COURSE INFORMATION

Course Number: DM-2102-01
Course Title: Data Multi-sensory Representation Friday
Class Hours: 08AM - 01PM
Instructor - Kyuha Shim (qshim@risd.edu)
TA - TBA

COURSE DESCRIPTION

We are living in a data-driven world and data can tell us stories about our lives. The aim of this class is to introduce different ways of seeing things through data and computational processes. In the realm of art, design and technology, we will explore diverse ways to represent data through both analog and digital means and domains. We will discuss the full process of data mapping and visualization with various mediums. We will investigate different types of data sets and format categories (text/number, sound/image, linear/nonlinear, spatial/non-spatial) with both analog and digital mediums. Students will complete a series of short projects and one final project. Students will learn Nodebox 3, which is based on Python. By deconstructing and rearranging data, each student will practice how to creatively use data as a narrative tool for his/her concepts. The course will be comprised of studio time, collaborative workshops, viewing sessions, and discussions based on references and readings introduced in the course.
Key issues: Decision making in visualization; Finding patterns and setting up rules; Translating data into information; Choice of aesthetics and medium. No prior programming experiences is required.
Download Nodebox 3 - http://nodebox.net/node/

READING

Required Books
- Peter Hall, Else/Where: Mapping
- Edward R. Tufte, The Visual Display of Quantitative Information

Recommended Books
- Manuel Lima, Visual Complexity: Mapping Patterns of Information
- Sven Ehmann, Data Flow
- Sven Ehmann, Data Flow 2
- Stephen Ramos, New Geographies 1
- Noah Iliinsky and Julie Steele, Designing Data Visualizations
- Carsten Nicolai, Cyclod Id
- Ben Fry, Visualizing Data

SYLLABUS

WEEK 1 - FEB 15
introduction
discussion of objectives, reference books and
examples of data visualization works
in-class programming practice : Nodebox 3 + Python

WEEK 2 - FEB 22
overview of many different programming languages
and what we can do with those.
in-class programming practice : Nodebox 3 + Python

* Research assignment
Data artists and designers
WEEK 3 - MAR 01
presentation : research assignments
in-class programming practice : Nodebox 3 + Python

WEEK 4 - MAR 08
presentation : research assignments
in-class programming practice : Nodebox 3 + Python

*Assignment no.1
Data visualization with Nodebox
*** HELP SESSION

WEEK 5 - MAR 15
presentation : assignment no.1
in-class data art workshop : Generative Text

WEEK 6 - MAR 22
presentation : research assignments
in-class data art workshop : Lego Parametric Modeling

*Assignment no.2
Translating film to tangible object
*** HELP SESSION

WEEK 7 - MAR 29
presentation : assignment no.2
in-class data art workshop : Matrix & Raster

WEEK 8 - APR 05
presentation : research assignments
in-class data art workshop : Tangible Data with Tape

*Assignment no.3
Drawing : various data layers in space
*** HELP SESSION

WEEK 9 - APR 12
presentation : assignment no.3
presentation : final project proposal

WEEK 10 - APR 19
in-class work and review of final project

WEEK 11 - APR 26
in-class work and review of final project

WEEK 12 - MAY 03
in-class work and review of final project

WEEK 13 - MAY 10
in-class work and review of final project

WEEK 14 - MAY 24
Final Crit

ASSIGNMENTS

There will be a final review of the three small projects and the final project on the last day of class. Students will be expected to present and print their projects showing the result of the works and development done throughout the semester. Each student will upload 4 pages of documentation of their works and descriptions on the class blog.

ATTENDANCE POLICY

Because participation in group discussions and collaborative assignments during workshop sections are an important part of the course any unexcused absences will affect your grade. More than two unexcused absences and you risk failing the course. If you need to be absent for any reason, please give the instructor advanced notice. Please see http://www.risd.edu/Policies/Academic/Class_Attendance/ for more information.

ACADEMIC CODE OF CONDUCT

Student work is expected to follow RISD's Academic Code of Conduct. Please see http://www.risd.edu/Policies/Academic/Code_of_Conduct/ for more information.

GRADING

30% - Final assignment
30% - Assignment 1, Assignment 2, Assignment 3
20% - Class Participation / Workshop
10% - Research Assignment
10% - Attendance