

MART 220; Creative Coding II

- SYLLABUS

- Semester: Fall 20--
- Class Times:

Professor

- Email:
- Office:
- Office Hours:

COURSE OVERVIEW

This course is intended to make you comfortable with presenting yourself through the web. In addition, you will learn skills that should allow you to build, manage, and develop websites for potential customers.

This course will start with an overview of HTML and CSS. This will be handled through a static hosting on github.io. After this introduction, Content Management Systems will be introduced, with particular emphasis paid to wordpress.org

Tools

- **HTML5**
 - We will discuss HTML5 in-depth.

- **CSS3**

- CSS will be used to add style to websites

- **Markdown**

- All blog and response entries for each homework will be written using markdown.

- **WordPress**

- This course will also examine the use of content management systems (CMS) for web development.
- wordpress.org will be used.

- **Editor**

- You should install a text editor. If you do not already have a text editor installed I suggest GitHub's [Atom](#).

- **Git**

- You will need to use Git; a free and open source distributed version control system. This should already be installed on your computer.
- You can work with git via the terminal or [command line](#).
- Although it is recommended you use a GUI based front-end application. Such as;
 - [SourceTree](#)
 - [GitHub Desktop](#)

- **GitHub**

- Additionally, you will be expected to maintain a github.io repository and website via [GitHub](https://github.com) where you will post your weekly homework assignments.

- **Browser**

- You should ensure you have a modern browser installed on your computer, such as Safari, Google Chrome, or Firefox.

Homework Wiki

All homework will be submitted to the class GitHub Homework wiki. You will submit links to your code sketch and blog entry (both hosted via your GitHub repository) for every assignment.

- [Homework](#)

Resources

Books (optional)

- If you are interested in some supplemental reading on HTML and CSS, The [HTML & CSS book](#) is a nice one.
- I have also recently come across "[HTML5: Up & Running](#)", which is a community sourced book of information on HTML5!

Server Hosting

You will be expected to purchase hosting space for your work between October and the end of the semester. We recommend [BlueHost.org](https://bluehost.org).

Course Outline

SECTION 1: Fundamentals

1: Introduction

- Development environment
- Text editors
 - [ST3](#)
 - [Atom](#)
- [Browsers](#)
- Text documents
- Git version control
- Markdown
- Setting up your GitHub repository and homepage
- Following the course repository

2: Hello World

- [History of the Web.](#)
- HTML5, CSS3, and JS
- Viewing source code.
- Unix
 - [Basic Unix Commands](#)
- Git Version Control and Github
 - [Introduction to Git and Command Line by Steve Klise](#)
 - [Git workflow for beginners](#)
 - ["Try" Git tutorial](#)

- Github Pages
- `index.html`
- Publishing your first live webpage

3: Basics of HTML

- Markup - Elements & Tags
- Block-Level Elements
 - `<Head>`
 - `<Body>`
 - Headings
 - `<p>`
- Style
- Meta Data
- Attributes
- Structure
- doctype
- Lists
- Semantic Markup Elements
- Inline Elements

4: Links, Images, & Forms

- Links (The OG of HTML)
- URL
 - Absolute
 - Relative
- Email Links
- Images
- Tables
- Forms

5: Extra Markup, More Structure, Media in HTML5

- extra markup
- Grouping
- Global Attributes
- Meta Data
- audio
- video

6: Intro to CSS

- Overview of what CSS (Cascading Style Sheets) can do for Web pages.
- CSS basic syntax
- CSS properties
- Boxes
- Lists
- Selectors
- Inheritance
- Precedence
- External CSS files
- Color
- Text

7: Styling

- Boxes
- Lists
- Tables
- Forms

8: Debugging and Layout

- Debugging
 - Page Layout
-

SECTION 2: CMS and Wordpress

9: Introduction to Content Management Systems (CMS)

- Site Maps
- Hosting
- setting up the install
- What is a CMS (Jekyll, Wordpress, Drupal). Hosting a website (github.io, UMT hosting).
- Planning
- Crawlers
- SEO

10: The Install

- Setting Up the CMS
- Install, Local & Remote
- articles
- posts
- pages
- Static front pages

11: WYSIWYG's

- WYSIWYG
 - Wordpress
 - Microsoft Word
 - Google Web Design
- formatting text & images
- adding images
- links
- embedded videos
- Tags

12: Admin

- Backing Up
- cPanel, phpMyadmin
- SEO
- Going Live

13: Templates and Themes

- Templates and Themes
- Installing and customizing prebuilt templates.
- Discussion of user interaction and what to look for in a theme.
- Contact Forms
- Lightbox Galleries
- popover function
- Aggregate Content Pages

14: EXAM

- **EXAM**

15: Child Themes

- Child Themes 1
- Making your own child theme

Finals Week: Presentations

Presentation of your final websites

Policies

Course Evaluation

We will have weekly assignments that are relevant to material from the previous class. These assignments are required and you should be prepared to show/talk about them in class. It is expected that everyone in the class will create and maintain a blog for their assignments.

Attendance is mandatory. Please inform your teacher via email if you are going to miss a class. Two unexcused absences is cause for failing the class. (An unexcused lateness of 10 minutes or more is equivalent to 1/2 an absence.)

This class will be participatory, you are expected to participate in discussions, live code with the class, and give feedback to other students both in class and through online participate with their projects. This (along with attendance) is 10% of your grade.

This course will culminate with final projects. You are expected to push your abilities to produce something that utilizes what you have learned in

the class that is useful in some manner to yourself or the world. This will comprise 20% of your grade.

Grading

Grades for all assignments will be based primarily on the student's ability to:

1. Demonstrate an understanding of the specific characteristics and integrative capabilities of the assigned topic in your own words and code.
2. Articulate a clear and concise perspective. Cutting and pasting or copying word for word off the Internet will result in loss of points.
3. Present an organized file/program, as well as blog entry; including proper and punctual delivery of the assignment files.
4. Demonstrate creativity beyond the expected technical requirements.

IMPORTANT: Assignments handed in after the due date and time will have points deducted for lateness. This will be in addition to any points deducted for content. Those that are uploaded late but within one week of the due date will lose 5% for lateness. For those uploaded after that, the number of deducted points will be at the discretion of the faculty.

Grade Break Down

Grades will be determined according to the following breakdown:

- Regular Assignments 50%
- Participation and Attendance 10%
- Exam 20%
- Final Project 20%

Letter Break Downs

- A 95-100
- A- 90-94
- B+ 86-89
- B 83-85
- B- 80-82
- C+ 76-79
- C 73-75
- C- 70-72
- D 60-69
- F 0-59

Academic Misconduct and the Student Conduct Code

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available online at http://www.umt.edu/vpsa/policies/student_conduct.php

Changes to the Course

I reserve the right to change the intended content of this course throughout the semester. This may be done to adjust for the speed of the class, to better meet educational goals, or to account for changes in technology.

References and Sources

Much of the content for this course will come from the The [HTML & CSS book](#). Many code examples are also copied or derived from their examples also available from the books homepage.