

Syllabus

Course Info

4D Design: Interactivity (Flash)
7100 311-801(78766)
Fall 2011
Tuesday/Thursday 5:20pm - 8:05pm
Folk 126
Final Exam Time: Thursday, Dec 8 6:00 - 7:55pm

Catalog Description

Students are introduced to interactivity, user-interaction, time-based and on-screen design with a focus on design principles and concerns of type, image, audio, video, animation and physical computing.

Full Description

Students in this course develop an understanding of interactivity as it applies to time-based user interaction and principles of on-screen design. The primary objective of this course is to establish an understanding of user-interaction and interactivity. Students apply their design skills of type and image to screen solutions while incorporating audio and video as essential design elements.

In any design problem there are significant possibilities with the elements of a design, such as typography, illustration and photography. 4dimensional design offers additional time-driven elements such as animation, audio, video and physical computing as well as user-influenced elements like navigational structures or user-defined elements like sequencing and navigation. This course develops an understanding of interactivity as it applies to time-based user interactions. Students apply those principles to on-screen design solutions and try to translate these solutions via custom code. The primary objective of this course is to establish an understanding of user-interaction and interactivity as it pertains to interface design, user interactions and basic coding principles. The principles discussed in this course can be applied to the fields of user-interface design, interface design, interaction design, game design, web design, presentation design, small screen interfaces and even exhibition design.

This is a 50% Lecture and 50% Lab Class. Students should expect equal time of lecture and open labs. During open labs (dates listed on the schedule) students are expected to come prepared with project materials to work on in class. Lectures could be comprised of lecture, presentations, discussions or critiques.

Students are required to spend an additional **5 hours per week** on development of projects **outside of class time**.

Additionally

This course will introduce the fundamental aspects and process of designing for a digital media, incorporating a balance of problem solving/conceptual abilities with technical/computer software skills (code). The underlying goal of the course is to conceptualize, develop and implement innovative communication experiences for a range of pragmatic applications for the web and on screen. A critical aspect is to apply previously learned design skills (concepts, structure, typography, two dimensional design principles) to a time based and interactive media. An expected outcome is an understanding of space(3D) and time(4D) and the influence these factors have on traditional two dimensional design. Audio, video and animation are new elements to incorporate into the concept and design phases along with previously learned elements like point, line & plane, typography, illustration and photography. This is a programming course as much as it is a design course. All students will be

expected to research and develop their own solutions. There will be significant open lab time during our scheduled class time. As well, there is a requirement of 5 additional hours per week of outside class development time. We will be using primarily Adobe Flash for our final solutions, though this is not an absolute requirement. Students can choose to pursue other programming solutions such as Processing, corona, arduino or openframeworks. Other Java and HTML/Javascript based solutions may be presented during class for discussion. We will be working in Actionscript 3.0 for functionality, and possibly branch out to processing and arduino.

All students will be encouraged to pursue original work and individual interpretation of homework assignments.

Except for typography and music, students will be required to produce and develop all elements of every project. Found art, illustration, photography, animation, video, narration and sound effects can only be used in brainstorming and concept phases of a design and must be replaced in the design stage of the project with the students original work. All stages must be thoroughly documented. Any acquired final music must be credited within the piece. On occasion found art, animation or video and audio may be permitted for use in final work. These elements must be approved by instructor and credited in the final piece.

Course Objectives

- express narratives through text-based and text / image combinations
- visually depict and communicate intended interactive design (i.e. - printed material for story boarding, timeline presentation for critique/review, site map layout and user experience)
- organize, outline and depict information for a comprehensive interactive document project process and present in a structured and communicative format (i.e. - story boarding, site map and structured content management and recovery aspects)
- create visually engaging and meaningful sound, time, motion integration for communication
- create simple interaction using cues and signals
- communicate in time and space
- integrate previously learned design skills to the realm of 4D interactive design
- demonstrate an understanding of Actionscript 3.0 principles
- demonstrate an ability to write and edit an Actionscript 3.0 document

Prerequisites:

Junior or Senior standing in Graphic Design. 7100:280, 7100:289, 7100:387 or by permission.

NOTE: This is an upper level course with an intense workload.

Required Supply List

- removable flash, jump drive or USB transfer drive, 2GB minimally
- sketchbook, wirebound, 5x7 or 7x10
- lined notebook or graph paper

Highly Suggested

- digital still camera, 6mpxl minimally
- digital video camera
- ipad

Online Resources

- <http://www.flashkit.com>
- <http://www.kirupa.com/developer/flash>
- <http://www.tutorialized.com/tutorials/Flash>
- <http://www.actionscript.org>
- <http://www.lynda.com>
- Flash Support Center at: <http://www.adobe.com/support/flash/>
- Loop, AIGA Journal of Interaction Design at: <http://loop.aiga.org>
- Application help menu, documentation and online support sites

Required Text

There are no required texts at this time. It is recommended to research and explore existing texts related to the topic of interactive and linear time-based design as well as technical Flash manuals.

It is highly recommended for students to purchase an Actionscript 3.0 only or Actionscript/Flash tutorial book. These continually change. A list will be on our course website of approved texts.

Course Web Site - <http://markusvogl.com/4D>

Course Materials will be provided through download
All projects will be presented in class.

Projects

The class is comprised of a total of ten homework assignments and three 'open' projects.

The final grade is based on the following:

project 1 =	250pts
project 2 =	350pts
project 3 =	400pts
TOTAL =	1000pts
ParticipationCredit =	[50pts]

Resubmissions

Unless otherwise noted, project resubmissions will be accepted up to the final Instructional day of the semester. No late submissions will be accepted after this date.