Mobile Web Development - Spring 2023

IFSC
3342
Instructor:
Thomas Wallace
tswallace@ualr.edu

Location & Time: EIT 218 - 9:25-10:40 - T/TH Meets Virtually and Face to Face 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 virtual and/or physical classroom. Excessive unexcused absences will negatively affect your participation grade. Due to COVID-19 content will be delivered in a hybrid format. All sessions will be offered online, with the understanding that there will be opportunities for face to face interaction as health safety permits. Students who wish to complete the entire course in an online environment

due to health and safety concerns will be given the option to complete the course in its entirety online with instructor approval. We will be using Blackboard Collaborate for online class meetings and individual meeting requests will be handled via Google Meet. Students are expected to attend lectures online at the regularly scheduled times and participate throughout the duration of the session. If attendance on a particular day is not possible. Students should email the Instructor prior to class to make alternate plans for completion of that day's content.

Grading

Your grade will be based on these areas:

| 10% - Participation & Self-Initiated Learning | |
|---|--|
| 30% - Homework Assignments | |
| 30% - Skill-Based Assessments | |
| 30% - Final Project and Presentation | |
| | |

Grading Scale:

| Α | 100% – 90% |
|---|------------|
| В | 80% – 89% |
| С | 70% - 79% |
| D | 60% - 69% |
| F | Below 60% |

Grade Appeal Policy

https://ualr.edu/policy/home/student/grade-appeals/

Policy for Late/Missed Work

Students are expected to 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 within 24 hours of the due date.
- 2nd Offense Maximum 50% Credit if submitted within 24 hours of the due date.
- 3rd Offense No Credit

Office Hours and Instructor Presence

Your success in this course is important to me. I will be available to meet virtually at the following times:

Monday/Wednesday - 9:00am - Noon | Tuesday/Thursday - 11:00am - Noon | Friday - 9:00am - Noon

To schedule an appointment please email at tswallace@ualr.edu and I will send you a virtual meeting invitation.

All course content will be delivered during the scheduled classroom sessions by the Instructor, except in cases of a relevant guest speaker. Additional support is available via CSTEM Student Academic Services. To schedule a tutoring session visit https://ualr.edu/cstem/students/tutor-request/.

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.

Academic Integrity

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.

UA Little Rock Inclement Weather Policy (215.1)

- 1. During inclement weather, UA Little Rock will make a decision whether or not to close based on all available information.
- 2. The chancellor will decide whether or not conditions warrant canceling classes and activities and closing the campus or whether classes and activities will be canceled but with specified campus offices open. Online or web-enhanced classes will continue as scheduled at the discretion of the faculty member.

- 3. The UA Little Rock website, UA Little Rock email, the university's main telephone number (501.569.3000), and the Rave campus alert notification system are the official means of communicating information concerning weather-related closings.
- 4. When necessary, the university will announce a separate decision about canceling night classes (those classes starting at 4:20 p.m. or later) by 2 p.m., if possible.
- 5. Ordinarily, sites remote from campus such as the Bowen Law School, the Arkansas Studies Institute, and the Benton Center will close or cancel classes and activities whenever the university does so. In some circumstances, however, a separate decision may be made whether or not a site remote from campus will be open or closed, and this decision will be announced through the university's official means of communicating weather-related closings.
- 6. Vice chancellors are responsible for seeing that necessary services are provided in their respective areas when the university is closed. Employees required to provide such services will be identified by their supervisors. Classified employees who must report to work when the university is closed due to inclement weather will be allowed compensation time of 1.5 hours for one hour worked. Persons who are not required to work when the university is closed will be granted authorized absence. Employees who do not report to work when the campus is open will be charged annual/compensatory leave or leave without pay. The Payroll Department will prescribe payroll reporting and timekeeping.
- 7. The Policy Advisory Council of the University Assembly will recommend to the chancellor if and when missed undergraduate and graduate class days should be made up. In the event that the university is closed during a final examination day, the provost, in consultation with the Faculty Senate president, will reschedule any missed graduate or undergraduate final examinations with the exception of online exams which will continue as scheduled.
- 8. Weather and road conditions vary from place to place. Employees and students are expected to exercise good judgment regarding the safety of travel when road conditions are affected by the weather.

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