

Coding for Creatives Syllabus

Miami Ad School

April 2018

M. Paul Weeks

Week 1

- Explain class structure, goals, grading
- How the internet works
 - DNS
 - Servers and IP
 - Routers and Local IP
 - Frontend vs Backend, "static files"
- Working with GitHub
- Introduction to HTML
- Introduction to CSS
- Demo Chrome dev tools

Homework

- Biography page

Week 2

- Explain source control
- Relative vs absolute URLs
 - Hotlinking
- Inline styles
- Fonts
- Browser cache and cache busting
- HTML Layout
 - The "row" eg `<div>`, `<p>`, `<h1>`
 - The layers eg styles on `<body>`
- Linking to a JS file

Homework

- Reading about basics of UX
- Blog page with working comments section

Week 3

- Discuss reading
- Indentation and good coding habits
- Favicon
- HTTP vs HTTPS
 - Encryption and Decryption
 - Man-in-the-Middle attacks
- Multiple pages with a shared banner

Homework

- Multi-page Portfolio site with interconnected links, reusing the same CSS

Week 4

- `<meta>` properties and social links / previews
- Introduction to JS
 - Function calls
 - Numbers vs Strings
 - Variables
 - Syntax
- Introduction to Canvas

Homework

- Website with a picture, painted using JS

Week 5

- Introduce jQuery
- Deeper dive on JS
 - Defining functions
 - jQuery to manipulate CSS
 - jQuery to listen for user clicks
 - Tracking state with variables
 - Conditionals
 - `$(this)`

Homework

- Reading about modern technology and AI
- Website with JS-powered interaction to change the visuals

Week 6

- Discuss reading
- CSS transitions
- Mobile design

Homework

- Website that displays well on both desktop and mobile

Week 7

- Explaining Botnets and DDoS
- What happens when I'm hacked?
 - Extortion via Hacking
- CSS animations

- `<audio>` elements
- Embedding YouTube and `&autoplay=1`

Homework

- Jukebox website
- Begin planning Final projects

Week 8

- URL Params
- Setting up your own project/web page hosted by GitHub
- Meeting 1-on-1 to discuss Final proposals

Homework

- Begin working on Final Project

Week 9

- Starting a software business
 - Protecting IP
 - Contractors vs Fulltime Developers
 - Equity as Compensation
 - Tech Recruiting
- Setting up DNS vs Hosting
- Meeting 1-on-1 to review Final drafts

Homework

- Finish the Final Project

Week 10

- Present Final Project in class