

## First Week

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### First Class

Thursday, September 25th, 2008

#### Lecture/ Demos

- Getting To Know You  
We're going to take some pictures...
- Basic Concepts
- Safety

#### Assigned Reading

- Todbot Course Guide, Class 1  
[http://todbot.com/blog/wp-content/uploads/2006/10/arduino\\_spoopy\\_projects\\_class1.pdf](http://todbot.com/blog/wp-content/uploads/2006/10/arduino_spoopy_projects_class1.pdf)
- Soldering Tutorial Video & links  
<http://electromac.wordpress.com/2008/07/22/soldering-tutorials-and-arduino/>

#### Outside Project

- Assignment #1: Acquire junk motors, switches, electronic noise-making toys and/or keyboards.

## Second Week

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### Second Class

Tuesday, September 30th, 2008

#### Lecture/ Demos

- Intro to Basic Electricity
  - DC vs. AC
  - Volts, Amps, Ohms, & Ohm's Law
  - Reading Schematics
  - State Machines

#### In Class Project

- Practice Soldering

#### Assigned Reading

- Circuit Bending  
<http://www.anti-theory.com/soundart/circuitbend>
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#### Outside Project

- Writing Assignment: Artist Report

### Third Class

Thursday, October 2nd, 2008

#### Lecture/ Demos

- Circuit Bending 1

#### Assigned Reading

- Getting Started with Arduino  
[http://www.tinker.it/en/uploads/v3\\_arduino\\_small.pdf](http://www.tinker.it/en/uploads/v3_arduino_small.pdf)

## Third Week

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<b>Fourth Class</b>	Tuesday, October 7th, 2008
<b>Lecture/ Demos</b>	<ul style="list-style-type: none"><li>• Circuit Bending 2</li><li>• Working with Junk</li><li>• Circuits</li><li>• Knobs &amp; Potentiometers</li><li>• Sound Chips</li></ul>
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #2: Circuit Bending</li></ul>
<b>Due</b>	<ul style="list-style-type: none"><li>• Assignment #1: Collected Electronic Toys &amp; Junk</li></ul>

<b>Fifth Class</b>	Thursday, October 9th, 2008
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #2: Circuit Bending continued</li></ul>
<b>Assigned Reading</b>	<ul style="list-style-type: none"><li>• Arduino Getting Started <a href="http://arduino.cc/en/Guide/MacOSX">http://arduino.cc/en/Guide/MacOSX</a> or <a href="http://arduino.cc/en/Guide/Windows">http://arduino.cc/en/Guide/Windows</a></li><li>• Todbot Course Guide, Part 1 (reread) <a href="http://todbot.com/blog/wp-content/uploads/2006/10/arduino_spooky_projects_class1.pdf">http://todbot.com/blog/wp-content/uploads/2006/10/arduino_spooky_projects_class1.pdf</a></li><li>• Digital i/O <a href="http://arduino.cc/en/Tutorial/HomePage-0007">http://arduino.cc/en/Tutorial/HomePage-0007</a> (links on digital input and outputs)</li></ul>

## Fourth Week

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<b>Sixth Class</b>	Tuesday, October 14th, 2008
<b>Lecture/ Demos</b>	<ul style="list-style-type: none"><li>• Demo Arduino hookup and basic programming</li></ul>
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #3: LED Sequencer</li></ul>
<b>Due</b>	<ul style="list-style-type: none"><li>• Assignment #2: Circuit bending</li></ul>
<b>Seventh Class</b>	Thursday, October 16th, 2008
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #3: LED Sequencer Continued</li></ul>
<b>Assigned Reading</b>	<ul style="list-style-type: none"><li>• Arduino Analog I/O <a href="http://arduino.cc/en/Tutorial/HomePage-0007">http://arduino.cc/en/Tutorial/HomePage-0007</a> (links on analog input)</li></ul>

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## Fifth Week

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<b>Eighth Class</b>	Tuesday, October 21st, 2008
<b>Lecture/ Demos</b>	<ul style="list-style-type: none"><li>• Interactive Devices 1: Sensors</li><li>• History of Kinetic &amp; Machine Art 1: Pre-Computer</li></ul>
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #4: Sensing Sequencer</li></ul>
<b>Due</b>	<ul style="list-style-type: none"><li>• Assignment #3: LED Sequencer</li></ul>

<b>Ninth Class</b>	Thursday, October 23rd, 2008
<b>Lecture/ Demos</b>	<ul style="list-style-type: none"><li>• Interactive Devices 2: multi-state machines</li></ul>
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #4: Sensing Sequencer Continued</li></ul>

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## Sixth Week

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<b>Tenth Class</b>	Tuesday, October 28th, 2008
<b>Lecture/ Demos</b>	<ul style="list-style-type: none"><li>• It's Midterm!</li><li>• Crit Assignment #4: Sensing Sequencer</li></ul>
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #5: More Interactivity</li></ul>
<b>Due</b>	<ul style="list-style-type: none"><li>• Assignment #4: Sensing Sequencer</li></ul>

<b>Eleventh Class</b>	Thursday, October 30th, 2008
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #5: More Interactivity Continued</li></ul>

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## Seventh Week

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<b>Twelfth Class</b>	Tuesday, November 4th, 2008
<b>Lecture/ Demos</b>	<ul style="list-style-type: none"><li>• DC Motors, fans, solenoids &amp; switches</li><li>• Chaotic vs. Rhythmic Structures &amp; Movement</li></ul>
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #6: Servo Circuits</li></ul>
<b>Due</b>	<ul style="list-style-type: none"><li>• Assignment #5: More Interactivity</li></ul>

<b>Thirteenth Class</b>	Thursday, November 6th, 2008
<b>In Class Project</b>	<ul style="list-style-type: none"><li>• Assignment #6: Servo Circuits Continued</li></ul>

**Eighth Week**

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**No Class** Tuesday, November 11th, 2008  
Veteran's Day

**Fourteenth Class** Thursday, November 13th, 2008

**Lecture/Demos** • Sensors & Motors

**In Class Project** • Assignment #7: Sensing Servo

**Due** • Writing Assignment  
• Assignment #6: Servo Circuits

**Ninth Week**

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**Fifteenth Class** Tuesday, November 18th, 2008

**Lecture/Demos** • History of Kinetic & Machine Art in the 20th Century, Part 2: Post Computers

**In Class Project** • Assignment #7: Sensing Servo Continued

**Sixteenth Class** Thursday, November 20th, 2008

**In Class Project** Final Assignment: Combining Techniques

**Due** • Assignment #7: Sensing Servo

**Tenth Week**

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**Seventeenth Class** Tuesday, November 25th, 2008

**In Class Project** • Final Assignment: Combining Techniques Continued

**No Class** Thursday, November 27th, 2008  
Thanksgiving

**Eleventh Week**

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**Eighteenth Class** Tuesday, December 2nd, 2008

**In Class Project** • Final Assignment: Combining Techniques Continued

**Nineteenth Class** Thursday, December 4th, 2008

**Final Assignment Crit**

**Open Studios** Friday, Noon to 4:00pm, December 5th, 2008

**Final Assignment Installed**