Carnegie Mellon University

Dietrich College Information Systems

Faculty: Prof. Sara Moussawi, Ph.D. Office: PH 224B Email: <u>smoussaw@andrew.cmu.edu</u> Office Hours: Wednesday 10:30 am to 12:00 pm or by appointment.

Mobile Web Design & Development (67-240)

Fall 2017 - Course Description and Syllabus

Class Meetings: Mondays and Wednesdays 12:00-1:20 pm Meeting Location: Hunt Library, HL 106C TAs Contact Info: TBA on Canvas TAs' Office Hours: TBA

Course Description

The Mobile Web Design and Development course provides a solid web design and development foundation focusing on responsive and user-centered design, and client-side components. Students explore the current standards and best practices of web design. Throughout the course, students work with HTML5, CSS3, Twitter Bootstrap, and Javascript, and learn how the various web components function together. The course utilizes a hands-on approach to guide students through learning and understanding the design and development process. This course is primarily designed for students with minimal technical experience. By the end of the course, students will be able to plan, design, and implement a basic functioning mobile web site/ app.

Learning Objectives

Upon successful completion of the course, students should be able to:

- Design and develop responsive mobile web sites /apps using HTML5, CSS3, Javascript and Bootstrap while respecting effective web design principles.
- Conduct the necessary research to inform the design and development process.
- Focus on user-centered design through all the stages of the process.
- Build and refine desktop and mobile site wireframes.
- Demonstrate an understanding of technology and business trends in the mobile web arena.
- Develop an understanding of mobile first and responsive web design principles and be able to use them practically.

Course Prerequisite: 15-112 or 15-104

Required Textbooks – Available as e-text through CMU libraries site:

- 1. Duckett (a), John. 2014. HTML and CSS: Design and Build Websites. ISBN 1118907442.
- 2. Duckett (b), John. 2014. JavaScript and JQuery: Interactive Front-End Web Development. ISBN 1118907442.
- 3. Marcotte, Ethan. 2014. Responsive Web Design. ISBN 9781937557188.

Reference Textbooks – Available through CMU libraries:

- 1. Lupton, Ellen. (2014). Thinking with type: A critical guide for designers, writers, editors, & students. Chronicle Books. ISBN 9781568989693..
- 2. Neil, T. (2014). Mobile design pattern gallery: UI patterns for smartphone apps. " O'Reilly Media, Inc.". ISBN 9781449314323.
- 3. Krug, Steve. 2014. Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability. Third edition. ISBN 9780321965516.

Software Tools- All available at <u>computer labs</u> on campus:

- 1. HTML editors: Sublime Text, BBEdit, TextMate, TextPad
- 2. Web browsers: Google Chrome, Safari, and Mozilla Firefox
- 3. Image editing and compositing software: Adobe Photoshop CC
- 4. Page design tool: Adobe InDesign

Course Evaluation:

The course is structured around a combination of class lectures, in-class applications, weekly assignments, and one group project. In order to successfully pass the course, students will be expected to complete the activities listed below. Weights listed between parentheses indicate the contribution of the specific component to the final course grade. The course evaluation components listed below are mandatory. Students do not have the option of opting out of any of the activities required for the assessment of these components.

- Attendance and Participation (8%): this component of the final grade is based on your contribution to the class in the form of attendance and active participation. Students are expected to attend every class meeting, arrive on time and stay until the end. Regular and punctual attendance may be used, at the professor's discretion, to make adjustments to the final grade in borderline cases. Active participation will help students achieve the best learning experience. Completing the readings indicated in the class schedule before class, and being fully present during each class will help students actively engage during each class meeting. Active participation includes active engagement during in-class activities and contributions through asking questions or providing answers when material is unclear. The professor will assume that you are well prepared for each class meeting and will feel free to call upon you to provide an answer or comment. *Each absence will be penalized by 1% in the case where permission was not granted by the professor ahead of time. A maximum of three absences is allowed in one semester.*
- Assignments and Quizzes (32%): Assignments will be due on Mondays by 10:00 am unless otherwise specified. Project deliverables will have a different deadlines' structure.. Any number of unannounced quizzes may be given during the semester at the beginning or end of class. There are no make-ups for assignments or quizzes. *Check the late assignment policy in the next section.*
- **Exams (30%)**: This component of the final grade is based on performance on two individual exams. The exams are closed book, cumulative, and will cover all required readings and in-class discussions. The exams' dates are indicated in the class schedule. Make-ups will only be provided for documented emergency situations (e.g. sickness, death).
- **Group Project (30%)**: This component of the final grade is based on one group project. Teams will consist of 3-4 people. Teams will propose their own projects under a common theme (to be specified later during the term). After the theme is announced, teams will have to go through an ideation phase for one week. Ideas will have to be approved by the instructor or TAs. It is the team's responsibility to schedule a meeting with the instructor or TAs during that week. Over the following weeks, each team will have to submit various deliverables including a project proposal, prototype wireframes and/ or user flow charts, market research, peer evaluations, sprint reports, user testing evidence, presentation and final report (includes code and sitemap). Teams are expected to submit all the deliverables in order to receive a final grade on the group project. Members are expected to contribute to every deliverable and be present in ALL group meetings and class presentations. Kindly be aware that peer evaluations can increase your final grade by 5% or reduce it by 15%.

Grading Scale: The table below presents the final course letter grades and their corresponding interpretation:

Letter Grade	Point Grade	Interpretation
А	90.0-100.0	Excellent, exceeds average understanding as evidenced in course work and goes
		well beyond the basics.
В	80.0-89.9	Far above average, fully meets average understanding as evidenced in course work
		and fully understands the basics and can deal with concepts somewhat beyond
		that level.
С	70.0-79.9	Average, meets minimum expectations and satisfies course requirements.
D	60.0-69.0	Below average, meets many minimum expectations and satisfies all or most course

		requirements.
R	0.0-59.9	Fails to meet minimum expectations in understanding and course work as
		evidenced by performance and submission of graded elements.

Tentative Class Schedule:

Here is the link to the tentative class schedule: <u>https://goo.gl/5mn]7x</u>. This schedule is subject to change depending on time and class flow.

General Course and University Policies

Attendance and Preparation for Class: You are expected to attend all scheduled class sessions with your reading and supplementary materials. Readings are to be completed prior to class.

Laptops, Tablets and Cell Phones:

- While this course is centered on mobile technologies, using mobile devices such as cell phones and tablets (even for texting purposes) in class is unprofessional behavior and forbidden in this course. Turn your cell phones to airplane mode while in class. Never answer a phone call in class. Employers will leave you a message or call you back; they also want professionals who know when and when not to take calls.
- Laptops can only be used for classroom purposes when directed by the professor. Bring your laptops to every class but please leave them in your book bags or closed until needed.
- Misuse of laptops or handheld devices will be considered a breach of discipline and appropriate action will be initiated by the professor. 🛛
- During exams, all cellphones must be turned off and left on top of your desk; cell phones cannot be taken out of the room during exams and will remain in the room during any restroom breaks.

Please take few minutes to read the following article: https://www.nytimes.com/2017/01/02/opinion/leave-your-laptops-at-the-door-to-my-classroom.html

Food and Drinks: Only covered drinks are allowed during class. Food is not allowed.

Absences: Each absence will be penalized by 1% in the case where permission was not granted by the professor ahead of time. A maximum of three absences is allowed in one semester. In the event you have an excused absence, it is your responsibility to notify the instructor and catch up on missed class material.

Assignments: In both the professional and academic world, you must meet deadlines. In this class, assignments will be due on Mondays by 10:00 am unless otherwise specified. Make sure to double check the submission deadline for every assignment. Assignments submitted after the deadline will be considered late.

Late Assignments: Late assignments will receive a 15% penalty for the first day they are late, and 10% for each day afterwards . So, if you submit a perfect assignment a day late, you earn 100% - 15% = 85%; two days late, you earn 100% - 25% = 75%; and so on. Equipment failure is not an acceptable reason for turning in an assignment late. You should always make a backup of your files.

Exams: Appropriate documentary evidence certified by the Division of Student Affairs is required for missing a critical activity or due date. Exams missed due to an excused absence (arranged with the professor ahead of \mathbb{Z}) time) must be made up within one week for full credit or no credit will be given. Documentation proving the excused absence will be required before or during the time the exam is made up. Exams missed due to an unexcused absence cannot be made up.

Academic Integrity: Carnegie Mellon students are expected to follow the ethical guidelines and cheating and plagiarism policies defined in <u>*The WORD*</u>. Please read it carefully! You will be held accountable for violations of

these guidelines and policies that come to my attention.

Cheating and plagiarism are defined in the CMU Student Handbook, and include (1) submitting work that is not your own for papers, assignments, or exams; (2) copying ideas, words, or graphics from a published or unpublished source without appropriate citation; (3) submitting or using falsified data; and (4) submitting the same work for credit in two courses without prior consent of both instructors. Any student who is found cheating or plagiarizing on any work for this course will receive no credit for that work. Further action will also be taken if necessary.

While I encourage you to be helpful to your classmates, you must understand that the work you turn in for evaluation or credit must be your own. You are welcome to talk with other students about general course content, requirements, and technology issues. You are not welcome to offer, or to ask for, substantial, material assistance to, or from, other students in completing specific aspects of graded assignments for individual credit. If there is any doubt in your mind about a particular situation, ask yourself this question: "How would I feel if I observed another student or students engaging in this particular behavior?" Any student who turns in work for credit that is identical or similar beyond coincidence, to that of another student (current or past) may face appropriate disciplinary action at the department, college, or university level.

Content copied from the Internet and reproduced verbatim in assignments or other submissions will be treated as plagiarized material, even if the source is cited. More information at: http://www.cmu.edu/policies/documents/Academic%20Integrity.htm.

An Invitation to Students with Learning Disabilities: Carnegie Mellon University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. Students who need accommodations must be registered with Disability Resources at 102 Whitfield Hall 412.268.2013, or with Larry Powell, Equal Opportunity Services Manager, at: lpowell@andrew.cmu.edu.

Contacting the Instructor: The easiest and most reliable way to get in touch with me is by e-mail. Feel free to send me e-mail if you have a question related to the course. I will respond as soon as I can but not always instantaneously. Besides that, you are also welcome to stop by my office any time to discuss the class. Please understand that I may not be free to talk to you at that time, but, in that event, we can make an appointment for a later time that is mutually convenient.

Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call <u>412-268-2922</u> and visit their website at <u>http://www.cmu.edu/counseling/</u>. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

If you or someone you know is feeling suicidal or in danger of self-harm, call someone immediately, day or night:

CaPS: <u>412-268-2922</u> Re:solve Crisis Network: <u>888-796-8226</u> If the situation is life threatening, call the police: On campus: CMU Police: <u>412-268-2323</u> Off campus: 911 **Hunt library:** Please read and become familiar with the IDeATe lending and purchasing policies, which can be accessed at <u>resources.ideate.cmu.edu</u>. The IDeATe facilities are shared student resources and spaces. As such, all members of the IDeATe community are expected to be respectful of the equipment, the spaces, and fellow students and their projects. Always clean up after completing your work, put things back in their correct place, and leave the lab in better condition than you found it. Students may be required to purchase materials to complete class projects. For convenience, some materials are available for borrowing and for purchase at IDeATe Lending (Hunt A29)."