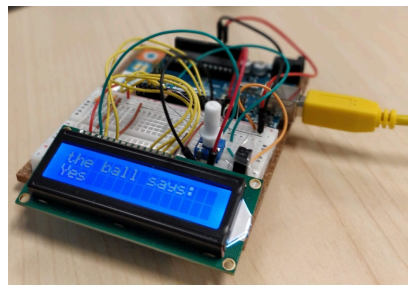


Updated Activities:

<https://lib.uvic.ca/ard>

Programmable Electronics with Arduino



Pre-class activities: 15 minutes

Face-to-face presentation: <https://goo.gl/6BaeTh>

Activities & Instructions - Virtual Arduino Activities

- Resize Handouts for Your Laptop Screen (2 min) - <https://youtu.be/lgk5hZUfzN0>
- Hello World: <https://bit.ly/36vk46L>
- Love-o-Meter: <https://bit.ly/3lBlwJ8>
- Light Theremin: <https://bit.ly/3mxsGQ9>
- 2M Covid Sensor: <https://bit.ly/3gYayj2>
- Lucky 8-ball: <https://bit.ly/3lxcixH>

Activities & Instructions - Face-to-Face Arduino Kit Activities

- Hello World: <https://goo.gl/8Qtysv>
- Love-o-Meter: <https://goo.gl/pHBEc1>
- Temperature Controlled Servo: <http://bit.ly/2CBxiTF>
- Lucky 8-ball: <https://goo.gl/y6CtRb>
- Electronic Die: <http://bit.ly/2X7MJbX>
- Light Theremin: <https://goo.gl/Lc11GQ>

Learning outcomes

Participants will be able to do the following by the end of this orientation:

- A. Be able to discuss a range of problems Arduino can help solve including digital humanities problems (Arduino possibilities & limitations).
- B. Know basic electronic principles including sensors and switches.
- C. Cut and paste programming, with minor modifications to existing code.



- D. Be able to wire up projects using a solderless breadboard.
- E. Build the “Hello World” project for Arduino: Blink project.
- F. Be able to form a simple circuit of their choice with a switch and output:
- G. Know where to find other projects and tutorials for learning how to program Arduino.

Step 1: Pre-Class Videos, Readings, & Exercises

25 minutes or less.

- For the Virtual Workshop, create a Tinkercad account - <https://tinkercad.com>
- For an in Library workshop, download Arduino IDE - <https://www.arduino.cc/en/Main/Software>
- [A] An Introduction to the Arduino (5 min) - <https://www.youtube.com/watch?v=CqrQmQqpHXc>
- [AG] Problems Arduino can solve (AKA Cool Arduino Projects) (3 min) - <https://goo.gl/kEpCsJ>
- [DEF] Virtual Arduino: Circuits.io (2 min) - <https://goo.gl/Qf4dJk>
- [B] Arduino Cartoon Introduction (10 min) - <https://bit.ly/3zC5A0e>

Step 2: Pre-Class Preparation Quiz

- <http://bit.ly/2OEFyaJ>

Step 3: In-Class Active Learning Activities & Instruction

120 minute session. Presenter slides: <https://goo.gl/6BaeTh>

1. Hello World: <https://goo.gl/8Qtysv>
2. Love-o-Meter: <https://goo.gl/pHBEc1>
3. Light Theremin: <https://goo.gl/Lc11GQ>
4. Lucky 8-ball: <https://goo.gl/y6CtRb>
5. Electronic Die: <http://bit.ly/2X7MJbX>
6. Temperature Controlled Servo: <http://bit.ly/2CBxjTF>

Post Class Assessment & Course Feedback

- <https://bit.ly/dsc-eval>

