

Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring Year: 2025

Course Prefix: CS Course and Section #: 2550-001

Course Title: Web Programming I Credits: 3

Course Description

This class is an introductory level course in web development. The student will learn to create pleasing static web page layouts as well as learn the skills and tools needed to build modern, interactive, web applications. We focus on HTML, CSS and JavaScript during this course.

Course Attributes

This	course	has	the	foll	owing	attributes:
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- \square General Education Requirements
- ☐ Global/Intercultural Graduation Requirements
- ☐ Writing Enriched Graduation Requirements
- ☑ Discipline Core Requirements in Program
- ☑ Elective Core Requirements in Program

☐ Open Elective

Other: Click here to enter text.

Instructor Information

Instructor Name: Rita Kuo

Student Learning Outcomes

- Learn core HTML skills which include:
 - o HTML5 Tags, containers, block and inline elements
 - o Forms, form validation and submission
 - Navigation and multi-page sites with tabs
 - o DOM manipulation via Javascript and jQuery
 - Debug and analyze HTML pages and script
- Learn core CSS skills which include:
 - HTML page layout using Flexbox and CSS Grid
 - Understand CSS layout tags and selectors
 - o Create responsive web pages using media queries
 - o Understand how to position elements (relative, fixed, absolute, sticky)
 - Create animations using CSS and animate.css
- Learn core Javascript skills which include:
 - o Basic Javascript language constructs such as objects, arrays, variables, looping

- Custom Form validation with error display
- Showing/Hiding portions of page using 'tabs'
- o Rendering portions of page dynamically from JSON and AJAX
- Learn Core Design and Architectural Concepts
 - o Model/View/Controller, SPA, separation of concerns
 - o Progressive Enhancement / Graceful Degradation
 - o Application and Layout Design
 - o Understand design principles, Contrast, Repetition, Alignment, Proximity
 - o Understand the people/roles involved in a web development project
 - o Be familiar with latest tools and key advantages of these tools

Course Materials and Texts

zyBooks learning environment using the Web Programming I online course

For students using Wolverine Access

- 1. Click the "Textbooks and Course Materials" link on your Account Menu in Canvas
- 2. Get the access code
- 3. It will either take you straight to a page showing you your course materials, or you will be prompted to create a new account. Make sure to create an account using your UV ID email.
- 4. You can reveal your zyBook access code by clicking the "Go to Website" button.

For students who opted out of Wolverine Access:

- 1. Open your first 'lab' assignment.
- 2. Click on the button 'Open in Zybooks', it will register you the first time.
- 3. You will be asked to provide your section (001), your student ID #. Have those ready. (if asked for email, provide a 'uvu.edu' or 'my.uvu.edu' address)
- 4. Subscribe and pay, the cost is \$89 for the textbook and lab module

Course Requirements

Course Assignments, Assessments, and Grading Policy

Assignment Categories

•	zyBooks PAs	5%
•	zyBooks Labs	10%
•	Programming Projects	50%
•	Midterm Exams (2)	20%
•	Final Exam	15%
•	SRI (Extra credit)	1%

Late Work Statement:

- All work is due at 11:59pm on its respective due date. Late work is automatically penalized 10% per day by Canvas, with a maximum penalty of 30%. This means that you can turn in any assignment anytime after the 3 days and your maximum score will be 70%. If you do not turn in an assignment the score will be 0.
- The lowest 2 Chapter/Reading scores will be dropped
- The lowest 2 Lab/Quiz scores will be dropped

Plan on getting your work done ahead of time. While this policy allows you to delay turning in an assignment indefinitely, please turn in your assignments within one week of due date. Many of the concepts build upon each other, you will fail future assignments in many cases if you don't complete the previous ones.

The following grading standards will be used in this class:

- A 94-100
- A-90-93
- B+87-89
- В 83-86
- B-80-82
- C+77-79
- C
- 73-76 C-70-72
- D+67-69
- D 63-66
- D-60-62
- E 0-59

Required or Recommended Reading Assignments

The required readings are the following chapters on zyBooks:

- Chapter 1: Introduction to Web Programming
- Chapter 2: Basic CSS
- Chapter 3: CSS Positioning and Layout
- Chapter 4: Basic JavaScript
- Chapter 5: JavaScript in the Browser
- Chapter 6: Forms
- Chapter 7.1: Classes
- Chapter 7.2: Classes (ES6)
- Chapter 9: Responsive Layout

There are two videos and handouts on Canvas discussing the Design Principles. Students should watch the video and read the handouts for completing the assignments.

General Description of the Subject Matter of Each Lecture or Discussion

The course is separated into 15 modules for course content and the exams. Each module takes 1 to 2 weeks on schedule. Below lists the module information and the corresponding readings:

- Module 1: Web Architecture and Introduction to HTML (zyBooks Chapter 1)
- Module 2: Basic CSS (zyBooks Chapter 2)
- Module 3: CSS Positioning, Animation and Effects (zyBooks Chapter 3)
- Module 4: Design Principles (additional videos and handouts)
- Module 5: CSS Grid and Flexbox (zyBooks Chapter 3)
- Module 6: Basic Javascript, Part A (zyBooks Chapter 4)

- Module 7: Basic Javascript, Part B (zyBooks Chapter 4)
- Module 8: Midterm
- Module 9: Responsive Layout (zyBooks Chapter 9)
- Module 10: Javascript in the Browser, Part A (zyBooks Chapter 5)
- Module 11: Javascript in the Browser, Part B (zyBooks Chapter 5)
- Module 12: Forms, Part A (zyBooks Chapter 6)
- Module 13: Forms, Part B (zyBooks Chapter 6)
- Module 14: Advanced Topics (zyBooks Chapter 7.1 and Chapter 7.2)
- Module 15: Final Exam

Required Course Syllabus Statements

Generative AI

Generative AI can be a powerful tool for learning about and creating software. In this class, you should treat AI systems like people; if it would be inappropriate to use content from another human, it is inappropriate to use content from an AI system. Similarly, AI systems can, like humans, be a wonderful resource to help you learn.

Using Remote Testing Software

☐ This course does not use remote testing software.

☐ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the

community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their <u>rights and responsibilities</u>. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541: Student Code of Conduct</u>.

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.