Course Syllabus

WDD 230 - Web Frontend Development I

Overview

Welcome to WDD 230 a course that focuses on the application of front-end web design and development technologies. When planning, designing, and developing websites and applications, successful web developers consider the purpose, the target audience, the structure, the organization, the user interface, the site usability, the content, the layout, and the visual (aesthetic) design. This course will teach you to plan, design, and develop pages and sites that conform to web standards while following best practices for positive user experiences using HTML, CSS, and JavaScript and other relevant frontend technologies.

***The assigned activities and assignments are of the applied nature in this course which is unlike traditional academic courses that solely assess students on taking tests and writing assignments/papers. The course is a technical, hands-on class, that is more closely tied to industry by requiring deliverables that meet functional and developmental specifications. This course will require between 9–15+ hours of time per week depending upon your experience and understanding of basic computer operations, file management, systems, design, and the core technologies. Even though it requires hard work, you will be successful as long as you plan and use your time and the available resources wisely. Plan on teaching and/or discussing with someone face-to-face, regularly throughout the entire course on the topics you learn directly and indirectly as this regularly activity will help you learn the material at a greater depth.***

Course Outcomes

1. Develop web pages that are semantic and valid using contemporary Hypertext Markup Language (HTML).
2. Style web pages using valid, contemporary Cascading Style Sheets (CSS) and avoid all HTML presentation markup.
3. Provide content that is visually appropriate, usable, and findable to humans and machines.
4. Plan, design, and develop web pages and sites according to best practices of organization and maintainability.
5. Work with JavaScript to manipulate the DOM, handle user-agent events, work with external APIs and JSON data.
6. Work effectively within a team by teaching and learning collaboratively, communicating clearly, fulfilling assignments and meeting deadlines.

***🚫The intended outcomes of successfully completing this course require that you learn to use the core web technologies of contemporary HTML, CSS, and JavaScript. The use of third-party templates, frameworks, content management systems, and services to fulfill assignments is not allowed. These forbidden technologies and systems include but are certainly not limited to WordPress, Wix, and Bootstrap, etc.  Any third-party service or interface that is allowed in the course will be explicitly assigned.***

Prerequisite Courses

* **CSE 121B** - JavaScript Language (1)
* **WDD 130** - Web Fundamentals (2)

Course Theme

In Mosiah 4, King Benjamin counsels the people to “impart of our substance to others and do all things in wisdom and order.” BYU-Idaho follows a structured learning model of preparing, teaching one another, and pondering and proving. As such, the course theme is based upon [Mosiah 4:15,Links to an external site.](https://www.lds.org/scriptures/bofm/mosiah/4?lang=eng) *“But ye will teach them to walk in the ways of truth and soberness; ye will teach them to love one another, and to serve one another”* and [Mosiah 4:27Links to an external site.](https://www.lds.org/scriptures/bofm/mosiah/4?lang=eng), *“And see that all these things are done in wisdom and order; for it is not requisite that a man should run faster than he has strength. And again, it is expedient that he should be diligent, that thereby he might win the prize; therefore, all things must be done in order.”* Let us commit to being taught by the Holy Ghost, understanding our own strengths and weaknesses, and go forward with confidence in doing our best.

Be honest in your work. While you are encouraged to ask questions and work with others, do not COPY work and represent others work as your own. There is no justification for this and will lead to a failing grade and a report to the honor code office.

Learning Model Architecture

* Students will participate in regular learning patterns each week.
* Students will prepare by completing activities, readings, videos, and labs.
* Students will teach one another by participating in peer reviews, developer forums, and students presentations.
* Students will ponder by applying and correlating the principles to their discipline and work-based learning opportunities.
* Students will prove by completing knowledge assessments, assignments, and programming projects, some with well-defined specifications and other with less definition.
* Students will understand the importance of  balancing the essential hands-on training activities with professional, academic education, both of which are essential parts of lifelong learning and success in the industry.

Required Materials, Software, and Services

* Code Editor: Visual Studio Code
  + Cloud Storage and Site Hosting: GitHub with a GitHub Pages repository.`

***Please email your instructor if you have experience in using another text-based editor and wish to use that editor for the class. More than likely you will be permitted to continue to use that editor but you are strongly encouraged to to the VS Code editor with its accompanying extension resources.***

Major Course Activities

* Developer Forums - An attempt to be analogous to professional boards for questions and answers. This promotes student interaction and teaching one another.
* Concept Fluency Quizzes - These quizzes prepare students for the final exam and they are designed to test basic knowledge of course topics, thus learning outcomes.
* Concept Application Activities and Assignments - These are regular activities that have specific requirements to lead students to develop solutions based upon the learning outcomes of the course.
* Student Presentations - A contemporary topic, student presentation that encourages follow-up questions and answers.
* Learning Project - A continuously enhanced, semester long website project with developmental specifications
* Exam - A concept fluency exam covering basic learning outcome principles within frontend development.
* Term Website Project - A individualized assessment of learning revolving around a project with specifications.

Assessments and Grading

Each assessment relates to one or more course objectives and is designed to support a learning outcome. The assessed activities descriptions include grading criteria broken down into specifications that correlate with learning objectives. The student is responsible for understanding the functional and developmental specifications for each assessment. Assessments are tied to course objectives and are assigned to one of the final grade categories, which are weighted. A letter grade will be assigned at the end of the course using a total percentage and standard scale as shown below.

***☝ Please note that completing the assignments and activities per the written instructions does not guarantee that you will receive full credit on the assessment. By definition, full or 'A' level credit is reserved for those students who "represent outstanding understanding, application, and integration of subject material and extensive evidence of original thinking, skillful use of concepts, and ability to analyze and solve complex problems." In addition, the hope is that you will work to demonstrate diligent application of the learning model principles, including "initiative in serving other students".***[***-BYU-Idaho Grading SystemLinks to an external site.***](http://www.byui.edu/student-records/grades/grading-system)

| ***Grade Distribution by Weighted Category*** | | | |
| --- | --- | --- | --- |
| **Category** | **Description** | **Learning Outcome** | **Weight** |
| Skilled Collaborator | Professional participation in timeliness, language, peer review, and best practice objective measurement in developer forums, topical discussion boards, and team meetings. | 6 | 15% |
| Concept Application | Weekly activities and assignments that involve demonstrating concept fluency; including progressively enhanced term project assignment that measures all course objectives. | 1-6 | 50% |
| Concept Exam | The individual final exam is designed to measure your comprehension of the principles outlined in course, specifically the application of HTML, CSS, and JavaScript course outcomes. | 1, 2, 5 | 15% |
| Final Project | The individual, final website project measures represents an applied, comprehensive assessment of learning and application of the principles in full site design and development project. | 1-5 | 20% |
|  | |  | **100%** |

| *Letter Grade Distribution* | |
| --- | --- |
| **Letter Grade** | **Final Total Percentage** |
| A | 93%–100% |
| A- | 90%–92.9% |
| B+ | 87%–89.99% |
| B | 83%–86.99% |
| B- | 80%–82.99% |
| C+ | 77%–79.99% |
| C | 73%–76.99% |
| C- | 70%–72.99% |
| D+ | 67%–69.99% |
| D | 63%–66.99% |
| D- | 60%–62.99% |
| F | 59.99% and below |

Proctored Exams and Assessments

This course will use an online proctoring software called Proctorio. This makes it possible for students to take assessments and exams without a human proctor present. Proctored exams can be accessed like any other exam, once the software has been installed. Exams will be recorded by Proctorio and reviewed by the BYUI Testing Center. Any questionable exams will be forwarded to the instructor for further review.

For step-by-step instructions on Proctorio installation, please refer to [this help guide](https://content.byui.edu/integ/gen/98a71664-d457-48f8-b54b-8ebd2c755346/0/?.vi=file&attachment.uuid=d4c29ff7-bf3e-4cf6-8f21-929bbaeb6c9c)***article.***

University Policies

Students with Disabilities

Brigham Young University-Idaho is committed to providing a working and learning atmosphere that accommodates qualified persons with disabilities. If you have a disability and require accommodations, please contact the [Disability Services OfficeLinks to an external site.](https://www.byui.edu/disability-services) at (208) 496-9210 or visit their website and follow the [Steps for Receiving AccommodationsLinks to an external site.](https://www.byui.edu/disability-services/steps-for-receiving-accommodations). Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with students and instructors by the Disability Services Office.

This course may require synchronous meetings. If you are currently registered with the Disability Services Office and need an interpreter or transcriber for these meetings, please contact the deaf and hard of hearing coordinator at (208) 496-9219.

Other University Policies

Student Honor and Other Policies

Please read through the document called [University PoliciesLinks to an external site.](https://content.byui.edu/integ/gen/d24f576f-d34b-47be-a466-d00bd4792fb6/0/universitypolicies.html). It gives important information about the following topics:

* Student Honor
  + Academic Honesty
  + Student Conduct
    - Sexual Harassment
* Student with Disabilities
* Complaints and Grievances
* Copyright Notice

Go to the [Student Resources](https://byui.instructure.com/courses/313524/modules/3707817) module to review further resources and information.

Course Summary:

| **Date** | **Details** | **Due** |
| --- | --- | --- |
| Thu Sep 19, 2024 | Discussion Topic [01 Getting Acquainted Discussion](https://byui.instructure.com/courses/313524/assignments/13551561) | due by 11:59pm |
| Sat Sep 21, 2024 | Assignment [01 Assignment: Course Home Page](https://byui.instructure.com/courses/313524/assignments/13551593) | due by 11:59pm |
| Quiz [01 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551541) | due by 11:59pm |
| Quiz [01 Course Environment Setup](https://byui.instructure.com/courses/313524/assignments/13551451) | due by 11:59pm |
| Quiz [01 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551501) | due by 11:59pm |
| Thu Sep 26, 2024 | Assignment [02 Assignment: Update Home Page](https://byui.instructure.com/courses/313524/assignments/13551597) | due by 11:59pm |
| Quiz [02 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551495) | due by 11:59pm |
| Fri Sep 27, 2024 | Discussion Topic [02 🔆 Sign Up: Student Presentation](https://byui.instructure.com/courses/313524/assignments/13551557) | due by 11:59pm |
| Sat Sep 28, 2024 | Assignment [02 Assignment: Design Principles Document](https://byui.instructure.com/courses/313524/assignments/13551595) | due by 11:59pm |
| Quiz [02 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551507) | due by 11:59pm |
| Thu Oct 3, 2024 | Assignment [03 Assignment: Update Home Page](https://byui.instructure.com/courses/313524/assignments/13551601) | due by 11:59pm |
| Quiz [03 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551479) | due by 11:59pm |
| Sat Oct 5, 2024 | Assignment [03 Assignment: Chamber Site Plan](https://byui.instructure.com/courses/313524/assignments/13551599) | due by 11:59pm |
| Quiz [03 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551535) | due by 11:59pm |
| Thu Oct 10, 2024 | Discussion Topic [04 Frontend Job Descriptions](https://byui.instructure.com/courses/313524/assignments/13551549) | due by 11:59pm |
| Quiz [04 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551545) | due by 11:59pm |
| Sat Oct 12, 2024 | Assignment [04 Assignment: Chamber Home Page Build](https://byui.instructure.com/courses/313524/assignments/13551607) | due by 11:59pm |
| Quiz [04 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551437) | due by 11:59pm |
| Thu Oct 17, 2024 | Assignment [05 Assignment: DOM Manipulation](https://byui.instructure.com/courses/313524/assignments/13551611) | due by 11:59pm |
| Quiz [05 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551523) | due by 11:59pm |
| Sat Oct 19, 2024 | Assignment [05 Assignment: Chamber Home Page Continued](https://byui.instructure.com/courses/313524/assignments/13551609) | due by 11:59pm |
| Quiz [05 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551421) | due by 11:59pm |
| Assignment [W05 Student Feedback to Instructor](https://byui.instructure.com/courses/313524/assignments/13551675) | due by 11:59pm |
| Thu Oct 24, 2024 | Assignment [06 Assignment: Course Home Enhancement](https://byui.instructure.com/courses/313524/assignments/13551619) | due by 11:59pm |
| Quiz [06 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551443) | due by 11:59pm |
| Sat Oct 26, 2024 | Assignment [06 Assignment: Chamber Home Responsive Design](https://byui.instructure.com/courses/313524/assignments/13551615) | due by 11:59pm |
| Quiz [06 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551491) | due by 11:59pm |
| Thu Oct 31, 2024 | Assignment [07 Assignment: Update Home Page](https://byui.instructure.com/courses/313524/assignments/13551627) | due by 11:59pm |
| Quiz [07 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551461) | due by 11:59pm |
| Sat Nov 2, 2024 | Assignment [07 Assignment: Chamber Discover Page](https://byui.instructure.com/courses/313524/assignments/13551623) | due by 11:59pm |
| Quiz [07 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551445) | due by 11:59pm |
| Thu Nov 7, 2024 | Assignment [08 Assignment: Form Build](https://byui.instructure.com/courses/313524/assignments/13551637) | due by 11:59pm |
| Quiz [08 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551433) | due by 11:59pm |
| Sat Nov 9, 2024 | Assignment [08 Assignment: Chamber Join Page](https://byui.instructure.com/courses/313524/assignments/13551633) | due by 11:59pm |
| Quiz [08 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551473) | due by 11:59pm |
| Thu Nov 14, 2024 | Assignment [09 Assignment: JSON Data](https://byui.instructure.com/courses/313524/assignments/13551645) | due by 11:59pm |
| Quiz [09 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551427) | due by 11:59pm |
| Sat Nov 16, 2024 | Assignment [09 Assignment: Chamber Directory Page](https://byui.instructure.com/courses/313524/assignments/13551641) | due by 11:59pm |
| Quiz [09 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551485) | due by 11:59pm |
| Thu Nov 21, 2024 | Assignment [10 Assignment: Course Home Enhancement](https://byui.instructure.com/courses/313524/assignments/13551653) | due by 11:59pm |
| Quiz [10 Learning Activities and Quiz](https://byui.instructure.com/courses/313524/assignments/13551515) | due by 11:59pm |
| Sat Nov 23, 2024 | Assignment [10 Assignment: Chamber Home Weather](https://byui.instructure.com/courses/313524/assignments/13551649) | due by 11:59pm |
| Quiz [10 Collaboration Report](https://byui.instructure.com/courses/313524/assignments/13551467) | due by 11:59pm |
| Thu Nov 28, 2024 | Discussion Topic [11 Usability - Peer Review](https://byui.instructure.com/courses/313524/assignments/13551553) | due by 11:59pm |
| Sat Nov 30, 2024 | Assignment [11 Chamber of Commerce Site - Part 1 of 2](https://byui.instructure.com/courses/313524/assignments/13551657) | due by 11:59pm |
| Assignment [11 Chamber of Commerce Site - Part 2 of 2](https://byui.instructure.com/courses/313524/assignments/13551661) | due by 11:59pm |
| Assignment [🔆Student Presentations](https://byui.instructure.com/courses/313524/assignments/13551591) | due by 11:59pm |
| Thu Dec 5, 2024 | Page [12 Final Exam Preparation: Core Frontend Technologies](https://byui.instructure.com/courses/313524/pages/12-final-exam-preparation-core-frontend-technologies) | to do: 11:59pm |
| Sat Dec 7, 2024 | Quiz [12 Quiz: Proctorio Practice (Remotely Proctored)](https://byui.instructure.com/courses/313524/assignments/13551457) | due by 11:59pm |
| Sat Dec 14, 2024 | Quiz [13 🗝️ Final Exam: Core Frontend Technologies (Remotely Proctored)](https://byui.instructure.com/courses/313524/assignments/13551529) | due by 11:59pm |
| Wed Dec 18, 2024 | Assignment [W13 End-of-Course Evaluation](https://byui.instructure.com/courses/313524/assignments/13551683) | due by 11:59pm |
| Assignment [🔑 Final Website Project](https://byui.instructure.com/courses/313524/assignments/13551589) | due by 11:59pm |