Design for Interactive Media

USC School of Cinema-Television, CTIN 541

Instructor: Tracy Fullerton

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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 core “playcentric” design methodology practiced in the Interactive Media division, encouraging them to develop a focus on the core 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:
Zemeckis Media Lab
M 6:30-9:30PM

Units: 4
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 3
• Board game system analysis 3-5 pgs, due week 4
• System treatment 3-5 pgs, due week 5

Prototype Projects
• Up the River variation, due week 6
• Serious play prototype (based on 505 research), due week 10
• Recombinant narrative prototype, due week 12
• Digital prototype (co-assigned as 534 final project), versions due weeks 14 and 15

Collaboration Assignment
• Skill sharing, due week 13

Course Texts

Game Design Workshop 2nd Edition: A Playcentric Approach to Creating Innovative Games by Tracy Fullerton

Designing Interactions by Bill Moggridge

These texts are available 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
http://www.kinojabber.com/541

Evaluation and Grading:

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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: GDW Chapters 1 – 3, Moggridge Foreword, Introduction
Analysis Assignment 1: Written analysis of simple system – due week 3
Collaboration Assignment: Choose someone from whom to learn a skill, someone to whom to teach a skill (presentation of skills is due week 13)

**Week 2:** Labor Day – no class

**Week 3:** 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: Rules of Play Ironclad essay, GDW Chapter 6
Analysis Assignment 2: Board game analysis – due week 4

**Week 4:** Experience goals and ideation techniques – discuss outcomes of board game analysis, intro to brainstorming techniques, in-class practice, discuss turning ideas into systems

Reading: GDW Chapter 7, Moggridge Chapter 10 - People and Prototypes
Analysis Assignment 3: System treatment – due week 5

**Week 5:** 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: GDW Chapters 5, 9, Moggridge Chapter 1 – Tim Mott interview
Prototype #1: Up the River variation – due week 6

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

Reading: GDW Chapter 4, Moggridge Chapter 5 – Will Wright interview

**Week 7:** Meaningful play – expressive elements of interactive systems, levels of engagement, serious games, values in play mechanics, Grow-a-Game exercises, ideation for serious play prototype

Reading: DeKoven The Well Played Game, Chapter 1; “Sustainable Play” in Games and Culture, Fullerton, Pearce, Fron and Morie
Prototype #2: Serious play – due week 10

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

Reading: GDW Chapter 8, Moggridge Chapter 8 – Hiroshi Ishii interview, Bill Gaver interview

Mid-term conferences (by appointment)

**Week 9:** Creating agency – designing levels of player control, affordances of controls, in-class play experiments with various control types, discussion of progress on serious play prototypes (505 papers due this week)
Reading: GDW Chapters 10, 11, Moggridge Chapter 4 - David Liddle interview, David Kelley interview

**Week 10:** Design Iteration – setting and reaching user experience goals -- playtest & critique serious play prototypes, guest critique

Reading: Rules of Play Chapter 26 – Games as Narrative Play

**Week 11:** Narrative play – systems of storytelling, “narrative toys”, recombinant narrative exercises, in-class brainstorming for recombinant narrative prototypes, design groups assigned for prototypes

Reading: GDW Chapter 8, 13, 14
Prototype #3: Recombinant narrative – due week 12

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

Reading: GDW Chapter 12
Prototype #4: Digital prototypes (534 final projects) – due week 14

**Week 13:** Team building, planning, communication – discuss agile development, collaboration skills, presentation of collaboration assignment outcomes

Reading: Norman, Emotional Design – Three Teapots

**Week 14:** Formal playtesting – usability process, playtest & critique of digital prototypes (534 final projects)

Reading: GDW Chapter 16

**Week 15:** Working as a designer – guest speaker & critique, discussion of areas of opportunity for designers, class wrap-up

**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 band 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 a game designer, educator and writer with fifteen years of professional experience. She is currently and Associate Professor in the Interactive Media Division of the USC School of Cinematic Arts. Tracy is the author of Game Design Workshop: A Playcentric Approach to Creating Innovative Games, a design textbook in use at game programs worldwide. Recent credits include faculty advisor for the award-winning student games Cloud and f10w, and game designer for The Night Journey a unique game/art project with artist Bill Viola. Prior to joining USC, she was president and founder of the interactive television game developer, Spiderdance, Inc. Spiderdance’s games included NBC’s Weakest Link, MTV’s webRIOT, The WB’s No Boundaries, History Channel’s History IQ, Sony Game Show Network’s Inquizition and TBS’s Cyber Bond. Before starting Spiderdance, Tracy was a founding member of the New York design firm R/GA Interactive, Creative Director at the interactive film studio Interfilm and a designer at Robert Abel’s early interactive company Synapse. Notable projects include Sony’s Multiplayer Jeopardy! and Multiplayer Wheel of Fortune and MSN’s NetWits, the first multiplayer casual game. Tracy’s work has received numerous industry honors including an Emmy nomination for interactive television and Time Magazine’s Best of the Web.