Apps4Ed Programming Workshop

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**Educational Technology 0858-7230002, Spring 2015**

**Keywords:** app development, javascript, programming, mlearning, ipad, iphone, android, html5, cordova, phonegap

**Description:** Students will design and create mobile educational apps using industry-standard tools: Balsamiq for wireframes; Github for project management; and jQuery, Backbone/Underscore, and Bootstrap for Javascript programming. We will convert our code to native mobile apps using Cordova, targeting Android and iOS. Some web development and CS experience required.

# Schedule, format, & session leaders

| Session | Date | Format | Topic |
| --- | --- | --- | --- |
| 1 | 1/28 | in person | Foundations of Open Education |
| 2 | 2/4 | online | Doing “open learning” |
| 3 | 2/11 | in person | Deschooling |
| 4 | 2/18 | online | Ignorant Schoolmaster |
| 5 | 2/25 | in person | Connected Learning |
| 6 | 3/4 | online | Free Software/Open Source Software |
| 7 | 3/11 | in person | Peer production |
| *Spring break* | 3/18 | - | - |
| 8 | 3/25 | in person | Free Culture & Open Content |
| 9 | 4/1 | online | Open Education Resources |
| 10 | 4/8 | in person | The Commons |
| 11 | 4/15 | online | Wikipedia |
| 12 | 4/22 | in person | MOOCs: Massively Open Online Courses |
| 13 | 4/29 | online | The Future University (MOOCs and More) |
| 14 | 5/6 | online | Resisting Open Education |
| 15 | 5/13 | in person | Wrap-up |

# Class sessions

## Week 1.0: Design

The very first assignment is to create the design and pitch for your mobile app.

*due end of day Wed, 1/7*

## Week 1.5: Tools

We are going to use a diverse set of tools for our app development, and you must have them up and running quickly (by the end of the first week).

## Week 2.0: Models

## Week 2.5: Views

## Design & Tools

* initial designs in balsamiq
* can compile and run basic app for Android and XCode
* modify basic app

## UI: HTML/CSS/Bootstrap

* html code for major screens, no functions yet

## Javascript and jQuery

* click and other events
* showing and hiding elements
* reading data, updating elements

## JS Objects & Data Structures