

Core Studio 1: Interaction

Fall 2007 : CRN 2523 - PUDT 1100 - Section B



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Introduction

Welcome to the Design and Technology curriculum. *Core Studio 1: Interaction* introduces you to the foundation of this field and department, preparing you for subsequent Core Studios and the studio curriculum in general. The course assumes that in order to function as a designer or artist in this century, a basic literacy of the following is required:

- ★ History of Media, Art and Computing
- ★ Design Methods
- ★ Web Publishing
- ★ Interaction and Graphics Programming

We will traverse these subject areas through an interdisciplinary approach weaving together lectures, exercises, brief and extended studio projects. Principles of design will be woven into discussion and critique. In some cases, the course will supplement, reinforce, or augment the topics covered in other courses you may be taking. Technical, historical and science-fiction readings are required within the following textbooks, available at the New School bookstore (Barnes & Noble, 18th & 5th), direct from the publishers, or at your favorite discounter:

William Gibson, *Pattern Recognition*, Berkley, 2003, (2005 paperback).

Casey Reas & Ben Fry, *Processing: A Programming Handbook for Visual Designers and Artists*, MIT Press, 2007.

Noah Wardrip-Fruin & Nick Montfort (ed.), *The New Media Reader*, MIT Press, 2003.¹

¹ Where possible, articles assigned in the *NMR* will be provided as PDF files, making the purchase of this text optional, but a suggested addition to your library.

Policies & Requirements

Attendance

Per standard University policy, four (4) absences may constitute a failure. Failing to attend a mid-term or final critique will result in a Withdrawal-Failure (WF) grade, no exceptions. Tardiness may be applied towards your absence record. Consider both your horizontal and vertical commute.

Class Participation

Being an active member of the course is essential and constitutes a percentage of your final grade. You are expected to conduct the assigned readings, exercises, and projects, provide verbal feedback to your peers during all critiques, and offer comments and questions during the discussion of readings and related topics.

Website Publishing

All students are required to maintain a website on your Parsons server to organize and archive all of your projects for all of your classes, throughout your academic career. All Core Studio 1 course assignments must be published according to the organization standard defined by the instructor. Students are welcome to use weblog software to automate and streamline the publishing of their ongoing work.

Software & Hardware

Students are encouraged to use their own laptop during certain class sessions. Consult the instructor if you are not able to obtain a laptop. The course will focus on using free and open source software tools, but in certain cases will use commercial software. Students should take advantage of software suites offered in the University labs, or consider taking advantage of academic discounts to obtain their own licenses.

Grading & Evaluation

Students will receive ongoing verbal critique during class session. At mid-term, students will receive a written mid-term evaluation with an unofficial letter grade and brief written comments on their standing in the class, including their attendance record. Final grades will be calculated based on the following criteria:

- ★ 25% class participation
- ★ 25% website
- ★ 25% midterm evaluation
- ★ 25% final critique

Projects

Students will present two projects formally during the semester. At mid-term, students will present a Code project that incorporates the study of Processing during the first part of the course. Student websites will also be evaluated at mid-term. For the final project, presented during the last days of the semester, students will complete a William Gibson project, (to be discussed), or will self-design an alternative concept.

Praxis

Praxis, as defined by Aristotle, refers the process of putting theory into knowledge. The course is conducted in various modes, including lecture, studio and seminar. During lectures, students are presented with demonstrations that will be supported by laboratory style exercises and reinforcement. During studio sessions, students will present their work for instructor and peer critique. During seminars, readings will be discussed, and class participation is essential.

Units	Sub-topics	Readings, Assignments
Web		
1. Basics	HTML, CSS, UNIX, Layout, Organization	Start building your http://a.parsons.edu/~user/
2. Memex	Semantic Web, parsons.edu, WordPress, Blogger, Delicious, Digg, others	Bush, <i>As We May Think</i> , NMR Berners-Lee, <i>The World Wide Web</i> , NMR
3. Synthesis	Embedding media: Processing, Flash	Preliminary course site
Processing		
1. Introduction	Software as art Code as design Learning through play Example walk-through Programming Basics	<i>Processing Handbook</i> Foreword Preface Processing... Using Processing Structure 1 Shape 1 Data 1 Math 1 Control 1 Control 2 Shape 2
2. Color, Image, Type	Manipulating color, bitmap images, text and typography	Color 1 Image 1 Data 2 Typography 1
3. Process	Iteration Continuity Functions Parameters Recursion Examples	Development 1 Synthesis 1 Structure 2 Structure 3 Shape 3

Units	Sub-topics	Readings, Assignments
4. Interaction	Mouse Static Forms Keyboard Events Debugging	Input 1 Drawing 1 Input 2 Input 3 Input 4 Development 2
5. Response	Input and Reaction Examples Movement Machine, Organism Complex Data Animation Pixels Typographic Motion Responsive Type	Interview 1 Synthesis 2 Interview 2 Motion 1 Motion 2 Data 4 Image 2 Image 3 Typography 2 Typography 3

Flash

1. Introduction	<i>Sketchpad</i> recap Workspace Objects Symbols + Library SWF publishing	Gibson, <i>Pattern Recognition</i> Additional readings from NMR to be announced.
2. Timelines	Frames Keyframes Tweens Labels Simple Actions	Prototype an experiential interaction based on <i>Pattern Recognition</i>
3. Interactions	Buttons Mouse Events Camera Microphone	Implement interactions
4. Loading	LoadMovie Preloading	Focus on production
5. Onward	ActionScript 3 Flash Lite	

All assignments, exercises, and experiments must be posted, with source code links on embedding pages to <http://a.parsons.edu/~username/core1/>

Calendar

Subscribe to the Google calendar for the course, provided by your instructor to follow the schedule and deadlines for the semester. Locate CDT department and Parsons academic and event calendars to add to your subscriptions. With the exception of key mid-term and final critique dates, some aspects of the course timeline are subject to change, as the instructor gauges the classes mastery of the topics.

Presentation & Critique

During the ongoing, in-class critiques, students are expected to present from their school websites, use PowerPoint or Keynote slides, or present their work in standalone Processing or Flash projector applications. At the mid-term and final critique, students must deliver polished, final products in the form of either permalinks, or downloadable applications from their course website. In addition, students will need to submit their work to the CDT departmental archive at <http://archive.parsons.edu> in the form of documentation, screenshots and links.