UA Little Rock Information Science

# **Mobile Web Development - Spring 2019**

IFSC 3342 **Instructor:** Thomas Wallace tswallace@ualr.edu Location & Time: EIT 219 - 9:25-10:40 - T/TH Office Hours: EIT 547 by Appointment

#### **Course Materials**

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

#### **Recommended Text Book**

Title: Responsive Web Design | Ethan Marcotte | A Book Apart. External / Cloud Storage - 1GB Minimum (Google Drive works well)

#### **Course Overview**

This course will take an in-depth look at modern web technologies used in the creation of standards-based websites for use on standard and mobile devices. We will evaluate and test many approaches in an effort to establish maintainable workflows and create highly usable sites using a "Mobile First" design philosophy. In addition, this course will explore various tools for testing, versioning and distributing project assets.

### **Learning Objectives**

- Students will learn key terminology and industry best practices related to responsive web design and development, site security, file management and site optimization.
- Students will be able to author valid HTML5 and CSS and augment behavior using JavaScript and DOM (Document Object Model).
- Students will be able to leverage responsive web frameworks to generate rapid prototypes of mobile web apps.
- Students will explore HTML5 native APIs. microdata, and grid-based design systems.
- Students will create an accessible, standards-based mobile 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:	Grading Scale:	
10% - Participation & Self-Initiated Learning	А	100% – 90%
30% – Homework Assignments	В	80% - 89%
30% – Skill-Based Assessments	с	70% - 79%
30% – Final Project and Presentation	D	60% - 69%
	F	Below 60%

### **Late Assignments**

This is an upper-level course. Students are expected turn in all assignments on time. Failure to do so will result in reduced or no credit for the assignment. Only in the case of extenuating circumstances will an extension be granted.

#### **Credit for Late Assignments**

- **1st Offense -** Maximum 75% Credit if submitted with 24 hours of the due date.
- 2nd Offense Maximum 50% Credit if submitted with 24 hours of the due date.
- 3rd Offense No Credit

### **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 o 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

Course Introduction / Review - What you should know / Where have we been? Where are we going?

# Week 2

The current state of mobile development / Underlying Technologies / Tools / Showcase

# Week 3

HTML5 / Semantics / Usage / Progressive Enhancement

# Week 4

HTML5 / APIs - Audio, Video, Geolocation

# Week 5

Microformats & Data Schema / Special Link Types / Mobile Specific Meta Tags

# Week 6

CSS3 / Media Queries / Breakpoints

# Week 7

Mobile Frameworks / Designing with Grids

# Week 8

Site Planning Wireframing / Prototyping

# Week 9

Present Project Briefs

# Week 10

CSS3 / Transitions and Other Goodies

# Week 11

Spring Break

# Week 12

Image Techniques for Mobile

# Week 13

Mobile Javascript

# Week 14

Optimization and Testing

# Week 15

Final