

## BlueStamp Build Plan

**Name:** Ryerson B

**Location:** New York City

**Instructor:** Kevin Veerasammy

**Main Project:** Ariel's 3-Joint Robotic Arm with Gripper (Project #219)

### Major Steps:

- 1) Ensure that all parts have arrived.
- 2) Draw a schematic that shows all wires that must be connected.
- 3) Connect one of the servos and one of the knobs to the arduino. **MILESTONE:** Program the arduino so that the servo turns when the knob is turned. Save all design files and record video of progress.
- 4) Design all required mechanical parts in google sketchup. Have a staff member check them and ask to get the parts made.
- 5) **MILESTONE:** Finish connecting the rest of the servos and knobs to the arduino and make sure they are working properly.
- 6) Assemble all mechanical parts of the arm.
- 7) **MILESTONE:** Connect the arduino to the servos that are mounted on the arm. Check to see if everything is working properly.
- 8) Finally, create a blog post that describes the final project, create full documentation, and upload everything to the web page.

### Possible Modifications:

- 1) Add another degree of freedom (allow for base rotation)
- 2) Add a small camera to view what the gripper is picking up
- 3) Configure controls so that arm moves with key presses