

# Web Technologies

## MART 441 Syllabus Spring 2024

### **MART 441 Section 50**

Instructor: Michael Cassens

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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. Afterward, we will explore 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 to see 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, **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, May 10<sup>th</sup>, 2024 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**

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

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

### **Late Assignments:**

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

### **Requirements**

Eloquent\_JavaScript – in Moodle

### **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 on 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 for how this will be dealt with:  
<https://www.umt.edu/student-affairs/community-standards/student-code-of-conduct-2021-pdf>

### **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, including 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.

### Land Acknowledgement:

The Séliš-Q'łispé Cultural Committee created the following language, *"The University of Montana acknowledges that we are in the aboriginal territories of the Salish and Kalispel people. Today, we honor the path they have always shown us in caring for this place for the generations to come."*

### Inclusion Policies:

The University of Montana values leadership, engagement, diversity, and sustainability, because our institution is committed to respect, welcome, encourage, and celebrate the differences among us. As members of the University of Montana community, we aspire to:

- Respect the dignity and rights of all persons.
- Practice honesty, trustworthiness, and academic integrity.
- Promote justice, learning, individual success, and service.
- Act as good stewards of institutional resources.
- Respect the natural environment.

The College of the Arts and Media at the University of Montana, has chosen to actively pursue equity and access for all persons. In this charge we will be researching, planning, and implementing ways in which our culture can be more accessible, inclusive, equitable, sustainable. It is not enough to be anti-bias in principle without being equitable in action. We will implement these actions organized by a group of students, faculty, and staff across the entire College in an ongoing way.

### Student Support Resources

#### Academic Misconduct and the Student Conduct Code

"This Code of Conduct embodies and promotes honesty, integrity, accountability, and duties associated with citizenship as a student in our community at the

University of Montana. This Code exists to protect the interests of the community and dignity of its members, and to challenge those behaviors which are not in accordance with our policies". The Code is available for review online at <https://www.umt.edu/student-affairs/community-standards/student-code-of-conduct-2021-pdf>

## Accommodations

"Students with disabilities may request reasonable modifications by contacting the Office of Disability Equity (ODE) office. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and the Office of Disability Equity (ODE). For more information, please consult <http://www.umt.edu/disability>. "

**The Writing and Public Speaking Center** provides one-on-one tutoring to students at all levels and at any time in the writing process. Visit now. Visit often. We're ready when you are. [www.umt.edu/writingcenter](http://www.umt.edu/writingcenter).

**Mental Health and Well-being Policy:** The University of Montana is committed to advancing the mental health and well-being of its students. Commonly students experience personal challenges that can impact their academic learning. Many services are offered on campus to support student success inside and outside of the classroom. If you or someone you know is feeling overwhelmed, depressed, and/or in need of additional support visit: <https://www.umt.edu/well-being/student-resources/default.php>

Our Well-being Support Coordinator can help you navigate resources if needed, I would encourage you to either fill out this form: [https://umt.co1.qualtrics.com/jfe/form/SV\\_cTq1BO0XyqpXTAG](https://umt.co1.qualtrics.com/jfe/form/SV_cTq1BO0XyqpXTAG)

Or contact her directly at: <https://calendly.com/courtney-bowers>

### **Stay connected:**

Please join SVMA social media to stay informed about events and happenings in our school.

- Instagram: [https://www.instagram.com/umt\\_svma/](https://www.instagram.com/umt_svma/)
- Facebook: <https://www.facebook.com/UMTsvma>

### **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:**

- Feb 19th, 2024 – President's Day – No Class
- March 18th-22nd, 2024 – Spring Break – No class
- May 3rd, 2024 – Last Day of Class
- Final Project Turn-In: May 10th, 2024 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 Spring Break

Week 11 HTML5

Week 12 HTML5 Canvas, Classes, Arrays, JSON

Week 13 Phaser.io

Week 14 three.js

Week 15 Node.js

Week 16 Work on Final Project

Week 17 Final Project Turn In- **Friday May 10<sup>th</sup>, 2024 11:59 pm**