

## CM371-01: Web II

Spring 2017  
3 Credit Hours

### Course Instructor:

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### Classroom:

College Center M021

### Office Hours:

M, W: 9:30 – 10:30 a.m., 12:30 – 1:30 p.m.  
and by appointment

## Course Description

According to the course catalog, “students extend their knowledge of website design, publishing, aesthetics and concepts through community-focused projects” in Web II. Therefore, Web I class or equivalent knowledge is required for taking this class.

In Web I class, students learn how to develop an interactive desktop website using HTML/HTML5, CSS/CSS3, JavaScript framework, and interactive tools (e.g., slideshows, forms, social media widgets) and applications of simple content management systems following web usability criteria, search engine optimization techniques, and web design principles.

Like Web I class, learning type in Web II is also very hands-on. As part of extension of their knowledge in web design and development in Web II class, students will learn 1) how to develop a mobile-friendly or multi-screen website with WordPress.Org and BootStrap (“[the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites](#)”), 2) how to plan and build cross-platform web/mobile apps with jQuery mobile and Web-based software, and 3) how to create visual content with data (DataViz) for the web. Learning these skills/applications is important for the communication professionals working in the fields of journalism, digital media, design, PR/advertising, entertainment media, and/or digital marketing. Skills included in this course are among the “[LinkedIn’s most in demand skills of 2016.](#)”

While learning these techniques of web and mobile app development, students will spend considerable amount of time creating websites for real clients, their own professional website, interactive visuals (e.g., maps, charts) with data for the web, and developing/designing hybrid apps for smartphones and tablets.

## Course Objectives

The objectives of this course are to help students:

- 1) learn the techniques of multiscreen/responsive web design with Bootstrap framework (included in Dreamweaver CC 2017) and WordPress.org themes;
- 2) understand the process of cross-platform mobile app development;
- 3) gain skills in mobile web and app development, primarily with jQuery mobile and PhoneGap Build;

- 4) design information visually through different forms of interactive visualization using public/free versions of industry-standard software (Tableau Public, Datawrapper, Google's Fusion Tables);
- 5) understand contemporary patterns in mobile user experience and responsive web design;
- 6) learn how to host and manage websites; and
- 7) understand the functions of web and app analytics.

### **Learning Outcomes**

Upon completion of this course, students will be able to:

- identify relative advantages of different approaches to responsive or multiscreen web design;
- interpret and analyze mobile user experience patterns;
- demonstrate their skills in building responsive websites with both WordPress.Org and Bootstrap;
- apply their skills to build a cross-platform native mobile site/app with jQuery mobile and/or a Web-based tool;
- implement interactive information design meaningfully with industry-standard data visualization tools – datawrapper, tableau public, and Google's fusion table.
- understand the functions of app and web analytics and gain knowledge on the process of implementing these analytics.

### **Software Requirements**

This course will not require you to buy a textbook. But you will be expected to purchase web hosting and domain services for your website. They are affordable; they can be cheaper than total price of textbooks in some courses, and, in the long term, it will be a good investment since you are interested in web development and digital media/communication. At the end of this class, you may want to keep using these sites to promote your work; and who knows you may want to start your new web/app development enterprise!

Buy a hosting service and domain name for your website from either of these hosting services – HostGator, DreamHost, BlueHost or iPage. You will be able to install WordPress with 1click from your account or CPanel. You also will be able to create user id(s) and password(s) for WordPress account and hosting service account. Depending on your budget, you can buy a suitable plan. But for the purpose of this class, a basic plan with access to a responsive design theme and domain name should work.

If you do not want to continue with the web hosting service in the future, you can cancel the subscription after the semester. But I strongly recommend that you at least keep the web hosting service (including WordPress and Dreamweaver site) and keep using it for other related classes or your own projects. Again, it will be a good investment for your future job search or freelancing activities in web development, graphic design or any other communication work you are interested to pursue.

Other than the requirement with the web hosting service, you will have access to Dreamweaver CC 2017, Photoshop CC 2017 and PhotoGap Build in the lab and through the website of the [university's technology services](#). In addition, you will be required to sign up/install two industry-standard data visualization software – 1) signing up for the free version of data visualization tool – Datawrapper (<https://www.datawrapper.de/>) – and 2) downloading Tableau Public's latest version from Tableau's website (<https://public.tableau.com/s/>).

**Supplies and Digital Storage.** A dedicated portable USB storage device [minimum 5GB] for this class should be brought to each class meeting, on which you should save and backup your class activities, homework assignments, projects and other course materials. Moreover, you can use Microsoft Drive or Dropbox or such storage tools for additional backups.

### Course Assignments and Activities

**Project 1 (30 points):** It is about responsive website design with a WordPress.Org theme. To work on this project, students will be expected to install WordPress.Org through a hosting service. Class activities on WordPress will prepare students for this project. Students will use original content to complete this project following the project prospectus.

**Project 2 (30 points):** It is also about developing a responsive website, but with bootstrap frameworks. Students will utilize this front-end framework, built in Dreamweaver CC 2017, to work on this project. This project will also make students to upload their hand-coded site on their host server that they will purchase at the beginning of the semester.

**Project 3 (20 points):** In this information design or data visualization project, students will be expected to download public data and then interpret the key information visually (e.g., interactive maps, charts, scatter plots) with either Datawrapper or Tableau Public following the guidelines in project prospectus.

**Project 4 (60 points):** This is a comprehensive project where students will demonstrate their skills in CMS and/or Bootstrap-based responsive web design and native mobile/web app development. Following the project prospectus and mobile usability guidelines, students will develop a hybrid app (native/mobile web) on a topic of their choice in one of the project components. In addition to app development, students may be assigned to develop/redesign a website for a real small business/non-profit/community organization. Depending on the number of project requests this class receives from Baltimore community, students may work individually or in a small group to help a local organization/small business build/redesign a responsive website.

**Homework Assignments (30 points):** Homework assignments will include completion of Web I review activities, WordPress plug-in and theme research. Details about the homework will be assigned in the class or through Moodle.

***Class Activities/Participation (30 points):*** Since this course will require students to do numerous class activities, students are expected to actively participate in them and complete them with the instruction provided by the instructor.

**Grade Distribution:**

Homework Assignments : 30 points (15%)  
Class Activities & Participation : 30 points (15%)  
Projects : 140 points (70%)  
Total : 200 points

A	93 – 100
A-	90 – 92.9
B+	87 – 89.9
B	83 – 86.9
B-	80 – 82.9
C+	77 – 79.9
C	73 – 76.9
C-	70 – 72.9
D+	67 – 69.9
D	60 – 66.9
F	0 – 59.9

**Class Attendance Policies**

Students are expected to come to every class session. The success of many aspects of class, like discussion, peer critiques, and class activities, will depend on attendance. Attendance is recorded at the beginning of each class session. Students who choose not to attend classes will be penalized for excessive absences, as follows: 1 or 2 unexcused absences = No effect on the final course grade. More than 2 unexcused absences = Minus one letter grade for each absence.

Grade Reduction Example. A student earning an overall “B+” on all the assigned work and having four unexcused absences will receive a penalty of two grades (4 unexcused absences minus 2 allowed) or a Final Class Grade of “B.”

If, for reasons of health or other emergency, a student knows that he/she will be absent from class for several days, the student should inform the Academic Advising and Support Center (AASC) by telephone(410)6175050. The AASC will, in turn, notify the student’s instructors. Only instructors can excuse absences.

***Definition of an Excused Absence.*** Excused absences are identified by the course instructor. Such excused absences include health problems, family and personal emergencies, absence from campus on official University activities such as athletic competition or academic field trips. In some of these cases, students will be expected to provide appropriate documentation (e.g., doctor’s note). Exceptions are intended to accommodate illness, emergencies, religious holidays, and university-sponsored trips.

***Excused Absence for University-approved activity.*** The student is responsible for personally informing the course instructor of such Universityapproved activities and must not expect other persons to convey such information to the course instructor. Therefore, absences for official university activities will not be excused unless the student personally informs the course instructor about them.

***Class Policy on Excessive Absences.*** If a student's absences, both excused and unexcused, reach what the course instructor considers to be unacceptable proportions, the course instructor reserves the right to make a professional judgment that a student has not satisfactorily completed the course and to record a final grade of "F" for the student.

***Student Athletes.*** Each student athlete is required to provide to the course instructor printouts of documents indicating class absences for athletic events. While absences for mandated athletics events are excused, missed work is not excused and must be made up. When necessary, negotiate deadline extensions with the course instructor.

### **Technology Support**

Help is available from the course instructor and/or from Loyola University Technology Services 410-617-5555, [ots@loyola.edu](mailto:ots@loyola.edu).

A class policy excludes technology problems as an excuse for late submission of assignments. So make sure to begin working on your project and assignment well ahead of deadline and keep a backup of your work-in-progress.

***Computer Facilities.*** Students will have access to Apple Macintosh® computers in Department of Communication media laboratories for working on course assignments so long as they abide by laboratory policies and provide for lab security. Use your Loyola ID card to gain access to the lab and to activate printing. This access means you can do homework and print in the lab whenever you want except for during classes (schedule posted). You are expected to follow posted lab rules. If you need help with your software and hardware questions, call Technical Services at x5555, 410-617-5555.

Note: Students are not required to use department-provided facilities to fulfill course assignments and may substitute their own resources, which are not necessarily supported by university resources.

### **Class Policies**

***Required use of Loyola Email Account.*** The course instructor will post notices of class events, assignments, grades, and other course matters to the course Moodle site and also by email to class members' Loyola University email accounts. Students are obliged to check their accounts daily for course-related messages. The course instructor endeavors to protect the privacy of all students. Personal information such as grades & critiques are kept confidential.

***Learning Disabilities.*** To request academic accommodations for a disability, contact the Disability Support Services (DDS) Office at (410) 6172062. It is your responsibility to present letters from the DSS Office indicating your need(s) for accommodation of disabilities to the course instructor within the first two weeks of class. Every effort will be made to provide such accommodations in this course while respecting the student's privacy.

***Loyola University Deadline for Course Withdrawals.*** The Course Calendar gives the university's deadline for withdrawing from a course with a grade of "W." Following this date, students not successfully completing the course will receive a final grade of "F."

***Inclement Weather.*** If the University, due to inclement weather or another event, cancels a class meeting we will follow the University's makeup schedule. Refer to the University's website or phone line to confirm that class has been canceled.

**Honor Code.** Misrepresenting oneself by cheating on quizzes or tests, failing to cite sources for quotations, paraphrasing, or outside media assets, turning in another person's work, or turning one's own work for another class or university activity is a serious breach of faith with the academic community, as defined by the Loyola University Honor Code Statement:

The students of Loyola University Maryland are citizens of an academic community that will conduct itself according to an academic code of honor, following the Jesuit Ideal of cura personalis and keeping within the school motto, "Strong Truths Well Lived."

"The students of this University understand that having collective and individual responsibility for the ethical welfare of their peers exemplifies a commitment to the community. Students who submit materials that are the products of their own minds demonstrate respect for themselves and the community in which they study. "All outside resources or information should be clearly acknowledged. If there is any doubt or question regarding the use and documentation of outside sources for academic assignments, your instructor should be consulted. Any violations of the Honor Code will be handled by the Honor Council."

The course instructor is duty bound by membership in the Loyola academic community to report Honor Code infractions to the Honor Council. Honor Code violations confirmed by the Course Director are punishable by a grade of "F" for the test or assignment in the first instance and for the course in the second. For more information about the Loyola Honor Code, see <http://www.loyola.edu/academic/honorcode>

**The Department of Communication Honor Code** policy reiterates that the university honor code applies to all CM courses, including this one. The Course Director will follow the Department of Communication's policy guidelines for honor code violations if any infraction of the code occurs. The department's policy is available upon request.

All assignments and projects submitted in this course must be your own work. When an image or text is gathered from the Web and another source, proper APA formatted citations must accompany the assignment. Use library resources available at <http://www.loyola.edu/library/REF/apa.htm> to verify the format. In design document, you may want to link an electronic source information with the correct Web address or URL.

**Appeal of a Grade.** The grade appeal policy in the current Loyola University Undergraduate Catalog applies. This policy provides adjudication of written student appeals submitted within four months following issue of the grade in question. Appeals go first to the course instructor. Unresolved appeals are reviewed first by the department chair, and then, if still unresolved, to a two-person panel appointed by the department chair for final determination.

## Course Schedule

Week	Topics and Activities	Assignments & Deadlines
Week 1 (Jan. 18)	<p>Course Overview &amp; Important Deadlines</p> <p>Reviewing SEO-Usability Quiz</p> <p>Reviewing CSS-HTML Quiz</p> <p>Recap Web I /Web Fundamentals (Review HTML and CSS) by completing <u>Review 1</u></p>	<p><b>HW1:</b> Complete the quizzes before coming to first class.</p>
Week 2 (Jan. 23)	<p>Setting up WordPress.org and Web hosting</p> <p>Complete setting up WordPress.Org site with a customized URL</p>	<p><b>HW2:</b> Complete <u>Review 2</u></p> <p><b>Moodle Reading/Video:</b> <i>How to set up WordPress.org through a hosting service provider</i></p>
Week 2 (Jan. 25)	<p>Principles of Responsive Web Design (RWD)</p> <p>Navigating WordPress.org's theme library and selecting a theme</p> <p>Understanding WordPress Dashboard</p>	<p><b>HW3:</b> Complete <u>Review 3</u></p> <p><b>Moodle Reading/Video:</b> <i>Selection and customization of WordPress.org theme</i></p> <p><i>Guidelines to select an effective theme</i></p>
Week 3 (Jan. 30)	<p>Selecting &amp; customizing a theme</p> <p>An overview of Plug-in</p>	<p><b>HW4:</b> Complete theme research and briefly present in the class</p>
Week 3 (Feb. 1)	<p>Plug-in research and integration (contd.)</p> <p>Activity: Making a progress on your project 1 website; planning and creating content for the website.</p>	<p><b>HW5:</b> Complete plug-in research and present it in the class</p>

Week	Topics and Activities	Assignments & Deadlines
Week 4 (Feb. 6)	Activity: Editing style editor of a WordPress theme  Activity: Adding new CSS style and widgets with text editor	
Week 4 (Feb. 8)	Assessment of your WordPress.Org site  Integration of Google Analytics  Activity: Making progress on project 1/WordPress.org website.	<b>Moodle Reading/Video:</b> <i>Chapter 3: Your Desktop Experience Is Not Your Mobile Experience (Mendoza, 2013).</i>
Week 5 (Feb. 13)	Responsive layout and understanding Media Queries	<b>Project 1 is due</b>  <b>Reading:</b> <i>*Chapter 2: Media Queries (Frain, 2012)</i>  <i>*Chapter 3: Embracing Fluid Layout (Frain, 2012)</i>
Week 5 (Feb. 15)	Activity: Setting up a website with responsive layout and Bootstrap (Instructor's handout)	
Week 6 (Feb. 20)	Activity: Responsive layout and Bootstrap applications for cross-platform navigation and header (Instructor's handout)	
Week 6 (Feb. 22)	Responsive layout and Bootstrap applications (Content rotator, Image Slideshow, responsive image and video)	
Week 7 (Feb. 27)	Creating a template for internal pages, utilizing and updating it;	



<b>Week</b>	<b>Topics and Activities</b>	<b>Assignments &amp; Deadlines</b>
Week 7 (March 1)	Activity: Uploading web pages on your Web server  Activity: Adding favicons, social media widgets and forms.	
Week 8	Spring Break	
Week 9 (March 13)	Principles of data visualization (DataViz) for the web  Activity: Creating charts with Tableau Public	Sign up for Datawrapper and installing Tableau Public
Week 9 (March 15)	Lecture: Principles of DataViz (contd.)  Activity: Creating charts with Tableau Public	<b>Project 2 is due</b>
Week 10 (March 20)	Activity: Creating Charts and Maps with Datawrapper	
Week 10 (March 22)	Activity: DataViz practice day with both Tableau and Datawrapper  Activity: Embedding charts and maps to a website	
Week 11 (March 27)	Lecture: Mobile App vs. Mobile Web, Types of App, App Development Process	
Week 11 (March 29)	Lecture: Mobile User Experience Patterns  Activity: Native Mobile/App Design with jQuery Mobile: Lesson 1	<b>Project 3 is due</b>
Week 12 (April 3)	Activity: Native Mobile/App Design with jQuery Mobile: Lesson 2	
Week 12 (April 5)	Activity: Native Mobile/App Design with jQuery Mobile: Lesson 3	

<b>Week</b>	<b>Topics and Activities</b>	<b>Assignments &amp; Deadlines</b>
Week 13 (April 10)	Lecture: App Distribution process  Activity: PhoneGap Build	
Week 13 (April 12)	Activity: Building App with Appy Pie/MIT App Inventor	
Week 14 (April 17)	Easter Break	
Week 14 (April 19)	Lecture: App Analytics  Activity: Building App with Appy Pie/MIT App Inventor	
Week 15 (April 24)	Lesson: Google's Webmaster Tool  Lesson: XML Sitemap  OR  Working on Project 4	
Week 15 (April 26)	Working on Project 4	
Last Class (May 1)	Working on Project 4	
May 5	Presentation/TBD	<b>Project 4 is due by 1 p.m.</b>

**Note:**

- 1) Since the instructor will heavily use Moodle for this class, please make sure to check course Moodle page almost every day. Course content will be populated week-by-week, while there will be separate folders/area for assignments and submissions.
- 2) Tutorials/readings will be available either on Moodle or accessed through the library's website.