

CREATIVE COMPUTING

explorations in screen-based and physical

COURSE WEBSITE

computationalart.org/talk/wordpress (and computationalart.org to review the websites for versions of this course with an emphasis on computational art that were offered in spring 2007 and spring 2008).

COURSE DESCRIPTION

This course offers a playful introduction to the fundamentals of computing and programming through prototyping, exhibiting, and critiquing interactive visualizations and physical creations that the participants will design, build and refine during the course. Through weekly projects students gain extensive experience with the PROCESSING programming language and its various extensions for incorporating rich data sets available on the web, and the PICOBBOARD and LOGOCHIP development kits for an introduction to prototyping interactive physical systems. The PROCESSING section of this course is designed to serve as conceptual and practical preparation for learning programming languages such as Java and ActionScript. The PICOBBOARD and LOGOCHIP section of the course is intended as an introduction to electronics and programming microcontrollers for prototyping interactive physical systems incorporating rich sensors and actuators. This section begins with a simple activity that also introduces the participants to a graphical programming language called SCRATCH.

COURSE PREREQUISITES

General experience with Macintosh or Windows systems

COURSE DATES AND MEETING TIMES

The first meeting will be on Monday, January 26. The last class meeting will be on Monday, May 11. Final project presentations will be on Thursday, May 14. The required meetings for this course are scheduled for 7:35-9:35 pm on Mondays & Thursdays. The lectures and discussions will be generally planned for Mondays so that Thursdays can be dedicated to tutorials and studio times. The first meeting will take place at 51 Brattle Street in Room 123/5. In the event that our room assignment changes, we will update the course website. Please check the course web site for information about meeting locations if you miss the first meeting.

COURSE STAFF

Instructors, Bakhtiar Mikhak <mikhak@mediamods.com> and Erik Blankinship <erikb@mediamods.com>, will be teaching all sections for this course.

TEXTBOOKS AND OTHER RESOURCES

The course makes use of the following three textbooks, available at the COOP and fine booksellers everywhere. These texts will be treated mostly as reference works. Some reading may be assigned, but for the most part these are included to support your work outside of scheduled class time.

1. [P5] Processing: A Programming Handbook for Visual Designers and Artists (Hardcover)
by Casey Reas (Author), Ben Fry (Author)
2. [VD] Visualizing Data (Paperback)
by Ben Fry (Author)
3. [PC] Getting Started with the LOGOCHIP (a collection of notes that will be provided online and/or in class)

Please consult the instructors about the additional fees associated with the hardware portion of the course.