

Web Technologies

MART 441 Syllabus Spring 2021

MART 441 Section 50

Instructor: Michael Cassens

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You can contact me via TeamViewer or Zoom

Please feel free to set up an appointment using my calendaring program.

<https://calendly.com/michael-cassens/441-meeting>

URL: <http://umonline.umt.edu/>

Overview:

Building on the principles and techniques covered in Intro to Web Design (MART 341), this project-based class focuses on media integration, interactivity, client-side development, and server-side development for the presentation and development of artistic websites.

This online advanced web technologies course will explore the latest in web technologies. This will begin with a refresher of HTML5 and CSS3. Next will be a thorough exploration of JavaScript (JS) for client-side site development and interaction. The final topic will touch on the power of JS and node.js for server-side development. A number of JavaScript libraries will be explored for how they can speed up the artistic process.

Objectives:

At the conclusion of this semester, students should;

- Feel comfortable creating static sites with advanced HTML5 & CSS3 techniques.
- Be capable of using JavaScript (JS) and jQuery to create “interactive elements” and manipulate the DOM.
- Be capable of incorporating external JS libraries, such as d3 or tone.js to create engaging sites.
- Have a basic understanding of the role node.js plays in web development.

Attendance:

Attendance is not mandatory however it is your responsibility to make up the work. Although the class is fully online, however, **I am asking for weekly check-in sessions from each student via email, text, Zoom, etc.**

Grading:

Homework 60%

Final Project/Portfolio 40%

Final Portfolios Turn In Friday April 30th, 2021 11:59 PM

All Assignments will be submitted through Moodle assignments. If you have trouble with your submission, please send them to

michael.cassens@mso.umt.edu

Your subject must be MART 441 Assignment # (e.g MART 441 Assignment 1)

**If you have multiple files, please zip all your files and label your file:
"MART441LastNameAssignment1.zip"**

Grading Scale

Grading Scale

100-93	A
93-90	A-
89-87	B+
86-84	B
83-80	B-
79-77	C+
76-74	C
73-70	C-
69-67	D+
66-64	D
63-60	D-
59-below	F

P/NP – pass/no pass, 70 or greater is passing determined by Media Arts Department policy, which is a C or better.

Late Assignments:

- Late assignments will not be accepted. Sorry for the inconvenience.

Requirements

- Web Design with HTML, CSS, JavaScript and jQuery Set - Jon Duckett
- https://www.amazon.com/Web-Design-HTML-JavaScript-jQuery-dp-1118907442/dp/1118907442/ref=mt_paperback?_encoding=UTF8&me=&qid=

- Optional Texts:
 - The Definitive Guide to HTML - Adam Freeman
 - Pro jQuery 2.0 - Adam Freeman
- Suggested pre-requisites for this course: MART 341
- Required Software:
- **Visual Studio Code, Atom, etc.**

Suggestions:

- It would be beneficial to ask as many questions as you can.
- Feel free to set up an appointment if you need help. I am here to help you understand and do well.

Collaboration:

- I encourage you all to work together through problems – make sure you comment who you worked with at the top of the page, but copying and plagiarism will not be tolerated. If you are caught cheating, I will give you an F for the course.
- Please refer to the Student Conduct Code in how this will be dealt with: http://life.umd.edu/VPSA/student_conduct.php

Incompletes:

"Incomplete for the course is not an option to be exercised at the discretion of students. In all cases it is given at the discretion of the instructor...." Some guidelines for receiving an incomplete are listed in the catalog which include having **a passing grade up to three weeks before the end of the semester** and being in attendance. **"Negligence and indifference are not acceptable reasons."** Also note that there may be financial aid implications.

Late Drops:

The University's policy on drops after **45** days of instruction is very specific. The School of Visual and Media Arts follows this policy rigorously. There are five circumstances under which a late drop might be approved: registration errors, accident or illness, family emergency, change in work schedule, no assessment of performance in class after this deadline. Except in very unusual circumstances, I will only approve late drops if there is documented justification for one of these circumstances.

Disabilities:

This course is accessible to and usable by otherwise qualified students with disabilities. To request reasonable program modifications, please consult with the instructor. Disability Services for Students will assist the instructor and student in the modification process. For more information, visit the Disability Services website at <http://life.umd.edu/dss/>.

Class Etiquette:

- Be respectful of your fellow classmates.
- Call me anytime if you have a question.
- Profanity and Obscenity will not be tolerated in class or assignments.

Special Dates:

- Jan 18th, 2021 – Martin Luther King Jr. Day – No class
- Feb 15th, 2021 – President's Day – No Class
- March 4th, 2021 – Study Break – No class
- March 16th, 2021 – Study Break – No class
- April 2nd, 2021 – Study Break – No class
- April 23rd, 2021 – Last Day of Class
- **Final Project Turn In: April 30th, 2021 11:59 pm**

Tentative Schedule:

Week 1 Syllabus Review and Overview and GitHub

Week 2 Introduction to JavaScript

Week 3 DOM, Functions

Week 4 Variables, Loops, Control Statements, Math Functions

Week 5 State, Query String, Cookies, Arrays, Debugging

Week 6 Arrays, Local Storage, JSON

Week 7 OOP, Classes, Objects

Week 8 jQuery

Week 9 JSON, jQuery AJAX, jQuery Plugins

Week 10 HTML5

Week 11 HTML5 Canvas, Classes, Arrays, JSON

Week 12 Phaser.io

Week 13 three.js

Week 14 Node.js

Week 15 Work on Final Project

Week 16 Final Project Turn In– **Friday April 30^h, 2021 11:59 pm**