

Syllabus: Foundations of Web Design and Development

CE 9506C/N 01 | Summer 2014

Continuing Education

Course Information:

Location: Terra – Room 1223

Dates: Mon | Jun 2 – Aug 4 | 6 – 9 PM

Note: There will be a possible guest speaker talking about working as a web development team member. S/he will also talk about real world expectations and duties when within a design team. Date TBA.

Instructor Information:

Name: Anthony Robertson

Email: zensmile@gmail.com

Email Policy: If your question/concern is of a personal/private nature, I encourage you to contact me via email. I schedule email hours, Tu, F-Su 6 – 9 PM, and will respond to your emails at that time, if not sooner.

If your question/concern relates to course content or homework, I ask that you email me no later than the EVENING BEFORE class. Email regarding a homework assignment will get a better and more helpful response a few days before class than at 8:45 PM on the evening before we meet

Instructor Bio: Eighteen (18+) years of web production experience working at design boutiques, government information technology departments, and within information services departments in higher education. Currently a technology lead and front-end designer at the University of Pennsylvania Perelman School of Medicine. Duties include: HTML5/CSS3/responsive static web production, common user interface design for rapid application development, search engine administration and maintenance, SEO and UI/UX leadership, CMS integration and administration, and social networking integration. You can find more professional details on my LinkedIn page... <http://www.linkedin.com/in/zensmile> or subjective details and social networking here... <http://www.anthony-robertson.com>.

Course Description:

This class offers a high-level overview of the infinite possibilities available to creatives who seek to use the web as their medium of choice. Discussions, readings, and a real-world hands-on approach to the subject matter allow students to explore the web as a creative outlet for both designers and developers. This course culminates with a simple website design project, wireframes and schematics, individual presentations, and a formal critique.

* At the completion of the course, students are required to take a skills test in Adobe Photoshop + Illustrator to determine if their level of aptitude is sufficient in order for them to progress in the Certificate program. Students who fail to meet the minimum requirements of the proficiency test are required to take the remedial courses, Adobe Photoshop Weekend + Adobe Illustrator Weekend.

Pre-requisites:

There are no prerequisites for this course; however, to ensure success, it is recommended that students have a solid working knowledge of the MAC OS X.

Course Overview

This course presents a comprehensive overview of the basic ideology, technologies, and principles of web creation. Through readings, lectures, homework assignments, and many hours of practice, students will learn the primary ideology, software tools, basic project management, and techniques used in modern web design and development.

Over ten classes this course will provide an overview of a web development project lifecycle: requirements gathering, project planning, architecture, wireframes, design, layout, development, troubleshooting, browser testing, and launch. The course will include a course-long project in requirements gathering, web site planning, wireframing, WordPress, HTML5, and CSS (design, layout, and placement). Lectures will explore the roles of programs in the Adobe Creative Suite, other software tools, high-level discussions of coding languages like JavaScript, PHP, ASP, Ruby, xHTML(5), and how various frameworks play into real-world web design projects. Students will have two lab-like classroom and homework activities that will culminate in valid, well-formed, and standards-based code. Through these coding exercise, the students will gain an understanding of the many components of a modern and functional web site and how the pieces work together.

Course Objectives/Learning Objectives:

At the end of this course, students will be able to:

- Identify XHTML/HTML5/CSS and create a basic page with these languages
- Write valid, well-formed, scalable, and semantically correct HTML5 and/or CSS
- Position web page elements using Cascading Style Sheets
- Identify the types of images used in modern web design and explain what types are appropriate for different functions
- Gather and utilize digital media from various sources
- Gather client requirements, identify target audiences, and explain critical actions needed in a successful website on a myriad of devices, viewports, and platforms
- Use the gathered requirements to create and utilize a wireframe to further plan a website design
- Create a file structure that will support a scalable and modular website
- Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites
- Work within a modern content management system (CMS), specifically WordPress
- Recognize the various tools to plan, design, code, and share projects/documents
- Understand the role of the primary dynamic languages of modern web development and explain how they are used
- Understand basic usability, user experience, and accessibility principles

COURSE RESOURCES

Software

Documents in this course will be presented in Adobe Portable Document Format (PDF) where possible. You will need Adobe Reader to view these files, which you can obtain free at <http://get.adobe.com/reader/>.

Homework and prototypes will be presented in MS Word, JPG, PDF, and/or HTML/CSS (.html or .css) formats. While the class will focus on the Adobe Suite, we will discuss third party and free/open source tools, broken down by platform, that are also used in many modern production environments.

Coursework will be completed using the Adobe Suite (Photoshop, Illustrator, and/or Dreamweaver) and/or a text editor. We will thoroughly discuss tools throughout the course, so knowledge of specific tools is not required for entry into the course. If students do not have the Adobe Suite of programs they can work in the campus lab.

Textbook(s) and Files

Each class will have a reading assignment that can be gleaned from the instructor's class site and in the book and web guide listed below. Each reading should take no longer than 30 minutes to an hour. There will be code examples that can be downloaded from the instructor's class site in .zip archive format. These articles, book chapters, and code examples will be the building blocks for your weekly homework assignments. Class slides will be available via download, also as a PDF and/or .zip archive.

- Designing for Emotion - \$9 (ebook) - <http://www.abookapart.com/products/designing-for-emotion>
- HTML & CSS Book - ~\$20 (softcover book) - <http://htmlandcssbook.com>
- Web Style Guide, 3rd Edition – free (online edition) - <http://www.webstyleguide.com/wsg3/index.html>
- Universal Usability, Access by Design – free (online edition) - http://universalusability.com/access_by_design/
- Designing for the Web – free (online edition) - <http://designingfortheweb.co.uk/>

Additional Course Materials | Supplies

Students are highly encouraged to purchase a USB drive with a minimum memory capacity of 2GB and come prepared with it to each class session and have a Dropbox.com or similar “cloud” account for backup purposes.

COURSE ACTIVITIES

Readings

We will read approximately one or two hours of web design theory topics and production strategies each week. The readings will cover basic aspects of design, usability, user experience, accessibility, and/or the web design and development project lifecycle.

Presentations and Homework

Most weeks there will be an instructor presentation related to the readings, lesson plan, and/or homework. You are expected to complete all readings and homework *before* the weekly in-class presentation. **Late homework will not be accepted.**

Quizzes

Students will be required to complete five “no-pressure quizzes.” These quizzes will consist of approximately five to ten questions and/or performance-based exercises based on the readings, homework, and/or presentations.

Assignments

There will be weekly assignments for this course. Students may be called upon to present homework in class for instructor and peer review. Students will be presented with any assignment-specific files and prototypes for mark-up and code review.

COURSE POLICIES**Student Feedback/Communication**

I welcome all feedback on the course. My preferred method of communication with individual students is via email. Students are offered the opportunity to complete an official mid-semester evaluation of the course. This evaluation is traditionally delivered and completed electronically at the beginning of the fifth class session.

If you experience a legitimate emergency (according to my standards) which will prevent you from completing required coursework on time, I expect you to communicate with me at the earliest reasonable opportunity. Please state the nature of the emergency and when you expect to turn in the coursework.

Submitting Electronic Files

All electronic files must be submitted in the required formats. When using HTML, please name your files using the following convention: index.html for the home page, and subsequent pages should NOT contain spaces. Please use underscores or dashes instead of a space. For example, sub_page1.html.

Attendance

Attendance is mandatory and essential to your performance. The information needed to complete assignments properly will be given in class. As a student in this course, it is your responsibility to make certain you obtain information covered should you miss a class session. *Previously absent students must come to the following class with all of the appropriate work due for that day.* All students are expected to **arrive to class on time and remain present for the duration of the class.** Be aware that tardiness and early dismissals will accumulate in absences.

2 absences = lowered grade

2 late arrivals/early dismissals = 1 absence

30 minutes late arrival/early dismissal = 1 absence

Students who withdraw from a course must do so in writing. Nonattendance does not constitute an official withdrawal.

UNIVERSITY POLICIES:**Academic Honesty/ Integrity Policy**

Violations of academic integrity are considered to be acts of academic dishonesty and include (but are not limited to) cheating, plagiarizing, fabrication, denying others access to information or material, and facilitating academic dishonesty, and are subject to disciplinary action. To review the **Academic Honesty/ Integrity Policy** in its entirety, please visit:

<http://cs.uarts.edu/ce/policies#academichonesty/integritypolicy>

ACT 48 Activity Hours

To have ACT 48 Activity Hours for this course reported to the Pennsylvania Department of Education (PDE) you must complete and return the CE Request for Activity Hours Submission Form to the UArts Continuing Studies Office and meet all requirements outlined by the PDE.

Student Code of Conduct

It is the policy of the Division of Continuing Studies to provide a safe and healthy environment for learning, personal growth and enjoyment. The well being of this community depends upon the good judgment and considerate behavior of its members. Student status at The University of the Arts is not an unconditional right, but a privilege subject to certain rules and expectations articulated in the Student Code of Conduct. To review the Student Code of Conduct in its entirety, please visit:

http://cs.uarts.edu/uploads/media_items/student-code-of-conduct.original.pdf

GRADING:

Your grade will be based on the following:

Component	Points
Quizzes (5@10)	10%
Client Project Site Scope	50%
Homework	30%
Participation	10%
Total	100%

Your grade will be calculated using the following scale:

Grade	Percentage Range	Grade Point
A	100 – 93%	4.0
A-	92 – 90%	3.67
B+	89 – 87%	3.33
B	86 – 83%	3.0
B-	82 – 80%	2.67
C+	79 – 77%	2.33
C	76 – 73%	2.0
C-	72 – 70%	1.67
D+	67 – 69%	1.33
D	63 – 66%	1.0
F	59% or less	0.0
I	Incomplete	-
P	Pass	-

SCHEDULE:

SESSION/DATE	TOPIC	COURSEWORK	DUE THIS WEEK
1 2/4	Introduction to the Web	<p>Lesson Topics</p> <ul style="list-style-type: none"> ▪ Class/Course Introductions ▪ Structure and history of the World Wide Web ▪ Introduction to HTML ▪ Browsers, platforms, servers, devices, and file structure <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Convert a Word Document to a basic HTML page ▪ Reading Assignment 	
2 2/11	Evaluating Websites	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Identify basics of usability ▪ Identify good web design ▪ Web standards and accessibility ▪ How design drives action and organizes content <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Assess websites for audience, action, and content ▪ Rate 5 websites for usability ▪ Reading Assignment 	- Reading #1 - Basic HTML page
3 2/18	Wireframes and Architecture	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Identify elements of a wireframe ▪ Identify architecture styles and objectives ▪ Identify client requirements, content, and audience actions <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Create wireframes from existing website ▪ Create architecture from existing website ▪ Complete a scope document for an existing website including all technical aspects and content ▪ Reading Assignment 	- Reading #2 - Website assessment - Usability analysis
4 2/25	Graphics and Design	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Understanding web graphics ▪ JPG, GIF, SVG, and PNG formats ▪ Saving images for web ▪ Color design and theory ▪ Identify and apply the elements of design – composition, contrast, balance, rule of thirds, emphasis, proximity, patterns, line, shape, unity, color and typography <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Critique design of existing websites based on design 	- Reading #3 - Scope document with wireframes, technical specs and architecture

		<p>principles</p> <ul style="list-style-type: none"> ▪ Find website designs that exemplify specific design principles ▪ Reading Assignment 	
5 3/4	Creating Web Graphics	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Creating JPG, GIF, SVG, and PNG images ▪ Scanning and optimizing web images ▪ Creating a color palette ▪ Typography for web <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Create a style guide (“mood board”) for the project website that will include colors, fonts, sample imagery, design principles, and a description of client objectives ▪ Research project site competitors, what’s lacking in the field, current standards ▪ Reading Assignment 	<ul style="list-style-type: none"> - Reading #4 - Select websites that exemplify specific design principles
6 3/18	HTML, Cascading Style Sheets (CSS)	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Introduction to the CSS language ▪ What are internal, inline and external style techniques ▪ Creating a basic style sheet and applying it to an HTML page <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Create a style sheet including fonts, colors, background colors, and text styles ▪ Create wireframes architecture for Project Site ▪ Reading Assignment 	<ul style="list-style-type: none"> - Reading #5 - Project Site style guide - Project Site Research
7 3/25	HTML and CSS (continued), CSS Positioning	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ HTML layout using <DIV> ▪ Style sheet layout using floats <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Create a 2 column layout using floats ▪ Use an existing template to create a complex layout using DIVs and styles ▪ Reading Assignment 	<ul style="list-style-type: none"> - Reading #6 - Project Site wireframes and architecture - HTML and CSS
8 4/1	Content Management Systems (CMS)	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Possible Guest Speaker Slot (TBA) ▪ Intro to content management systems ▪ Identifying database-driven design ▪ Identify open source and closed source CM Systems and basics of functionality <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Discuss pros and cons of content management systems for Project Site including cost, functionality, 	<ul style="list-style-type: none"> - Reading #7 - HTML and CSS with layout - Template layout

		<p>customization and design</p> <ul style="list-style-type: none"> ▪ Create a blog using WordPress, select a theme, add images, and simple content ▪ Reading Assignment 	
9 4/8	CMS (continued), JavaScript, dynamic languages, and database-driven sites	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Possible Guest Speaker Slot (TBA) ▪ Introduction to dynamic languages and platforms <ul style="list-style-type: none"> ○ JavaScript, ASP, PHP, Ruby, and/or SQL ▪ Identify main development tools and languages and how they are used ▪ Identify functionality on live websites and what tools were used to create them <p>Assignments:</p> <ul style="list-style-type: none"> ▪ Plan functionality of project site, applications, calendars, forms, animations, interactivity ▪ Outline what elements will be included in client project site plan and what languages will be used to develop them 	<ul style="list-style-type: none"> - Reading #8 - WordPress blog - Select CMS for Project Site
10 4/15	Project Presentations	<p>Lesson Topics:</p> <ul style="list-style-type: none"> ▪ Client project presentations ▪ Receive and incorporate feedback on Client Project Site Scope ▪ Where to go from here (FINAL PRESENTATION) 	<ul style="list-style-type: none"> - Client Project Site Scope: Technical specifications, wireframes, architecture, and style guide