

Curriculum Review: Electronics Projects II : SP26

I. Introduction of the content:

- Electricity Review
- Arduino and Processing start

II. Programming Concepts: the Arduino and C:

- Scaling and sending analog data via serial port
- Functions, Loops: For loops, While loops
- Piezo disk audio examples (theremin, etc.)

III. Continuing Programming Concepts:

- Arduino-Processing interaction, functions (again)
- Key press, mouse, serial sloth, etc.
- Light sensors, bend sensor, etc.
- binary numbering
- Voltage divider

IV. Flow Control Programming:

- Pd (puredata)
- Max
- Introduction and Starting examples

V. Programming environment comparison and hardware:

- Servo motors
- Voltage divider (again)
- Object Oriented Programming (OOP)

VI. Interactivity Project:

- Choosing software for interaction
- Tangible User interface -"fiducials"
- OSC, "Face OSC", data over networks
- Cell phone apps

VII. Data Visualization intro:

- Mapping data, "Screen scraping", etc.

VIII. Visiting Artist: John Henry Thompson

IX. In-class Work day:

X. Reflections Proj. Descriptions and success of final projects