AAV 255-02: Web I-Spring 2022

Course Syllabus

Meeting Time: Tuesdays, 1:30-5:20 PM, AIMM 223

Instructor: Matthew DiMatteo

Email: dimatte4@tcnj.edu

Discord: Matthew DiMatteo#3880 **Office Hours:** By Appointment

Best Availability: Thursdays, after class on Tuesdays

Please email me or send me a message on Discord if you have any questions or concerns. I'm happy to meet before or after class, and if you'd like to arrange a Zoom meeting during the week, let me know and I'll find a time that works for both of us.

Course Description

Web I is an introduction to web production and design using Hyper Text Markup
Language (HTML), Cascading Style Sheets (CSS), JavaScript, and various software programs. The course consists of lectures and demonstrations on the creation of websites as well as the hardware and software technologies used for web production. The use of the Internet as an expressive medium by contemporary visual artists is also explored.

Course Resources

- Canvas—Resources such as <u>class slides</u> and other <u>files</u> will be accessible online through the <u>Files section in Canvas</u>. Students will be expected to <u>submit</u> <u>assignments through the Assignments section</u>, where they can also find detailed instructions and grading criteria. <u>Zoom</u> may be used in the event that a class must be switched to a remote format. Any changes to the instruction format or any other announcements will be posted in the <u>Announcements</u> section.
- Code Editor—Students will require a code editor such as <u>Adobe Dreamweaver</u>
 (compatible with both Mac and Windows; included as part of <u>Adobe Creative</u>
 <u>Cloud</u>), <u>Microsoft Visual Studio Code</u> (compatible with both Windows and Mac;
 free), TextEdit (Mac default), Notepad (Windows default), or any other preferred
 editor.

- 3. AIMM Labs—Students have access to all AIMM classrooms and labs by swiping in with a valid TCNJ ID. Workstations in these rooms all have a wide variety of digital media software (including the Adobe Creative Cloud) installed on them. Keep in mind not to swipe in while another class is in session. You can see the schedule of classes held in a room posted outside its door. Students also will have access to resources such as scanners, printers, etc. in dedicated labs. The AIMM building itself is open for the majority of the day on weekdays, but locked on weekends. Art/DCT students can swipe in with their TCNJ ID to enter the building, however. View the hours of availability for the AIMM building here.
- 4. Adobe Creative Cloud—Students currently enrolled in any Arts and Communications course will have full access to the Adobe Creative Cloud, and can download any software for use on up to two personal computers by logging in with their TCNJ username and password here. Programs such as Adobe Dreamweaver, Adobe Photoshop, Adobe Illustrator, and Adobe XD will be used in this course. Please note, however, that this access is only guaranteed for the duration students are enrolled in the course—be sure to back up any files saved to Creative Cloud storage prior to the end of the semester.
- 5. Various learning resources here: tutorials, references, special tools
- Sketchbook/Notebook—Recommended for quickly jotting down notes or sketching out designs.

Course Requirements

- Students will be expected to arrive to class on time, participate in class
 discussions and workshops, present, discuss, and defend ideas, and complete
 assignments by the date due. In the event of absence, students are responsible
 for catching up on material covered in class and completing any assignments.
- 2. Students should expect to spend an average of four to eight hours per week outside of class time in order to complete assignments. Students are strongly encouraged to work consistently throughout the semester. Always take into account the lab hours and possible technical problems when planning out the time you will spend on these assignments.
- 3. Students are responsible for saving and backing up their work, and are strongly encouraged to utilize multiple backup locations, such as external hard drives, personal computers, and cloud storage services such as Google Drive or Dropbox.

- Lab machines and network storage drives should never be depended on, and should be treated as temporary, as they are routinely cleaned. Because students are expected to habitually back up their files, the loss of data is not considered an acceptable excuse.
- 4. Students are expected to abide by TCNJ policy aimed at preventing the spread of COVID-19. As of August 16, 2021, this includes wearing a face covering while indoors, regardless of vaccination status. Because this is a fluid situation, policy and guidelines are subject to change. You can see the latest updates on the TCNJ Fall 2021 page.

Course Learning Goals

Students will:

- 1. Understand how to set up, structure, and preview an HTML document.
- 2. Understand HTML (Hyper Text Markup Language) syntax, elements, and attributes.
- 3. Use CSS (Cascading Style Sheets) to control the basic appearance of a Web page.
- 4. Use JavaScript to add basic interactivity to a Web page.
- 5. Create mockups, wireframes, and UI assets for a Web page.
- 6. Design and build a fully functional Web page.
- 7. Understand concepts such as IP addresses, domains, web hosts, and registrars.
- 8. Use an FTP (File Transfer Protocol) client to manage a hosted Web site.
- 9. Discuss the Internet as an expressive medium.

Course Schedule (subject to change; download a detailed schedule as a PDF)

Week 01	Jan. 25	Course Overview	
Week 02	Feb. 1	Introduction to HTML (Hyper Text Markup Language)	
Week 03	Feb. 8	HTML Layouts	
Week 04	Feb. 15	Introduction to CSS (Cascading Style Sheets)	
Week 05	Feb. 22	Responsive CSS	
Week 06	Mar. 1	Flexbox Layout Module	
Week 07	Mar. 8	Grid Layout Module	
No class Mar. 15 (Spring Break)			
Week 08	Mar. 22	Introduction to JavaScript	
Week 09	Mar. 29	JavaScript and the DOM (Document Object Model)	
Week 10	Apr. 5	Dynamic Web Applications with JavaScript	

Week 11	Apr. 12	User Interface and User Experience (UX) Design
Week 12	Apr. 19	Web Hosting and Domains
Week 13	Apr. 26	Beyond Web I: Other Web Technologies
Week 14	May 3	Final Project Workshop
Final Exam Period		Final Project Presentations (date TBA via PAWS)

Assignments and Grading

Grades are determined by the following:

- **[60%]** Weekly Exercises—Each week, you will complete a small project to help reinforce the skills covered in class. There are 12 weekly exercises in total, valued at 5% of the semester grade each.
 - <u>Visual Studio Code</u>, <u>Adobe Dreamweaver</u>, Notepad, or TextEdit, create a simple HTML page. Envision this as something that can eventually be built into the home page for your personal website. Include a heading at the top of the page and use paragraph tags to enclose blocks of longer text. Also include one link and one image, with text that displays when the user mouses over each of these.
 - Weekly Exercise #2: Formatted HTML Page—Build on last week's exercise by adding styles and layout elements to format your home page. Include a header and footer, different headings, an ordered list, and an unordered list. Define styles for your HTML elements in the document head, and use JavaScript to create an interactive button.
 - Weekly Exercise #3: Styled Web Page—Use an external stylesheet (CSS document) to define the styles for your home page, and link to the .css file in the head of your HTML document. Apply properties such as background, border, margin, and padding to elements, and use the box-sizing property to include these values in the elements' total size. Include a small horizontal navigation bar for your home page. It's alright if the links don't go to anything yet. Use CSS combinators to define the styles for items within the navigation bar, and use pseudo-classes to define styles for hover and visited states. Make this navigation "sticky" so that it remains in place as the user scrolls.

- Weekly Exercise #4: Responsive Web Page—Use @media queries and/or properties from either the Flexbox or Grid layout modules to make your home page react appropriately when the user resizes the browser window or views the page on a tablet or mobile device. Consider both portrait and landscape orientations, and remember to make your layout print-friendly.
- Weekly Exercise #5: Flexbox Layout—Using the Flexbox layout module, create a responsive layout for your home page. You may want to keep a copy of your existing layout. Use the <u>developer tools</u> in your web browser or a program like <u>LT Browser</u> to preview your layout on two smaller screen sizes and include screenshots of each.
- Weekly Exercise #6: Grid Layout—Using the Grid layout module, create a
 responsive layout for your home page. You may want to keep a copy of your
 existing layout. Use the <u>developer tools</u> in your web browser or a program
 like <u>LT Browser</u> to preview your layout on two smaller screen sizes and
 include screenshots of each.
- Weekly Exercise #7: JavaScript Functions—Write two JavaScript functions in an external .js document and link to this file at the bottom of your HTML document's body. Each function should compute and return a value, one a string value and the other a numeric value. Output one of these values as innerHTML and the other using a popup.
- Weekly Exercise #8: Web Form—Create an HTML form that includes at least one text field and one number field. Use JavaScript to get the values that the user inputs into the form, then compute and return a value based on the user's input. For example, concatenate a first and last name entry into a full name, or calculate the sum or product of two numbers. The returned value should be output to the innerHTML for some element on the page.
- Weekly Exercise #9: Dynamic JavaScript Application—Use JavaScript to create one of the following dynamic applications:
 - a web form that keeps its input fields filled when the page reloads (using sessionStorage)
 - a dropdown menu that uses JavaScript to create <option> elements (using a for loop)
 - an input counter (using sessionStorage)
 - a tab control that toggles which set of information is visible (advanced)

- Weekly Exercise #10: UX Flow—Using Adobe XD, create a visual representation of your ideal personal home page. This can be a desktop, tablet, or mobile design. Include rough mock-ups of at least three other pages for your site and prototype how users can navigate between pages.
- Weekly Exercise #11: Hosted Web Site—Using an FTP client such as FileZilla, upload your web files to our class' shared Dreamhost server. Additionally, create a custom favicon, or logo that displays in the browser window when your page is loaded, and make it display there. Make sure that file paths for any linked CSS or JavaScript files are correct.
- Weekly Exercise #12: Web Technology Research—Pick one of the Web technologies discussed in class, or another you are interested in, and research it. What is it used for? Does it integrate with any of the technologies we have covered this semester? Are there any forums, knowledge bases, or other resources you could use to learn it? Write a brief document (approx. 250-500 words) explaining how you would use this technology to improve your personal home page: What could you do with it that you are unable to do now, or what could you do in a more efficient way?
- [30%] Final Project: Personal Home Page—You will be building on this page throughout the semester, making it increasingly complex as you learn new skills. By the end of the semester, it should reflect the design you laid out in your UX assignment, and hopefully you will have a personal home page that you will be proud to use as your own!
- [10%] <u>Participation</u>—Students are expected to attend classes on time, submit assignments by the date due, treat others with respect, contribute to discussions, and be engaged during demonstrations. In the event of absence, students are expected to communicate with the instructor in a timely fashion and make up any work that was missed.

All assignments are to be <u>submitted electronically to Canvas</u> by 11:59 PM on the date due. Assignments handed in late, without a proper excuse, will receive a grade penalty every week they are late. Assignments not handed in at all will receive a grade of 0.

Students are encouraged to have their assignments submitted prior to class time so that their work may be included in a peer review. Projects will be displayed for the class to

discuss and offer constructive feedback. Students are encouraged to briefly discuss their process, though these discussions are intended to be informal and are not included as part of the grading.

TCNJ Policies

Browse all TCNJ Policies here: https://policies.tcnj.edu/policies/digest.php/?docId=9136

Attendance

Every student is expected to participate in each of his/her courses through regular attendance at lecture and laboratory sessions. It is further expected that every student will be present, on time, and prepared to participate when scheduled class sessions begin. At the first class meeting of a semester, instructors are expected to distribute in writing the attendance policies which apply to their courses. While attendance itself is not used as a criterion for academic evaluations, grading is frequently based on participation in class discussion, laboratory work, performance, studio practice, field experience, or other activities which may take place during class sessions. If these areas for evaluation make class attendance essential, the student may be penalized for failure to perform satisfactorily in the required activities. Students who must miss classes due to participation in a field trip, athletic event, or other official college function should arrange with their instructors for such class absences well in advance. The Office of Academic Affairs will verify, upon request, the dates of and participation in such college functions. In every instance, however, the student has the responsibility to initiate arrangements for make-up work.

Students are expected to attend class and complete assignments as scheduled, to avoid outside conflicts (if possible), and to enroll only in those classes that they can expect to attend on a regular basis. Absences from class are handled between students and instructors. The instructor may require documentation to substantiate the reason for the absence. The instructor should provide make-up opportunities for student absences caused by illness, injury, death in the family, observance of religious holidays, and similarly compelling personal reasons including physical disabilities. For lengthy absences, make-up opportunities might not be feasible and are at the discretion of the instructor. The Office of Academic Affairs will notify the faculty of the dates of religious holidays on which large numbers of students are likely to be absent and are, therefore,

unsuitable for the scheduling of examinations. Students have the responsibility of notifying the instructors in advance of expected absences. In cases of absence for a week or more, students are to notify their instructors immediately. If they are unable to do so they may contact the Office of Records and Registration. The Office of Records and Registration will notify the instructor of the student's absence. The notification is not an excuse but simply a service provided by the Office of Records and Registration. Notifications cannot be acted upon if received after an absence. In every instance the student has the responsibility to initiate arrangements for make-up work. View this policy online: https://policies.tcnj.edu/?p=77 (PDF)

Academic Integrity

Academic dishonesty is any attempt by the student to gain academic advantage through dishonest means, to submit, as his or her own, work which has not been done by him/her or to give improper aid to another student in the completion of an assignment. Such dishonesty would include, but is not limited to: submitting as his/her own a project, paper, report, test, or speech copied from, partially copied, or paraphrased from the work of another (whether the source is printed, under copyright, or in manuscript form). Credit must be given for words quoted or paraphrased. The rules apply to any academic dishonesty, whether the work is graded or ungraded, group or individual, written or oral. View this policy online: https://policies.tcnj.edu/?p=130 (PDF)

Americans with Disabilities Act (ADA)

Any student who has a documented disability and is in need of academic accommodations should notify the professor of this course and contact the Office of Differing Abilities Services (609-771-2571). Accommodations are individualized and in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992. View this policy online: https://policies.tcnj.edu/?p=145 (PDF)

Final Examinations (PDF)

Accessibility and Accommodations

Students who experience barriers in this course are encouraged to contact the instructor as early in the semester as possible. The Accessibility Resource Center (ARC)

is available to facilitate the removal of barriers and to ensure reasonable accommodations. For more information about ARC, please visit: https://arc.tcnj.edu/.

Access to IT support

If you have technology issues or needs during the semester, please contact the IT Helpdesk at 609-771-2660 or helpdesk@tcnj.edu.

Resources for Students

Dean of Students Office

(609) 771-2780

http://tcnjcares.tcnj.edu/

Brower Student Center 220

CAPS: Alcohol and Other Drug Support Services

(609) 771-2571

https://adep.tcnj.edu/

Forcina Hall 308

CAPS: Anti-Violence Initiatives (AVI)

(609) 771-2571

http://oavi..tcnj.edu/

Forcina Hall 308

CAPS: Mental Health Services (MHS)

(609) 771-2247

http://caps.tcnj.edu/

Eickhoff Hall 107

Student Health Services (SHS)

(609) 771-2889

http://health.tcnj.edu/

Eickhoff Hall 107