

# CM312.01: Web I, Spring 2018

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[3 credit hours]

Class Schedule: Monday & Wednesday, 3 – 4:15 p.m., College Center M021

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**Instructor:** Masudul (Mas) Biswas, Ph.D.  
**Office:** College Center, Room M026A

**E-mail:** [mkbiswas@loyola.edu](mailto:mkbiswas@loyola.edu)  
**Office Phone:** 410.617.6753

## Office Hours

Tuesday & Thursday: 2 – 4 p.m.  
and by appointment.

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**Course Description** (from Loyola Undergraduate Catalogue): This course offers students the conceptual understandings, such as design principles, Web usability, and search engine optimization associated with website design and development. Students spend much time learning HTML & CSS in this course. In addition, students gain experience with Content Management Systems and other related programs needed to build effective websites.

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**Learning Outcomes.** On completion of the course, successful students will:

- Be able to design and develop a website with *web-development languages (HTML, CSS)* and supporting application software (such as text editor Brackets and/or Adobe Dreamweaver);
- Be able to set up and design a web site using a *Content Management System (CMS)*, such as WordPress.Com, Wix or Google Site;
- Gain knowledge of terminologies, concepts and techniques associated with web development;
- Be able to create essential visual, interactive and multimedia content for a website (including favicon, forms, custom site search, slideshows, tabbed content, accordion, audio for Web and video for Web)
- Effectively tackle *cross-browser compatibility* issues for audio and video content;
- Be able to identify and address *accessibility* issues on a website;
- Be able to critically evaluate the functionality and *usability* of a website;
- Be able to create and implement *social media widgets* for a website;
- Demonstrate their understanding of the process of tracking, monitoring and interpreting website traffic with *Google Analytics*;
- Implement *search engine optimization (SEO)* strategies and techniques in the creation of a website;
- Be able to *optimize images* for faster loading of a website.

**Course Overview.** This course is your first step to be a **front-end web developer** with **essential knowledge on back-end of web development**. This course is designed to provide you with an opportunity to develop basic- to intermediate-level skills and understandings of web design and development. This course will address many of the methods and tools that are being used to support communication on the Web. *Even you do not want to be a web developer, the learning outcomes of this course can be useful and applicable if you plan to pursue a career in digital media and communication.*

Lab time during class periods is limited and students are expected to spend additional time working in the labs or on their own computers to complete assignments.

## Course Materials

The instructor will not use everything of Brian Miller's book. In the beginning of the semester, we will quickly finish key chapters from this book as they pertain to concepts and techniques of web design. Please use Duckett's book as a reference book for learning HTML & CSS on your own. Moreover, your instructor will share with you about 15 recipes and a number of video tutorials (created by the instructor) for learning web development with HTML, CSS and plug-ins. Duckett's book will help you to understand those recipes well. IF you do not buy Duckett's book on HTML & CSS, then you will need to rely on W3School's free resources online.

**Required Text** (Available in the campus bookstore):

- Miller, Brian. *Above the fold: Understanding the principles of successful website design (Revised Ed.)*. 2014. ISBN: 9781440336669 [Kindle Edition is available through Amazon.Com]
- Duckett, Jon. *HTML & CSS: Design and Build Websites*. 2011.

OR

- W3School's HTML Tutorial: <https://www.w3schools.com/html/default.asp>
- W3School's CSS Tutorial: <https://www.w3schools.com/css/default.asp>

*\*\*\* A note on how to LEARN & PRACTICE HTML and CSS: In the Course Schedule section, you will notice "LEARN & PRACTICE" label for some pre-class activities, particularly for the HTML- and CSS-related learning from the Jon Duckett's book. Since one of the major objectives of this class is to learn the use of HTML and CSS, it is important that you read and practice codes from the selected chapters. An instruction file on such pre-class activities "Learn and Practice" will be available for you to download and print from the Moodle's Course Resources folder.\*\*\**

**Software:**

- **Brackets:** Install this *FREE* text editor software from <http://brackets.io/>
- **Adobe Dreamweaver CC:** Though we will not use it a lot in our class activities, it will be good to know how this web development software works. So please download the latest version of Dreamweaver through Adobe Creative Cloud. Free for Loyola Students. Apply for your Creative Cloud license here, <http://www.loyola.edu/department/technology-services/services/software/adobe-creative-cloud>
- **WOWSlider:** You can download the *FREE* version from <http://wowslider.com/>
- **FileZilla** (FTP software): It is *FREE* and it can be downloaded from <https://filezilla-project.org/>

*Links to free online tools for image optimization, favicon generator, CSS3 Effects, form application creator, social widgets, Google's Custom Search will be shared through Moodle.*

**Supplies:** A dedicated portable USB storage device [minimum 5GB is preferred] for this class should be brought to each class meeting, on which you should backup your work. Also, you are expected to back-up your recipes (completed class activities), completed and draft versions of homework assignments and projects on OneDrive or Google Drive or Dropbox. Therefore, excuses such as losing files and having corrupt files because of computer issues may not be accepted/considered as valid excuses.

**Course Moodle Site** (<http://moodle.loyola.edu>): Course materials (i.e. handouts and supplemental readings) will be posted to Moodle. Students will be informed in class or by email, as they become available. Online course discussions will be hosted and moderated through Moodle. If you need any assistance using Moodle, contact Technical Services at x5555, (410) 617-5555.

## Grading & Course Requirements

**Methods of Evaluation:** Requirements for this course include class participation (a good number of class activities), homework assignments, quizzes, and projects. *Your earned grade will depend on the effort and quality work that you put into these elements.*

**Grade Distribution (in points):**

Homework Assignments (5)	:	70 points
Analysis/Reports (2)	:	45 points
Quizzes on HTML & CSS (2)	:	40 points
Activities & Participation	:	35 points
Project 1	:	80 points
Project 2	:	80 points
<b>Total</b>	:	<b>350 points</b>

<b>Final Grading Scale (%):</b>	
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

Grades are based on standardized criteria. Grade reports will be issued periodically. The reports show progress toward learning aims, attendance/class participation, and a prediction of the overall course grade, which might change, as additional grades are included. The purpose of the grade reports is to maintain accurate records. *Students are responsible for immediately notifying the course instructor of apparent recording errors. Students experiencing difficulties should request help from the course instructor.*

**Class Participation (35 points):** This class is designed to help students learn the web development tools hands-on. It will be a very activity-oriented course. Your *class participation points (35 points)* will depend on the completion of all the activities assigned in the class and through Moodle (80%) and class discussion (20%).

The instructor will provide recipes/instruction handouts for class activities. *If you fail to complete a recipe in class due to an absence from class, you will be expected to meet either of these two options: 1) you will meet with the instructor during his office hours within a week from the missed class and complete the recipe OR 2) you will complete the missed recipe/activity on your own following the handout/instruction available on Moodle and then show the completed recipe to your instructor.*

Please review the “Course Schedule” section of the syllabus carefully. You need to come to class **prepared** to do the activities on your own or with the instructor or to engage in class discussion as an informed participant. Therefore, I have added a column – “**Pre-class activities**” – with information about reading materials and tutorials for you to get ready for most of the class sessions.

**Homework & Projects (230 Points):** Homework assignments and projects will be due at the beginning of class on the designated dates, unless otherwise specified. You will be expected to work on FIVE homework assignments and two projects.

In five homework assignments, you will apply what you will learn in different recipes on web development and CMS lessons. Homework assignments will help you master the applications of software in addition to class activities and working with the tutorials. In homework assignments, **you will get a chance to fix the errors within 48 hours of the instructor’s feedback to receive full points as long as you submit it by deadline. If you fail to complete homework correction correctly within that window of 48 hours, you will lose some points or full points depending on the nature of error you will have.** The goal of such assignment is to prepare you for the projects.

Two projects in this course are interconnected. Project 2 will be an extension of project 1. In two projects, you will complete building a whole functional, interactive website. In project 1, you will create a 4-page website on a topic/entity/theme from the scratch with HTML and CSS, text and images. In project 2, you will add three new pages to your project 1 site. In this final phase, you will be expected to include favicon, multimedia content, interactive content, site search, social icons, Google Fonts for typography across your 7-page website. You will be allowed to get help and ideas from completed recipes and homework assignments; additionally, you will be able to receive help and critiques on project draft versions. [Examples of student projects from past semesters are available here.](#) Project and homework assignment details to be available on Moodle will include information about submission format

*Late Work Policy:* Late homework assignments and project 1 will not be accepted more than a day after deadline and will receive a letter grade penalty for late submission. *No extension will be granted for project 2 since it is equivalent to final in this course.*

**Quizzes (40 points):** Throughout the semester there will be TWO quizzes covering the materials from readings, lectures and software tutorials on HTML and CSS. You will complete these quizzes online within a certain timeframe.

*You can make up a quiz within one week from the deadline of a quiz.* You have to have an excusable reason to qualify for a make-up quiz. In case you are allowed to make up a missed quiz, remember that make-up version of quiz will be different from the original version.

**Analysis/Reports (45 points):** You will work on TWO analysis papers/reports where you will be expected to demonstrate your learning on web design concepts, terminologies and principles from Brian Miller’s textbook and other reading materials (such as Internet articles, presentation slides). One of these reports will be about analysis of web usability and accessibility. In another assignment, you will be expected to interpret various design elements and components on a website. Details about these assignments and submission format will be available on Moodle.

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## Class Policies

**Attendance Policy:** 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 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 Examples.* 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-." Another student earning a "C+" and having six unexcused absences will receive a penalty of 4 letter grades (6 unexcused absences minus 2 allowed) or a Final Class Grade of "F."

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) 617-5050. 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).

**Excused Absence for University-approved activity:** The student is responsible for personally informing the course instructor of such University-approved 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 Absences:** If you are absent, it is your responsibility to get notes from a classmate and to makeup missed assignments; quizzes cannot be made-up following an unexcused absence. Exceptions are intended to accommodate illness, emergencies, religious holidays, and university-sponsored trips.

**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.

**Smartphone and Computer Use.** Except for urgent alerts or class activity purposes, you can check emails, text messages or visit social media sites or any other websites, not related to class, *only after a lecture is complete and you have completed all the activities.*

**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.

**Learning Disabilities:** To request academic accommodations for a disability, contact the Disability Support Services (DDS) Office at (410) 617-2062. 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 make-up schedule. Refer to the University's website or phone line to confirm that class has been canceled.

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**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 with 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.

## Computer Policies

**Computer Proficiency:** General proficiency in using personal and Mac computers is assumed. Help is available from the course instructor and 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 back-up of your work-in-progress.*

**Required Use of Loyola E-mail Account:** The course instructor will post notices of class events, assignments, grades, and other course matters to the course Moodle site and also by e-mail to class members' Loyola University e-mail accounts or any other email addresses programmed with course Moodle. 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.

**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.



## Course Schedule

	Topics	Pre-Class Activities	Class Activities, Assignments & Deadlines
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### Web Design – Principles & Usability

Jan. 17	Course Overview  Web I class and Communication Profession  Website Planning	<b>READ:</b> Syllabus  <b>READ:</b> Miller (Chapter 1)  Accessing Adobe Creative Cloud through Loyola's OTS and downloading Adobe Dreamweaver CC	<b>Activities:</b> Analyzing websites, Assessing web usability
Jan. 22	Website Planning & Web Usability	<b>READ:</b> Miller (Chapters 1 - 2), Notes on Web Usability (Moodle)	

### Website – Structure & Design

Jan. 24	Accessibility and Usability	<b>READ:</b> Miller (Chapter 2)	<b>Activity:</b> Accessibility
Jan. 29, Jan. 31	Web Space & Layout, Anatomy of a webpage  Elements of Web Design	<b>READ:</b> Miller (Chapters 3 - 5)	<b>Activities:</b> Dissecting website layout, identification and assessment of web design elements  <b>Report 1 is due on Jan. 31<sup>st</sup></b>

### Web Development: HTML, CSS and SEO

Feb. 5	Creating a basic HTML page with text and images	<b>LEARN &amp; PRACTICE</b> HTML Structure and Text ("Selected Topics" from Duckett Chapters 1 – 2)	Activity: Recipe 1
Feb. 7	Formatting text and images, Formatting Links	<b>LEARN &amp; PRACTICE</b> HTML images and extra mark-ups ("Selected Topics" from Duckett, Chapters 4, 5, 8)	Activity: Recipe 2  <b>Report 2 is due on Feb. 7.</b>
Feb. 12	Formatting lists and horizontal line  Web Typography: Modifying Fonts SEO and techniques of implementing it	<b>LEARN &amp; PRACTICE</b> HTML Lists ("Selected Topics" from Duckett, Chapter 3)  <b>Read:</b> Miller (Chapter 6) <b>READ:</b> Notes on Search Engine Optimization (Moodle)	<b>Homework 1 is due.</b>  Activity: Implementing SEO in HTML.
	<b>Topics</b>	<b>Pre-Class Activities</b>	<b>Class Assignments &amp; Deadlines</b>

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**Web Development: HTML, CSS and SEO (Contd.)**

Feb. 14	Introducing CSS (Understanding the functions of different types of CSS)	<b>LEARN &amp; PRACTICE</b> CSS ("Selected Topics" from Duckett, Chapters 10, 11)  <b>READ:</b> Miller (Chapter 7)	Recipe 3  <b>Online Quiz I (HTML)</b> <i>Deadline: By 11:55 p.m., Feb. 15</i>
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**Advanced Web Development: Baking Layouts with HTML & CSS**

Feb. 19	Creating a landing page layout with HTML and CSS I  Overview of Homework 2	<b>LEARN &amp; PRACTICE</b> CSS ("Selected Topics" from Duckett, Chapters 12 - 13)	Activity: Recipe 4
Feb. 21	Creating a landing page layout with HTML and CSS II  Project 1 to be assigned	<b>LEARN &amp; PRACTICE</b> CSS ("Selected Topics" from Duckett, Chapter 15)	Activity: Recipe 5
Feb. 26	Creating a Simple Responsive Layout with HTML & CSS		<b>Homework 2 is due.</b>  Activity: Recipe 6

**Advanced Web Development: CSS Navigation**

Feb. 28	Simple, horizontal navigation bar with CSS  Project 1.	<b>EXPLORE</b> the sites of CSS-tricks.com and GitHub.com to search code snippets for different applications (e.g., Dropdown menu, CSS menu)	<b>Homework 3 is due.</b>  Activity: Recipe 7
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**Spring Break: From March 5 - 11**

March 12	Navigation bar with dropdown options		Activity: Recipe 8  <b>Online Quiz II (CSS)</b> <i>Deadline: By 11:55 p.m., March 15</i>
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**Advanced Web Development: CSS3 Effects and Transitions**

March 14, March 19	Adding CSS3 Effects and Transitions to webpages		Activity: Recipe 9
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**Advanced Web Development/Plug-In: Integration of Slideshows and Interactive UI Applications**

March 21	Exploring the options of creating slideshows	<b>READ &amp; Explore</b> Slideshow documents and resources (Moodle)	Activity: Recipe 10  Special Slideshow activity
March 26	Recap of slideshow activity  Applications of tabbed content & jQuery Accordion		Activity: Recipe 11

**Easter Break: From March 29 – April 2**



	Topics	Pre-Class Activities	Class Assignments & Deadlines
March 28	Project 1 Day		<b>Project 1 is due on March 28 by 4:15 p.m.</b>
<b>Advanced Web Development/Plug-In: Multimedia and Form Applications</b>			
April 4	Adding audio & video content (HTML5 and embedded codes)  Cross-browser compatibility	<b>LEARN &amp; PRACTICE</b> ("Selected Topics" from Duckett, Chapter 9)	Activity: Recipe 12
April 9	Site Search and Form Applications (Applications of Google Form, JotForm, Google CSE)  Generating favicon and Integrating it with the website  Project 2 to be assigned	<b>LEARN &amp; PRACTICE</b> CSS ("Selected Topics" from Duckett, Chapter 7)	Activities: Recipe 13, Recipe 14
<b>Advanced Web Development/Plug-In: Social Media Widgets</b>			
April 11	Integration of active social share icons  Generating and integrating social media widgets into a webpage		<b>Homework 4 is due</b>  Activity: Recipe 15
<b>Content Management System (CMS)</b>			
April 16	CMS way of web design/web content management  WordPress.Org vs. WordPress.Com	<b>Watch and Practice:</b> Tutorials on WordPress.Com	WordPress Activity
April 18	Continuation of CMS-related lessons	<b>Watch and Practice:</b> Tutorials on WordPress.	WordPress Activity
<b>Web Hosting and Analytics</b>			
April 23	Google Analytics: What it tracks and how it works with a CMS and a hand-coded website  Understanding how a FTP software works	<b>Read:</b> Miller (Chapter 9)	<b>Homework 5 is due</b>  Activities: 1) Generating Google Analytics tracking code/ID and adding it to websites; 2) Server file management with FileZilla.

April 25 - April 30	Google Analytics Follow Up Working on Project 2	Activity: Interpreting Google Analytics Report
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### Final Exam Week

Project 2 is due on Wednesday, May 2<sup>nd</sup> by 4 p.m.

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#### NOTES:

- Projects 1 and 2 are usually assigned 3 to 4 weeks in advance from the submission deadline.
- Students usually get minimum 36 hours to five days to work on a homework assignment, depending on the nature of the assignment.
- What you should study/practice for quiz will be available on Moodle in the “Topics for Quizzes” document located in the “Syllabus and Assignments” folder.
- Homework assignments and project details will be available on Moodle (in “Syllabus and Assignments” folder).

### Assignment Deadline Chart:

Report 1 (Usability & Accessibility)	January 31
Report 2 (Layout & Design)	February 7
Homework 1	February 12
Online Quiz 1 (HTML)	February 15
Homework 2	February 26
Homework 3	February 28
Online Quiz 2 (CSS)	March 15
Project 1	March 28
Homework 4	April 11
Homework 5	April 23
Project 2	May 2