

The Knowledge House
BXL Bronx Business Incubator
1231 Lafayette Ave, Suite 2L
Bronx, NY 10474
TheKnowledgeHouse.org



Course Syllabus: Intro to Computer Science Fall 2015

Instructor: Tunisia Mitchell

Meeting Time: Tuesdays and Wednesdays, 1:03-1:48pm

Class Location: Bronx High School for Visual Arts, Rm 220

Office Hours: TBD

Instructor's Email: tmitchell@theknowledgehouse.org

Overview of The Knowledge House

The Knowledge House builds an education to employment pipeline in under-served neighborhoods by empowering young people with the 21st century skills needed to launch careers and ventures that will have an uplifting impact in their communities. We provide technology education, career development, and job resources to underutilized young adults.

Course 1: Intro to Computer Science: HTML, CSS

Course Description: Intro to Computer Science: HTML, CSS is part one of our three unit flagship program, Tech-Entrepreneurship. This course will allow the participant to understand common computing principles, how code is used to build solutions by learning the basics of front-end web programming using HTML and CSS, and be challenged to think computationally. By the end of the course, the student will understand technology from a software engineer's point of view, construct functional websites, have a developer portfolio, and gain marketable skill sets that can be used and transformed within the present and future job market.

Attendance and Preparation: This course is project-based. Students will be expected to complete the projects assigned and to have full attendance/participation in all classes.

Skills Included, but not Limited To:

Understand Basic Computing Principles; Understand the Functionality of a Programming Language; Basics of HTML, CSS, UX/UI; Bootstrap; Build Websites; Time Management; Problem Solve: Programmatically; Problem-Solve: Socially; Teamwork; Learn how to Search for Computer Related Issues; Create Repositories, Share Code;

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Public Speaking; Written and Verbal Communication; Multi-tasking; Project Management; Project Completion

Final Project: Students will create a social good product in the form of a five-page website that would provide and/or attempt to provide a solution to a problem found within their community. Following topics include, but not limited to: policing, environmental justice, relationships, food/desert, and gang violence.

Course Materials: During this course, we will be using the following:
Mac OS (provided)
Sublime Text 3
Axure

Goals:

Understand Technology: Uses and Possibilities

- General understanding of tech
- Real-world practices
- Broader scope of job sector

Understand the Web:

- What is Web 101
- Why and how was the web created
- What has the web transformed to
- Where is the web leading

Understanding Programming: Uses and Creation

- Learn the basics of computer science
- The possibilities of what one can do with programming
- Design layouts
- Design website
- Build websites: individually and pair programming
- Learning how to find your niche
- Teamwork and Accountability



Course Schedule

November: Weeks of Nov. 16th, 23rd and 30th = 5 classes

Goal: Web 101: Explore what the web is and how it's changing; tools needed to create what's on the web; jobs associated with tech; understanding what a programming language is; installing software: text editor; make GitHub account; and learn the basics of HTML

Nov. 17th

Review the syllabus

Understand Computer Science and Web 101

Complete Survey

Nov. 18th

Review Computer Science

Jobs Aligned with Tech

Navigate Sublime

Basics of HTML

Do "Hello World"

Nov. 23rd*

Basics of HTML and CSS

Create one page portfolio site

Nov. 24th

Create Github Account

Review Github

Polish One Page "Portfolio" Site

Push Project to GitHub

HW: Review HTML terms

Nov. 30th*

Learn public speaking principles

Public Speaking Practice

Dive into HTML

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HW: Review HTML terms and practice pitch for Portfolio website

December: Weeks of Nov. 30th, Dec. 7th, 14th, and the 21st = 7 classes

Goal: Learn public speaking principles, dive into HTML, build individual and team websites, learn GitHub, create repositories, share code, learn the basics of UX/UI, and learn the basics of CSS

Dec. 2nd

Showcase work to class *Pitch Presentations*

Review Social Good Requirements

HW: Write down three possible topics you would choose for your final project

Dec. 7th*

GitHub exercise and connect

Review Team Website

Team Website: Select from HW

Basics of CSS

Revise Portfolio Site

Dec. 9th

Importance of UX/UI

Learn Axure

Team Website: Design the home page

Dec. 15th(Linda Stern out)

Final Project Selected

Review Web Resources

Team Website: Assign/Design the rest of the pages

HW: Name three features you wish to implement within your team website

Dec. 16th

Team Website: Create structure via Sublime

Begin Inputting Content to Websites

Q & A

HW: Sketch layout for Final Project

Dec. 22nd

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Final Project: Design layout for website
Continue inputting content to website
Fill out Public Speaking Document
Dec. 23rd
Polish website
Practice pitch
HW: Review/Practice Presentation Pitch

January: Weeks of Jan. 4th, 11th, and 18th = 6 classes
Goal: Continue with user experience and user interface and construct 5-page website

Jan. 5th
Team Website: Presentations
Review What We've Learned, What We're Good At

Jan. 6th
Review Bootstrap
Final Project: Finish Layout via Axure

Jan. 12th
Lab Hour: Build pages

Jan. 13th
Lab Hour: Build pages
HW: Begin preparations for your *pitch presentation*, bring questions to class

Jan. 19th
Lab Hour: Build pages
Polish website
HW: Prepare for your *pitch presentation*

Jan. 20th
Presentations