Class 10 10/07	Wireframes - key features Working session

Class 11 10/09		Visual Design working session Cognitive systems
Class 12 10/14		Critique prototypes Working session
Class 13 10/16		**Critique Project 3 -** final prototype videos **Intro to Project 4** Midterm progress reports

Unit 4: Out of Box Experience

Out of box experience for a new service device to change behavior

Class 14 10/21		BJ Fogg's Behavior Model Project topics, working session - remember those behaviors you have been tracking?
Class 15 10/23		Working session Plan Research
Class 16 10/28		Review Research & findings
Class 17 10/30		Ideation & cheatstorming ***Introduce Project 5***
Class 18 11/04		Concept evaluation and planning Review opportunity frameworks Review storyboards Pre-production - box creation, sequencing *Team worksheets for Project 5*
Class 19 11/06		Interim critique Basic filmmaking *Team assignments for Project 5*
Class 20 11/11		Working session *Project 5 - Behavior change mechanisms & metrics*
Class 21 11/13		Working session - finalize your box *Project 5 - Finalize behavior to change* *Project 5 - Recruit participants*

Unit 5: Evaluating Behavior Change

Changing behavior with real people

Class 22 11/18		**Critique Project 4 - final project videos & boxes** Project 5 - Finalize Behavior Change hypothesis, nudges Project 5 - Finalize technology to gather data Project 5 - Finalize study design
Class 23 11/20		Working session on data gathering Begin running study
Class 24 11/25		Analysing data - begin report as data comes in
Class 25 11/27		Recruit more people into study - alternative hypothesis or control group
BREAK		**THANKSGIVING**
Class 26 12/02		Share out results so far & pivot / refine study as needed Begin research paper
Class 27 12/04		Begin data analysis and hypothesis of results so far
Class 28 12/09		Working session on final report, analytics, findings, research paper
Class 29 12/11		**Final class** **Project 5 presentations - teams**

* All activities and topics subject to change.

Required and Recommended Books and Resources

Nearly all of the course readings are on the Internet and can be freely downloaded.

Required texts:

- Don Norman. *The Design of Everyday Things*, Basic Books, 2002
- Richard Thaler & Cass Sunstein. *Nudge*, Penguin, 2008

The following are not required but highly recommended. Chapters from these books will be shared as PDF files.:

- Jeff Johnson. *Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Rules*, Morgan Kaufmann, 2010
- Dan Saffer. *Microinteractions*, O'Reilly Media, 2013
- Bill Scott & Theresa Neil. *Designing Web Interfaces*, O'Reilly, 2009
- Nir Eya. *Hooked*, Portfolio, 2014
- Djajadiningrat et al.. "But how, Donald, Tell us How?"
- Controls, Baummann
- Transitional Interfaces on Medium.com: https://medium.com/@pasql/transitional-interfaces-926eb80d64e3
- Johnston and Thomas. *The Illusion of Life: Disney Animation*, chapter 3
- Basic Principles of Animation: http://en.wikipedia.org/wiki/12_basic_principles_of_animation
- This UI isn't a Disney Movie https://startupsventurecapital.com/your-ui-isn-t-a-disney-movie-703f7fbd24d2

Optional Readings:

- Billinghurst, M., Kato, H. and Poupyrev, I. (2001). "MagicBook: Transitioning between Reality and Virtuality," CHI Extended Abstracts
- Case, Amber (2016), *Calm Technology: Principles & Patterns for Non-Intrusive Design*, O'reilly Media
- Dourish, P. (2004). *Where the Action Is*, MIT Press

- Dunne, A., and Raby, F., Design Noir: *The secret life of electronic objects*, Birkhauser, 2001. (Sec 2 "Hertzian Space" pp. 15-43), (Sec 5 "The Secret Life of Electronic Objects" pp. 75-90).
- Hannington, B., and Martin, B. (2012). *Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions*, Rockport.
- Hurff, Scott (2016). *Designing Products People Love*, O'Reilly Media.
- Igoe, T., and O'Sullivan, D. (2004). *Physical Computing: Sensing and Controlling the Physical World with Computers*.
- Kolko, J. (2011), *Exposing the Magic of Design: A Practitioner's Guide to the Methods and Theory of Synthesis*.
- Kolko, J. (2010), *Thoughts on Interaction Design*.
- Kuniavsky, Mike (2010), *Smart Things: Ubiquitous Computing User Experience Design*, Morgan Kaufmann
- Moggridge, B. (2007), *Designing interactions*, MIT press