Introduction to Physical Computing Fall 2016, Feddersen   Wednesdays 12:10-2:40 (Except week 6*)   jfeddersen@gmail.com
Course site: http://itp.nyu.edu/physcomp/   917 435 7844
Section site: https://itp.nyu.edu/physcomp/itp/sections/jeff-feddersen-fall-2016/

Goals: We'll learn how to use microcontrollers – the smallest, simplest devices that can execute programmable digital logic – to create things that fit the humans that use them. We'll learn a bit about electricity, basic circuits, programming, sensors, and the ways digital devices communicate. We'll put that knowledge to work in a midterm due week 8, and we'll carefully plan and execute a second more ambitious final in the second half of the semester.

This schedule is a synopsis for reference *only*. Please see the full syllabus for all details on assignments, readings, etc.

Class #	Date	Topic	Tasks for the *following week*	Blog	Reading
1	Sep 7, 2016	Introductions	Get parts, set up doc site	*What is Interaction?*	Yes
2	Sep 14, 2016	Electricity	Electronics Labs; **Quiz 1**	Lab doc	Yes
3	Sep 21, 2016	Microcontrollers, Digital I/O, Analog Input	Digital I/O + Analog Input labs, **Quiz 2**	Lab doc, *Observation*	Yes
4	Sep 28, 2016	Analog Output	Analog Out Labs + catch up, **Quiz 3**	Lab doc	None
5	Oct 5, 2016	Review & Reading Datasheets	Catch up on labs and documentation	Lab doc	Yes
6*	10/14/2016*	Asynchronous Serial 1 **(note date)**	Serial Labs, **Quiz 4**, start midterm	Lab doc	None
7	Oct 19, 2016	Asynchronous Serial 2	Serial Labs, continue midterm	Lab doc, midterm doc	None
8	**Oct 26, 2016**	**Project Presentations Midterms Due**	Final project concept	*Final concept*	None
9	Nov 2, 2016	Final project planning	Build 'paper' prototype, make test plan	*Plan, BOM, Timeline*	Yes
10	Nov 9, 2016	Playtesting	Update project plans based on playtesting	*Revise final docs*	None
11	Nov 16, 2016	Power electronics	Work on final	*Revise final docs*	None
	Nov 23, 2016	*Thanksgiving holiday, no class*			
12	Nov 30, 2016	Serial 3: I2C and SPI	Get final project ready for user testing	*Progress report*	None
13	Dec 7, 2016	User testing	Prepare final and presentation	*Finalize project docs*	None
14	**Dec 14, 2016**	**Project Presentations Finals Due**			

* I have a conflict in week 6, and have rescheduled the class for the following Friday October 14, at 9AM. Please contact me if you can't make that class

Guidelines: Be curious, ask questions, be courteous to other students, do the work, be on time.

Grading: 30% In-class lab work and participation
               20% Midterm
               30% Final project
               20% Blog & documentation