1. semester WU Spring 2016 – Frontend Development.

Lecture Plan

Date:	Lecture title	Content and exercise	Preparation
Lecture no. 1 Introduction week (5)	Thinking like a designer	Introduction to thoughtful design and making bad ideas good by Jonas Löwgren.	[Löwgren] p xi – 13
Lecture no. 2 week 6	Typography and lessons from Bauhaus on how to express style.	Why typography matters. How it affect the user and where fonts come from.	[Dikun] videos 19 min [Murrey] [Doyle] [Mayor]
Lecture no. 3 week 7	HTML and CSS	Document Object Model (DOM) CSS selectors, importance, specificity and inheritance Box model Floating layout Browser compatibility issues	[HTML]: Ch. 1-3 + 6 [PLURAL-WEB]: Ch. 1-3: • Introduction, • HTML • Cascading Style Sheets Videos: 4h 15min [W3C-HTML] [W3C-CSS]
Lecture no. 4 week 8	Responsive Web Design	Fluid grid, flexible images, media queries, viewport meta tag Mobile First Semantic HTML(5) CSS3 transitions and animations	[RESPONSIVE]: Ch. 1-4 [MOBILE]: All five levels/videos [PLURAL-HTML] (1hr 49 mins) [PLURAL-CSS] Ch. 1 (CSS Transition Fundamentals) (25 mins)

Date:	Lecture title	Content and exercise	Preparation
Lecture no. 5 week 9	Colours to set the mood.	What are colours, colour codes and how do they work. The Basics of web navigation by Steven Krug.	[Dikun] videos 16 min [Price] video 23 min [Krug] p.55 – 83
Lecture no. 6 week 11	JavaScript	HTML forms DOM events IIFE and scope Debugging CSS manipulation JavaScript objects (Revealing) Module Pattern	[PLURAL-WEB]: Ch. 4 (JavaScript) (1hr 41 mins) [PATTERNS]: • What is a pattern? • Module Pattern • Revealing Module Pattern
Lecture no. 7 week 13	jQuery	Animations AJAX jQuery design patterns jQuery plugins	[PLURAL-JQUERY] (1hr 40 mins)
Lecture no. 8 week 14	JavaScript tools	Node.js npm Bower Gulp	[PLURAL-WEB]: Ch. 8 (Node.js), Module 1 and 2 (Node.js introduction and Node Package Manager) [PLURAL-GULP]: Ch. 1-4

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			[PLURAL-BOWER] Ch. 1-3
Lecture no. 9 week 15	Rules of thumb and gestalt principles to create composition.	Balancing a layout by using gestalt laws and best practices described by Tim Dikun and Steven Krug.	[Dikun] videos 11 min [Johnson] p. 1 – 51 [Krug] p. 11 – 47
Lecture no.10 week 16	CSS preprocessors	Sass CSS grid system Mixins, functions, variables, nesting, inheritance, importing, partials, operators	[SASS]
Lecture no.11 week 17	CSS frameworks	Bootstrap grid system UI components Customising Bootstrap with Sass	[BOOTSTRAP] Ch. 1-3
Lecture no.12 week 18	JavaScript frameworks	Differences between a library and a framework Basic AngularJS principles (view, controller, service, $scope, $http)	[NG] [PLURAL-NG]
Lecture no. 13 week 22	Semester Recap	Exam topics Repetition of course before exams Exercise: Mock exam (Exercise: Tabular presentations.)	[Krug] p. 111 – 141 and p. 173 – 181

Literature you must buy
[Krug]: Steven Krug – *Don't make me think (2014 edition)*
[HTML]: Goldstein et al: *HTML5 & CSS3 for the Real World*, Sitepoint

Videos
[Dixon]: Tim Dikun: Fundamentals of design: (http://design.codeschool.com/levels/1) //Requires Code school login!!
[Price]: Andrew Price: Understanding Color: (http://www.blenderguru.com/tutorials/understanding-colors/)
[PLURAL-WEB]: Introduction to Web Development (https://app.pluralsight.com/library/courses/web-development-intro/table-of-contents)
[PLURAL-HTML]: Semantic HTML (https://app.pluralsight.com/library/courses/semantic-html-2329/table-of-contents)
[PLURAL-CSS]: CSS Animation with Transition and Transform (https://app.pluralsight.com/library/courses/css-animation-with-transition-and-transform/table-of-contents)
[PLURAL-JQUERY]: jQuery: Getting Started (https://app.pluralsight.com/library/courses/jquery-getting-started/table-of-contents)
[PLURAL-GULP]: JavaScript Build Automation With Gulp.js (https://app.pluralsight.com/library/courses/javascript-build-automation-gulpjs/table-of-contents)
[PLURAL-BOWER]: Bower Fundamentals (https://app.pluralsight.com/library/courses/bower-fundamentals/table-of-contents)
[MOBILE]: Journey into Mobile (https://www.codeschool.com/courses/journey-into-mobile)
[SASS]: Assembling Sass (https://www.codeschool.com/courses/assembling-sass)
[PLURAL-NG]: Angular: The Big Picture (https://app.pluralsight.com/library/courses/angular-big-picture/table-of-contents)
[NG]: Shaping Up With Angular.js (https://www.codeschool.com/courses/shaping-up-with-angular-js)

Articles will be available on Fronter:
[Dixon]: Matthew Dixon: *The Effortless Experience*
[Johnson]: Jeff Johnson: *Designing with the Mind in Mind chp. 1 - 4*
[Löwgren]: Jonas Löwgren og Erik Stolterman: *Thoughtful interaction design*
[JS]: Darren Jones: *JavaScript: Novice to Ninja*, Sitepoint
[RESPONSIVE]: Craig Sharkie & Andrew Fisher: *Jump start Responsive Web design,* Sitepoint
[BOOTSTRAP]: Syed Fazle Rahman: *Jump start Bootstrap*, Sitepoint

Articles available online:

[Doyle]: John R. Doyle and Paul A. Bottomley: *Font appropriateness and brand choice*

        http://course1.winona.edu/cmalone/stat110/Font_Appropriateness_and_Brand_Choice.pdf

[Mayor]: Dan Mayor: *What Font Should I Use? Five Principles for Choosing and Using Typefaces*

        http://www.smashingmagazine.com/2010/12/what-font-should-i-use-five-principles-for-choosing-and-using-typefaces/

[Murrey]: Six Lessons form the Bauhaus: *Masters of persuasive Graphic*:

        http://blog.visual.ly/six-lessons-from-the-bauhaus-masters-of-the-persuasive-graphic/

[W3C-CSS]: Inheritance and cascade

        https://www.w3.org/wiki/Inheritance_and_cascade

[W3C-HTML]: HTML Common content models

        https://www.w3.org/TR/html-markup/common-models.html

[PATTERNS]: Learning JavaScript Design Patterns

        https://addyosmani.com/resources/essentialjsdesignpatterns/book/