

Design for Interactive Media

USC School of Cinematic Arts, CTIN 541

Meeting Times: Wednesdays 1-3:50pm, SCI L114

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Course Description:

This course introduces students to core skills in interactive design, including conceptualizing interactive systems, prototyping, playtesting and managing an iterative design process to meet specific and meaningful experience goals for users. The overarching themes of the class are:

Preparation – Developing a vocabulary of interactive design concepts and formal elements of interactivity, deep analysis of interactive systems, focusing on the player/user experience, study of prior art.

Process - Setting experience goals, ideation techniques, brainstorming, prototyping methods, playtesting, iterative design, specification, presentation.

Practice - Developing & exercising skills, initiating projects, follow through, giving and taking critique.

Partnership – Developing a collaborative mindset, communication skills, sharing authorship, managing yourself and others.

The course approaches interactivity as a participatory art form, with the designer's goal to provide a specific and meaningful experience for the users and to respond quickly and creatively to feedback during the design process. During the course of the semester, the exercises and assignments primarily focus on developing low- and non-technical prototypes of interactive concepts, experimenting with games, improvisational theater, fine arts, toys, interactive narrative, and real and virtual play spaces.

A central purpose of this course is to give students the opportunity to explore various types of design strategies, to discover their own strengths and interests, and to provide them with a wide repertoire of techniques upon which to draw in the future. In addition, the course will introduce students to the "playcentric" design methodology practiced in the Interactive Media division, encouraging them to develop a focus on the central user experience that anchors their design process.

This is a studio class and a large part of the class content will focus on in-class discussion, critique and problem solving for individual projects. As such, it is imperative

that students treat the development of their design projects professionally and bring requested milestones to class on time, ready to present. Students will be expected to participate actively in all discussions and critique sessions, giving and receiving feedback of the highest quality.

Throughout this class, students are encouraged to take risks and to look beyond prior art, in-class examples and common wisdom to explore new and different design ideas. In many cases, students will be assigned to work in partnerships or teams and the quality of students' participation within these groups is of great importance – perhaps as important as the final project. Interactive media in all forms is a collaborative discipline and learning to communicate, share workload, learn from and help others excel is a core value in this field.

Meeting Information:

SCI 114L

W 1:00-3:50PM

Units: 2

Pre-requisites: Open to IMD M.F.A. students and iMAP Ph.D. students only.

Assignments & Texts:Written Analysis & Ideation Assignments

- Simple system analysis 1-2 pgs, due week 2
- Board game system analysis 3-5 pgs, due week 3
- System treatment 3-5 pgs, due week 4

Prototype Projects

- Up the River variation, due week 6
- Meaningful play prototype, due week 9
- Narrative play 1st prototype, due week 12
- Digital prototype (co-assigned as 534 final project), testable version due week 15 and final build during finals week

Collaboration Assignment

- Skill sharing, due week 13

Course Texts

Game Design Workshop 3rd Edition: A Playcentric Approach to Creating Innovative Games by Tracy Fullerton

Designing Interactions by Bill Moggridge

These texts are available in the USC bookstore or online at Amazon.com and BarnesandNoble.com. Additional readings listed in the syllabus will be available as handouts in class or as digital files on the course website.

Course Website

Evaluation and Grading:

Participation	5
Simple system analysis	5
Board game system analysis	10
System treatment	10
Up the River variation	15
Meaningful play prototype	15
Narrative play prototype	15
Digital prototype	15
Skill sharing	10
Total:	100

Course content by class meeting

Week 1: Overview of the class – introduction to each other, discussion of course goals and themes: preparation, process, practice and partnership, assign collaboration partners for skill sharing assignment, intro to systems thinking, analysis of simple systems.

Reading for Week 2: GDW Chapters 1 – 3, Moggridge Foreword, Introduction
Analysis Assignment 1: Written analysis of simple system – **due week 2**
Collaboration Assignment: Choose someone from whom to learn a skill, someone to whom to teach a skill (presentation of skills is due week 15)

Week 2: Formal elements of interactive systems – discuss outcome of simple system analysis, deconstructing Set, Connect 4, Tic Tac Toe, looking at more complex interactive systems, discovering the “play” in a system, assign play groups for board game analysis.

Reading for Week 3: Rules of Play Ironclad essay, GDW Chapter 6
Analysis Assignment 2: Board game analysis – **due week 3**

Week 3: Experience goals and ideation techniques – discuss outcomes of board game analysis, intro to brainstorming techniques, in-class practice, discuss turning ideas into systems.

Reading for Week 4: GDW Chapter 7, 14, Moggridge Chapter 10 - People and Prototypes
Analysis Assignment 3: System treatment – **due week 4**

Week 4: Prototyping strategies – discuss outcomes of system treatments, intro to prototyping techniques, asking design questions, getting the most out of prototypes, playing and analyzing Up the River, assign design teams for Up the River variation assignment.

Reading for Week 5: GDW Chapter 12, 13
Prototype #1: Up the River variation – **due week 6**

Week 5: Team building, planning, communication – discuss agile development, collaboration skills.

Reading for Week 6: GDW Chapters 5, 9, Moggridge Chapter 1 – Tim Mott interview

Week 6: Playtesting and the iterative process -- playtest & critiques of Up the River variations, guest critique.

Reading for Week 7: DeKoven The Well Played Game, Forward - Chapter 1; Bogost “Persuasive Games;” Norman, Emotional Design – Three Teapots

Week 7: Meaningful play – expressive elements of interactive systems, levels of engagement, serious games, values in play mechanics, Grow-a-Game exercises, ideation for meaningful play prototype. (Indiecade this week!)

Reading: New Games Book, “It Began with WWII;” “Sustainable Play” in Games and Culture, Fullerton, Pearce, Fron and Morie
Prototype #2: Meaningful play – **due week 9**

Mid-term conferences (by appointment)

Week 8: Public play – pervasive games, “big” games, theater games, and improvisation exercises.

Reading for Week 9: GDW Chapters 10-11, Moggridge Chapter 4 - David Liddle interview, David Kelley interview

Week 9: Design Iteration – setting and reaching user experience goals -- playtest & critique meaningful play prototypes, guest critique.

Reading for Week 10: GDW Chapter 4, Moggridge Chapter 5 – Will Wright interview, Rules of Play Chapter 26 – Games as Narrative Play

Week 10: Narrative play – systems of storytelling, “narrative toys”, recombinant narrative exercises, in-class brainstorming for narrative play prototypes, design groups assigned for prototypes.

Reading for Week 11: Moggridge Chapter 8 – Hiroshi Ishii interview, Bill Gaver interview; Swink, Game Feel, “Defining Game Feel”
Prototype #3: Narrative play project 1st prototypes – **due week 12**

Week 11: Creating agency – designing levels of player control, affordances of controls, in-class play experiments with various control types, discussion of progress on narrative play prototypes.

Reading for Week 12: GDW Chapter 8, Swink, Game Feel, “Input Metrics”

Week 12: From paper to digital prototypes – playtest & critique of narrative prototypes, specifications and thoughtful implementation of design.

Reading for Week 13: GDW Chapter 15, 16
Prototype #4: Digital prototype (534 projects) – **due week 15**

Week 13: Working as a designer – discussion of areas of opportunity for designers, presentation of skill sharing assignment outcomes.

Week 14: Thanksgiving holiday – no class

Week 15: Formal playtesting – usability process, playtest & critique of digital prototypes (534 final projects), class wrap-up.

Finals week: Final game builds, playtesting notes and semester post-mortems due.

Missing an Assignment Deadline, Incompletes:

The only acceptable excuses for missing an assignment deadline or taking an incomplete in the course are personal illness or a family emergency. Students must inform the professor before the assignment due date and present verifiable evidence in order for a make-up to be scheduled. Students who wish to take incompletes must also present documentation of the problem to the instructor or teaching assistant before final grades are due.

Attendance Policy:

Punctual attendance at all classes is mandatory. Students arriving late or leaving early will be marked absent from class. The following guidelines are from the Interactive Media Division handbook regarding absences and grading and apply to all students.

Guidelines for absences affecting grading

- Two unexcused absences: lowers grade one full grade point
- Three unexcused absences: lowers grade two full grade points
- Four or more unexcused absences: request to withdraw from course (instructor's discretion)

Excused absences are:

- Illness (with a doctor's verification)
- Family or personal emergency (with verification)

Note for students with disabilities:

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to us as early in the semester as possible. DSP is located in STU 301, and is open 8:30am - 5:00pm Monday through Friday. The phone number for DSP is (213) 740-0776.

Academic Integrity:

The School of Cinematic Arts expects the highest standards of academic excellence and ethical performance from USC students. It is particularly important that you are aware of and avoid plagiarism, cheating on exams, submitting a paper to more than one instructor, or submitting a paper authored by anyone other than yourself. Violations of this policy will result in a failing grade and be reported to the Office of Student Judicial

Affairs. If you have any doubts or questions about these policies, consult “SCAMPUS” and/or confer with the instructor.

Instructor Bio:

Tracy Fullerton, M.F.A., is an experimental game designer, associate professor and chair of the Interactive Media & Games Division of the USC School of Cinematic Arts, where she directs the Game Innovation Lab. This design research center has produced several influential independent games, including *Cloud*, *fIOW*, *Darfur is Dying*, *The Misadventures of P.B. Winterbottom*, and *The Night Journey*, a collaboration with artist Bill Viola. Tracy is the author of “Game Design Workshop: A Playcentric Approach to Creating Innovative Games,” a design textbook in use at game programs worldwide, and holder of the Electronic Arts Endowed Chair in Interactive Entertainment. Recent projects include *Future Bound*, a suite of college preparation games funded by the Department of Education, the Gilbert Foundation and the Gates Foundation; *Participation Nation*, a history and civics game funded by the Corporation for Public Broadcasting and developed in collaboration with Activision-Blizzard and KCET; and *Walden*, a simulation of Henry David Thoreau’s experiment at Walden Pond. Prior to entering academia, she was a professional game designer and entrepreneur making games for companies including Microsoft, Sony, MTV, among many others. Tracy’s work has received numerous honors including an Emmy nomination for interactive television, Indiecade’s “Sublime Experience,” “Impact,” and “Trailblazer” awards, and Time Magazine’s Best of the Web.