ARTS&SCI/ISCI 3IE1 / Interdisciplinary Experiences: "Electronics for the Rest of Us!"

Course Description
To most of us, the workings of the electronic devices that accompany (and enable!) our everyday lives often seem mysterious and opaque -- an area of concern for only the most qualified ‘techies’. Though a basic understanding of electronics and programming is generally viewed as a core competency for 21st century success, these topics remain intimidating, as they often appear inaccessible to many students from non-technical disciplines. This doesn’t have to be the case. The development and widespread availability of inexpensive, user-friendly and well-documented electronics -- such as the Arduino -- has made learning and developing these skills accessible (and dare we say, even fun) for students of every age. Such resources now make it possible for even the most inexperienced student to create with electronics, while simultaneously reaping the educational benefits associated with the application of logic and rules to make cool stuff.

Over the span of 5 classes, students will be introduced to the world of simple electronics and programming, and will have an opportunity to develop their skills by designing and building an electronic device of their choice.

Course Details:
**Instructors:** Dale Askey & Jay Brodeur
**Schedule:** Classes will take place on Tuesdays from 7-9pm on the following dates: January 7, 21; February 4, 25; March 11, 18
**Location:** Classes to take place in Mills library: either in Sherman Centre or Wong Classroom

**Space Availability:**
- Out-of-class workspace (and extra materials) will be made available to students in Sherman Centre during normal business hours, though students will be free to work on their projects where they choose.

**Required Costs:**
For this course, each student is required to purchase and use the following Arduino starter kit:

With taxes and shipping, estimated costs are between $65 and $70

**All students are required to purchase this kit on their own**, and have it at the time of the first class. Therefore, **orders should be placed by** December 10th to ensure timely delivery.

**Assessment and Course Deliverables:**
The class will have 5 components, all graded on a pass/fail basis. Students must pass all components to pass the course.
- Student will develop their project proposal and present it during the second session. The oral presentation should be accompanied by a short (1 page maximum) written proposal, which also contains a specification list.
• As a means of documenting progress and reflecting on the experience, students should create a minimum of 2 blog posts on their project, which will be shared on a public webspace.
• During the final session, students will present their final deliverables to the class and submit a 1-page reflection of their experience via a final, summative blog post.