



<b>Syllabus</b>
-----------------

**SCHOOL OF TECHNOLOGY & COMPUTING**  
CS 225: Introduction to Web Design

5 Credits  
Effective: Spring 2020

*Access to the Internet is required.  
All written assignments must be in Microsoft-Word-compatible formats.  
See the library's APA Style Guide tutorial for a list of resources that can help you use APA style.*

## FACULTY

Faculty Name: FACULTY NAME

Contact Information: CONTACT INFORMATION

[INSTRUCTOR MAY INSERT PERSONAL MESSAGE IF DESIRED]

## COURSE DESCRIPTION

The course develops a student's understanding and skills in web development and script programming to create dynamic websites. The course is an introductory course and builds a fundamental working knowledge of web technology and the ability to create a website. Students will apply knowledge of computer operation and basic symbolic logic to the create a dynamic website. Students completing this course will have an understanding of the operation and construction of a dynamic website.

## COURSE RESOURCES

Felke-Morris, T. (2019). Web Development and Design Foundations with HTML 5 (9th ed.). Boston, MA: Pearson. (ISBN: 9780134801148)

## CITYU LEARNING GOALS

This course supports the following City University learning goals:

- Professional competency and professional identity

## COURSE OUTCOMES

In this course, learners:

- Develop a responsive user interface design that can be ported to multiple devices
- Summarize the main programming language used to construct a static website and demonstrate how they are used
- Implement basic client-side programming techniques to implement a dynamic website
- Assess the usability of a website and modify design based on assessment
- Explain the basic operation of web infrastructure with focus on functionality, and configuration of both web server and web browser
- Design a web page using appropriate tools and programming languages

## OVERVIEW OF COURSE GRADING

The grades earned for the course will be derived using City University of Seattle's decimal grading system, based on the following:

OVERVIEW OF REQUIRED ASSIGNMENTS	% OF FINAL GRADE	POINTS
Muddiest Point (MP)	5%	50 = 5 points * 10 modules
Discussion Board (DB)	10%	100 = 10 points * 10 modules
Programming Exercise (PE)	80%	800 points
<ul style="list-style-type: none"><li>• PE 1: Create a Basic Home Page of a Website</li></ul>	10%	100 = 100 points * 1 module

• PE 2: Create a Three Page Website	15%	150 = 150 points * 1 module
• PE 3: Add Style to a Website	15%	150 = 150 points * 1 module
• PE 4: Convert Website for Mobile	20%	200 = 200 points * 1 module
• PE 5: Make a Website Dynamic	20%	200 = 200 points * 1 module
Knowledge Check (KC)	5%	50 points
<b>TOTAL</b>	<b>100%</b>	<b>1,000 points</b>

The following approaches are used for developing this course content:

Assessment

- Summative Assessment. [https://en.wikipedia.org/wiki/Summative\\_assessment](https://en.wikipedia.org/wiki/Summative_assessment)
- Formative Assessment. [https://en.wikipedia.org/wiki/Formative\\_assessment](https://en.wikipedia.org/wiki/Formative_assessment)

Classroom Assessment Techniques

- The Muddiest Point. [https://en.wikipedia.org/wiki/Classroom\\_Assessment\\_Techniques](https://en.wikipedia.org/wiki/Classroom_Assessment_Techniques)

Active Learning. [https://en.wikipedia.org/wiki/Active\\_learning](https://en.wikipedia.org/wiki/Active_learning)

- Flipped Classroom. [https://en.wikipedia.org/wiki/Flipped\\_classroom](https://en.wikipedia.org/wiki/Flipped_classroom)
- Just-in-time Teaching (JiTT). [https://en.wikipedia.org/wiki/Just-in-time\\_teaching](https://en.wikipedia.org/wiki/Just-in-time_teaching)
- Peer Instruction. [https://en.wikipedia.org/wiki/Peer\\_instruction](https://en.wikipedia.org/wiki/Peer_instruction)

Learning Theory

- Learning-by-doing. <https://en.wikipedia.org/wiki/Learning-by-doing>
- Project-Based Learning (PBL). [https://en.wikipedia.org/wiki/Project-based\\_learning](https://en.wikipedia.org/wiki/Project-based_learning)
- Social Learning. [https://en.wikipedia.org/wiki/Social\\_learning\\_\(social\\_pedagogy\)](https://en.wikipedia.org/wiki/Social_learning_(social_pedagogy))

Evidence-Based Practice (EBP). [https://en.wikipedia.org/wiki/Evidence-based\\_practice](https://en.wikipedia.org/wiki/Evidence-based_practice)

- Pair Programming. [https://en.wikipedia.org/wiki/Pair\\_programming](https://en.wikipedia.org/wiki/Pair_programming)
- Stand-up Meeting. [https://en.wikipedia.org/wiki/Stand-up\\_meeting](https://en.wikipedia.org/wiki/Stand-up_meeting)
- Agile Software Development. [https://en.wikipedia.org/wiki/Agile\\_software\\_development](https://en.wikipedia.org/wiki/Agile_software_development)

**SPECIFICS OF COURSE ASSIGNMENTS**

The instructor will provide grading rubrics with more detail as to how this assignment will be graded.

**The Muddiest Point (MP)**

Before class, students are required to finish the muddiest point activity. This activity is designed to stimulate student engagement in class. Also, the instructor uses feedbacks of the Muddiest Point in preparation for the classroom lecture to implement Just-in-Time Teaching (JiTT). This activity consists of writing a brief reflective essay (<= 50 words) in which students identify the most confusing part (i.e. the muddiest point) of the content covered in the upcoming module. If you do not have MP, you can explain the most interesting point. In addition, students will answer one multiple choice question from the required reading to determine students' grasp of core concepts.

<i>Components</i>	<i>% of Grade</i>
Quality Participation: Meets requirements in a timely manner	60%

Writing: Is clear, concise, and grammatically correct.	20%
Accuracy: Answers quizzes correctly	20%
<b>TOTAL</b>	<b>100%</b>

### The Concept Test (CT)

In class, students may be required to answer questions called ConcepTests, which allows peer to teach other, i.e. Peer Instruction. 1) Instructor poses question based on students' responses to their pre-class reading. 2) Students reflect on the question. 3) Students commit to an individual answer. 4) Instructor reviews student responses without giving the correct answer to the students. 5) Students discuss their thinking and answers with their peers. 6) Students then commit again to an individual answer. 7) The instructor again reviews responses and decides whether more explanation is needed before moving on to the next concept. Any participating students will earn their 100% grade.

<i>Components</i>	<i>% of Grade</i>
Quality Participation: Meets requirements in a timely manner	100%
<b>TOTAL</b>	<b>100%</b>

### Discussion Board (DB)

All classes are required to use the Discussion Board. Participation through DB is an integral part of this course and is defined as active engagement in a discussion or other activity. Instructors will determine the type of activities and their due dates; moreover, different DB activities will have different guidelines with regard to substance and length. The instructor will provide specific instructions to students.

A discussion question or topic from the instructor appears weekly in the Discussion Board. Students are to post their answers as well as responses to two other students' responses in the DB by the end of each module. The DB is to help promote student to student engagement. The instructor may not respond to each posting. Questions or comments that are specifically for the instructor, should be emailed directly to the instructor or posted in the Question and Answer Forum. Students who want to talk with other students about issues unrelated to the discussion forums should use the Coffee Talk Forum.

Although the tone of your DB postings can be informal, your instructor will expect the content to be on a professional level. In other words, your comments and questions for discussion should be clear and thoughtful, with correct grammar, spelling, and punctuation. As with written assignments, the quality of your discussion postings will be graded on both content and presentation.

<i>Components</i>	<i>% of Grade</i>
Quality Participation: Meets requirements in a timely manner	80%
Writing: Is clear, concise, and grammatically correct.	20%
<b>TOTAL</b>	<b>100%</b>

### Hands-on Practice (HOP)

The instructor may assign hands-on practice exercises to a pair of students in class or individually in online. Students will learn and practice either specific tools or languages pertinent to their course. Each activity will be graded by pass or fail to encourage collaboration among students. (Pair programming can be used for the generation of more diverse solutions to problems.)

<i>Components</i>	<i>% of Grade</i>
Quality Participation: Meets requirements in a timely manner	80%
Accuracy: Answers questions correctly	20%
<b>TOTAL</b>	<b>100%</b>

## Programming Exercise (PE)

The students must individually perform the programming exercise which is based on the topics and Hands-on Practice. No code sharing or copying from other sources are allowed. Non-executable programs will not be graded. The programs in poor coding styles will be asked to be resubmitted.

- **PE01: Create a Basic Home Page of a Website**

Each assignment in this course builds to a whole website on multiple devices, of which this basic home page is the start. Student should make sure to think about this requirement as you choose their topic. Student should recognize that he/she will build on their work through the other assignments.

For this assignment, the student will design, create, and deploy a simple web page using HTML code. The student is expected to document their design process and submit both that reflection document and the HTML file to Blackboard.

Documentation: Student will document design process (approx. 150 - 200 words).

- Describe why they chose the topic.
- Describe the design decisions they made for the page and explain why they made those decisions (for example: placement of text, images, etc.).
- Describe the process to implement their decisions for their home page design.

Design: Student will choose a topic that interests them for the webpage/website (for example: about themselves, a favorite hobby, or a topic of interest like running, cooking, tennis, embroidery, puppies, etc.). Name their file index.html.

The home page should include:

- Title
- At least one body of text
- At least one image
- At least three hyperlinks to external websites
- Use at least three of the following style tags:
  - o Bold
  - o Italicized
  - o Font Size
  - o Font Family
  - o Font Color

<i>Components</i>	<i>% of Grade</i>
Documentation	30%
Functioning User Interface	30%
HTML Code	40%
<b>TOTAL</b>	<b>100%</b>

- **PE02: Create a Three Page Website**

Each assignment in this course builds to a whole website on multiple devices, of which this three-page website is the next step.

For this assignment, the student will design, create, and deploy two additional web pages using HTML code that are linked to the initial home page created in the last assignment. The student is expected to document their design process and submit both that reflection document and the zipped HTML website files to Blackboard.

Documentation: Student documents their design process (approx. 200 - 250 words).

- Describes the design decisions they made for the additional web pages and the website as a whole; then explain why they made those decisions (for example: placement of text, images, etc.).
- Describe the process to implement their decisions for their website design.

Design: This assignment should include two additional web pages that are both linked to the home page and there should be a consistent look and feel among all of the webpages. Be sure to keep the files within proper organization within the server directory.

Changes to the Home Page -

- Links to the two additional pages

For each Additional Webpage -

- Title
- Link to return to the home page
- At least one image
- At least one body of text
- At least a numbered or bulleted list

<i>Components</i>	<i>% of Grade</i>
Documentation	30%
Functioning User Interface	30%
HTML Code	40%
<b>TOTAL</b>	<b>100%</b>

- **PE03: Add Style to a Website**

Each assignment in this course builds to a whole website on multiple devices, of which this style assignment is the next step.

For this assignment, the student will create three CSS style sheets for their website created in past assignments, each one significantly different. The HTML files previously created do not need to be changed except for adding one call to the style sheet and take out the styling tags. Those styling tags should be then put in the CSS style sheet. Once the first style sheet is created and tested, two additional style sheets should be created and tested on the website as well to show the added flexibility that using CSS provides – these changes should be visibly different. The student is expected to document their process and submit both that reflection document and the zipped HTML website files to Blackboard. Be sure to keep your files within proper organization within the server directory.

Documentation: Student will document their design process (approx. 100 - 150 words).

- Describe the design decisions they made for the style sheet and the website as a whole; then explain why they made those decisions.
- Document the change among style sheets by providing three screen shots of the website, each using a different style sheet (titled the same as the style sheet name). Make sure the changes between style sheets are visibly different.

Design: This assignment should include one CSS style sheets that is called to within each of the web pages and there should be a consistent look and feel among all of the webpages. The two additional style sheets should be included with the documentation as separate files.

The style sheet should include at least 5 of the following items:

- o Bold
- o Italicized
- o Font Size
- o Font Family
- o Font Color
- o Background
- o Align-Content

<i>Components</i>	<i>% of Grade</i>
Documentation	30%
Functioning User Interface	30%
HTML and CSS Code	40%
<b>TOTAL</b>	<b>100%</b>

- **PE04: Convert Website for Mobile**

Each assignment in this course builds to a whole website on multiple devices, of which this assignment is the last step.

For this assignment, the student will apply the techniques of responsive design by using CSS to configure their previously created website for display on mobile devices. Be sure to follow the mobile design best practices. The student is expected to document their process and submit both that reflection document and the zipped HTML website files to Blackboard. Be sure to keep your files within proper organization within the server directory (being sure to place all CSS code in one external CSS file).

Documentation: Student will document their design process (approx. 100 - 150 words).

- Describe the method they used to implement responsive design; then explain why they made those decisions.

Design: Choose one of their CSS files and edit it to include code to respond to requests specifically from desktop and mobile devices.

The CSS file should include:

- o Desktop Specific Code
- o Mobile Specific Code

All webpages should include:

- o Call to the specific CSS file

<i>Components</i>	<i>% of Grade</i>
Documentation	30%
Functioning User Interface	30%
HTML and CSS Code	40%
<b>TOTAL</b>	<b>100%</b>

- **PE05: Make a Website Dynamic**

Each assignment in this course builds to a whole website on multiple devices, of which this assignment is the next step.

For this assignment, the student will create another webpage for their website to implement a validated form element, use an event handler, and display an alert message to enhance its functionality using JavaScript. The student is expected to document their process and submit both that reflection document and the zipped HTML website files to Blackboard. Student should be sure to keep their files within proper organization within the server directory (being sure to place all JavaScript processing in an external JavaScript file).

Documentation: Student will document their design process (approx. 100 - 150 words).

- Describe the design decisions they made for the validated form and its code; then explain why they made those decisions.

Design: Use JavaScript to implement form validation by creating an HTML form (the new webpage) with at least one text field and use an event handler (example: Onblur) to check that the user has made a valid entry. Then display an alert message to inform the user if they have made an invalid entry. There should be a consistent look and feel among all of the webpages.

The webpage should include:

- o Form Element with a Validated Text Field

The JavaScript file should include:

- o Event Handler that Manages Validation
- o Alert Message for Validation Errors

<i>Components</i>	<i>% of Grade</i>
Documentation	30%
Functioning User Interface	30%
HTML, CSS, and JavaScript Code	40%
<b>TOTAL</b>	<b>100%</b>

### **Research Paper (RP)**

In the research paper, each student will use an instructor approved topic relevant to the course. The paper must be no less than 3-4 pages, excluding the title and reference pages, using APA format, with at least 5 recent, scholarly, peer-reviewed references. As in any scholarly writing, students should not merely copy information from another author, but use evidence to support the contentions they have drawn from their findings and critically analyze related literature - each paper needs to be an analytical paper, not a summary of readings.

Students must cite the sources of all ideas, facts, tables, images, figures, formulas and information used that are not their own, even if they have put the information into their own words. Failure to do so is plagiarism, even if the oversight is unintentional. Papers must be in compliance with the University's academic integrity policy, as described in the university catalog.

<i>Components</i>	<i>% of Grade</i>
Structure: Consists of the required report elements.	20%
Content: Demonstrates critical analysis and synthesis of concepts.	60%
Reference: Is pertinent to the topic and cited properly.	10%
Writing: Is clear, concise, and grammatically correct.	10%

<b>TOTAL</b>	<b>100%</b>
--------------	-------------

### Team Project (TP)

Each student can select his or her own team. Each team consists of three students. A team of less than three students requires instructor's approval. Each team will use an instructor approved topic relevant to the course. For effective project management, an agile software development process, Scrum, is used.

The paper must be no less than 6-7 pages. We required you to use the paper template from [EDSIG/CONISAR](#), which is the international conference standard. *The best papers in this course may be submitted to conferences with your team's approval and the instructor's recommendation and revisions. A paper submission is optional and has nothing to do with your course grade.*

As in any scholarly writing, students should not merely copy information from another author, but use evidence to support the contentions they have drawn from their findings and critically analyze related literature - each paper needs to be an analytical paper, not a summary of readings.

**Three** submissions are required according to the following schedule:

- Proposal (1 page; 30 points) - Starting (Module 1) & Ending (Module 3)
- Progress (3-4 pages; 70 points; graded only after the proposal has been submitted) - Starting (Module 4) & Ending (Module 7)
- Final (6-7 pages; 100 points; graded only after the progress has been submitted) - Starting (Module 8) & Ending (Module 10)

Students are expected and encouraged to use the assigned readings, videos, and other materials used throughout the quarter on this project. Students will need to utilize additional sources that were not assigned by the professor. While stylized after an industry report; nonetheless, students are expected to employ APA formatting of citations, footnotes, and bibliography. Students must cite the sources of all ideas, facts, and information used that are not their own, even if they have put the information into their own words. Failure to do so is plagiarism, even if the oversight is unintentional.

<b>Components</b>	<b>% of Grade</b>
Structure: Consists of the required report elements.	5%
Content: Demonstrates critical analysis and synthesis of concepts.	30%
Reference: Is pertinent to the topic and cited properly.	5%
Writing: Is clear, concise, and grammatically correct.	10%
Visual Presentation: Is well designed, legible, and persuasive.	30%
Team Collaboration: Is based on peer review	20%
<b>TOTAL</b>	<b>100%</b>

### Knowledge Check (KC)

Students will complete weekly quizzes that are from the course content to reflect on what they have learned in the course. Completing all KCs will help ensure that you successfully master the concepts in this course. The best way for you to gain a thorough understanding of the underlying concepts is to apply those concepts to solve the quizzes. You should focus on the underlying principles, rather than just memorizing information.

<b>Components</b>	<b>% of Grade</b>
Accuracy: Answers questions correctly.	100%
<b>TOTAL</b>	<b>100%</b>

### Course Activities

There will be a set of activities that support the course outcomes and major assignments of the class. These activities are done on the discussion board and could include: preparation for major assignments, discussion of relevant/current topics, knowledge checks, content exploration, peer-review, journals, other alternate online tools, and/or other activities as determined by your instructor. Descriptions are provided by the instructor in the course.

<i>Components</i>	<i>% of Grade</i>
Engagement	100%
<b>TOTAL</b>	<b>100%</b>

## COURSE POLICIES

### Late Assignments

LATE ASSIGNMENT

### Participation

PARTICIPATION

### Professional Writing

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

## UNIVERSITY POLICIES

You are responsible for understanding and adhering to all of City University of Seattle's academic policies. The most current versions of these policies can be found in the [University Catalog](#) that is linked from the CityU Web site.

### Scholastic Honesty

Scholastic honesty in students requires the pursuit of scholarly activity that is free from fraud, deception and unauthorized collaboration with other individuals. You are responsible for understanding CityU's policy on scholastic honesty and adhering to its standards in meeting all course requirements. A complete copy of this policy can be found in the [University Catalog](#) in the section titled *Scholastic Honesty* under *Student Rights & Responsibilities*.

### Attendance

Students taking courses in any format at the University are expected to be diligent in their studies and to attend class regularly.

Regular class attendance is important in achieving learning outcomes in the course and may be a valid consideration in determining the final grade. For classes where a physical presence is required, a student has attended if s/he is present at any time during the class session. For online classes, a student has attended if s/he has posted or submitted an assignment. A complete copy of this policy can be found in the [University Catalog](#) in the section titled *Attendance Policy for Mixed Mode, Online and Correspondence Courses*.

## **SUPPORT SERVICES**

### **Disability Resources**

If you are a student with a disability and you require an accommodation, please contact the Disability Resource Office as soon as possible. For additional information, please see the section in the [University Catalog](#) titled *Students with Special Needs* under *Student Rights & Responsibilities*.

### **Library Services**

CityU librarians are available to help you find the resources and information you need to succeed in this course. Contact a CityU librarian through the [Ask a Librarian](#) service, or access [library resources and services online](#), 24 hours a day, seven days a week.

### **Smarthinking**

As a CityU student, you have access to 10 free hours of online tutoring offered through Smarthinking, including writing support, from certified tutors 24 hours a day, seven days a week. Contact CityU's Student Support Center at [help@cityu.edu](mailto:help@cityu.edu) to request your user name and password.