

Internet Technologies - Spring 2018

IFSC 1310	Instructor: Thomas Wallace tswallace@ualr.edu	Location & Time: EIT 219 - 1:40pm - 2:55 - M/W	Office Hours: EIT 547 by Appointment
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Course Materials

All required materials will be available via my website located at <http://thomaswallace.net>.

External / Cloud Storage - 1GB Minimum (Google Drive works well)

Course Overview

This course is an introduction to Internet client-side technologies and standards-based web development. The course will be divided into sections covering the core components of any web site/page. Core components include Structure, Content, Design (presentation), and Behavior. Three lecture hours per week.

Learning Objectives

- Students will learn key terminology and industry best practices related to web design and development, site security, file management and site optimization.
- Students will understand the relationship of the core technologies of the modern web stack (HTML, CSS, JavaScript).
- Students will be able to author valid HTML5 and CSS and augment behavior using JavaScript and DOM (Document Object Model).
- Students will understand principles of digital image creation and optimization techniques.
- Students will be able to design and implement web site based on criteria established by a client.
- Students will explore tooling and workflows of a modern web developer.
- Students will create an accessible, standards-based web site using the appropriate techniques and deploy to a development environment.

Attendance

Attendance is critical in mastering the course material. If you must miss class, please send an email to tswallace@ualr.edu before class begins explaining the reason for your absence. Participation implies making comments, observations and contributions and asking questions in the classroom.

Additional Support

Tutoring is available via EIT Student Academic Services - Amy Frets, EIT 117, amfrets@ualr.edu

Grading

Your grade will be based on these areas:

- 10% - Participation & Self-Initiated Learning
- 30% - Homework Assignments
- 30% - Skill-Based Assessments (3 - HTML5, CSS, Applied JS)
- 30% - Final Web Site Project

Grading Scale:

A	100% - 90%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	Below 60%

Course Format

The course will be conducted as a seminar. Participation counts and may include small group presentations and exercises. A high level of student participation is required. Make sure that all assigned preparation and readings are done in advance and that you are ready to engage in full examination and discussion of topics. The instructor will not hesitate to call on students for questions and comments. It is, therefore, critical that reading assignments be completed before class in which they are addressed and reviewed.

UA Little Rock Plagiarism Policy

Plagiarism on any assignment will at a minimum result in 0 points for the assignment. We reserve the right to pursue further disciplinary action if appropriate (e.g. any student caught cheating on an assignment/assessment will receive an "F" for the course, and we may pursue action with the Committee on Academic Integrity).

Plagiarism includes copying someone else's work and claiming it as your own, or collaborating excessively with another person or persons and claiming the work as solely your own. It is strongly recommended that students maintain a record of the preparation of their major assignments.

UA Little Rock Disability Policy

Your success in this class is important to me, and it is the policy and practice of the UA Little Rock to create inclusive learning environments consistent with federal and state law. If you have a documented disability (or need to have a disability documented), and need an accommodation, please contact me privately as soon as possible, so that we can discuss with the Disability Resource Center (DRC) how to meet your specific needs and the requirements of the course. The DRC offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process among you, your instructor(s) and the DRC. Thus, if you have a disability, please contact me and/or the DRC, at 501-569- 3143 (V/TTY) or 501-683- 7629 (VP). For more information, please visit the DRC website at ualr.edu/disability.

Detailed Schedule

Week 1

- Review Syllabus and course expectations
- Our Window to the Web: Web Browsers & Understanding Web Related Terminology

Week 2

- Structure, Content, Design, & Behavior and a discussion on Naming Conventions, Meta Naming, Directory Structure
- **Structure:** Introduction to HTML5 – Properly Marking up an HTML5 Document (Headings, Paragraphs, Lists, Links, Images).

Week 3

- **Structure:** Introduction to HTML5 - Properly Marking up an HTML5 Document (Tables , Forms, Attributes)
- **Structure:** Block (Structural) vs. Inline (Text-level Semantics) Elements, Additional HTML Attributes
- **Structure:** Terminology and Concepts Quiz

Week 4

- **Site Management:** Building Development Environment, File management, Publishing to web server
- **Assessment:** Develop a prototype html document project

Week 5

- **Design:** Introduction to CSS – Creating and attaching a stylesheet – Type, ID, Class Selectors
- **Design:** CSS Syntax, Styling the elements of your site, Resetting vs. Normalization CSS

Week 6

- **Design:** Using CSS for Layouts – CSS Box Model / Flexbox
- **Design:** Using CSS for Layouts – In-class Lab (Positioning Lab Assignment)

Week 7

- **Design:** Color Theory and Designing with Grids
- **Assessment:** Style prototype HTML document and publish to server

Week 8

- **Design:** Introduction to Graphic Design concepts – Working with Shapes, Symbols and Text |

Rasterized vs. Vector Imagery

- **Design:** Introduction to Graphic Design – Filters, Guides, and Paths, Cropping
- Vector Icon Design Assignment

Week 9

- **Design:** Introduction to Graphic Design - Web Site Banner Case Study – Explore the design process using a combination of the techniques we have used thus far |
- Image Optimization
- **Structure / Design:** Integrating Images into your site template
- **Structure:** Validating your site Template | Finalizing Page Structure | Duplicating Pages
- Assign Individual Web Project

Week 10

- Project Q&A
- Web Forms

Week 11

- **Project Consulting:** The client Interview / Site Planning / Prototyping
- **Behavior:** Introduction to JavaScript – Your First Script, Document Object Model (DOM)
- Assign Final Project

Week 12

- **Behavior:** Introduction to JavaScript – The Power of JavaScript Libraries
- **Behavior:** Progressive Enhancement Case Study

Week 13

- **Behavior:** Introduction to JavaScript – JQuery in-class lab
- **Special Topic:** Web Accessibility

Week 14

- Final Project Troubleshooting / Optimization
- Next Steps and Evaluation

Week 15

- Final Web project Due at time of Final