SYLLABUS - CIS 215 Client-side Web Development

Class Hours: online

Prereqs: CIS 122 and MATH 096 or MATH 098 with a grade of at least 2.0, or

instructor permission.

Instructor Sharon Huitsing

Office Hours: online, Mon-Thurs 4.00-5.30 pm or by appt (via StarFish)

Contact Info: Canvas email, phone 253-912-2399 x8908 (Office)

Please feel free to visit during online office hours and I will be more than happy to assist you.

Email Policy:

Emails are answered first, then phone calls. I will respond to emails promptly on Mon-Fri (Canvas preferred). No weekend emails. If you do not receive a reply in Canvas, please use college email shuitsing@pierce.ctc.edu

Class Textbook

The textbooks for this course are:



- <u>Murach's HTML 5 and CSS, 4th edition. ISBN: 978-1-943872-26-8</u>
- zyBooks subscription

You may purchase either the e-book version and/or the paperback versions based on your study preference.

The paperback book is available at the college bookstore, and at many outlets online. You may use a pre-owned paperback version of this book, if available.

Additional Assistance

• Tutors are available "The P.A.S.S. Centers will continue to provide students with quality tutoring and mentoring support in an online environment. Our offices will remain accessible by phone, email, and through our <u>P.A.S.S. Canvas course</u>. Students will be able to meet with tutors and mentors, schedule appointments, and explore resources through this <u>Canvas space</u>. Tutoring and mentoring sessions will be conducted in Cranium Café using webcams and microphones to make the experience as seamless as possible. You will have an opportunity to interact with the tutor or mentor via video, audio, or chat while uploading and sharing documents. We are working to offer expanded hours and resources: More details to

come as the quarter gets closer. Should you have questions, feel free to call or email our offices. We are here to help you through this unique quarter, just let us know how we may be of service.

Contact Information:

Phone: 253-964-6737 (FS) or 253-864-3258 (PY)

Email: tutoring@pierce.ctc.edu

P.A.S.S. Canvas Space: https://pierce.instructure.com/courses/1839995"

- Technical support specifically for this course is available at the center lab (CTR174) in the College Center building in Puyallup campus. Lab technicians are available to assist you with the required hardware and software configuration for your personal laptop devices, and can show you how to use the software needed for this course. Contact John Campbell (jcampbell@pierce.ctc.edu) at (253) 912-2399.
- The Student Technology Assistance Team (STAT) members are available to help students with questions about Wi-Fi, Canvas, email and basic operations. A STAT member is always in room 272 in the College Center building in Puyallup, and room 301 in the Olympic building on the Fort Steilacoom campus. Team members will be available during all normal college hours. The STAT site is at http://www.pierce.ctc.edu/dist/labs/stat. Visit the online technical resources posted in Canvas.

Canvas Classroom

A CANVAS website has been set up for this class. The purpose is to have all assignments and materials available to you throughout the quarter. All assignments will be submitted through the website, and grades are posted there as well. Check the class site weekly to see what needs to be completed each week. You may expect to engage in online discussions and related online activities.

If you are unfamiliar with Canvas, you can get oriented the Student eGO orientation course at https://pierce.instructure.com/courses/999530.

Student Technology Expectations

- 1. All students are expected to know how you use a Windows-based computer and peripherals.
- 2. All students should know how to create, read and delete files, folders etc.
- 3. Students should know how to use a browser and browse/search the Internet, and how to create user accounts on web sites.
- 4. Students should understand how to operate devices like microphones and web cameras for some assignments
- 5. While students are free to use the computers in the labs CTR172, CTR174 and CTR176 to do their assignments, students will need their own computers do work away from the campus. Thus students should understand how to install software on Windows-based computer systems.

Class Materials

Portable storage should be available for all assignments (thumb drives, OneDrive, Google Drive, etc.);

You will need a webcam/microphone combination to be able to record your image in your screencasts (for some assignments). These are available online or in the bookstore. In a pinch, you can borrow a USB-based webcam from the lab techs at PUY CTR 174 for brief, onsite use. Laptops often have a webcam/microphone built in. If so you will not need to purchase this equipment.

External Site Requirements

- A Lucidchart.com student account is needed OR access to Microsoft Visio. Follow the directions in the Canvas shell to create your Lucidchart student account https://www.lucidchart.com/pages/usecase/education
- A free Screencast-O-Matic account is required. You will use screen-casting software
 to complete many of your assignments. Follow the directions in the Canvas shell to
 create your Screencast-O-Matic account. http://screencast-o-matic.com/home

You may get assistance from the lab technician in Puyallup CTR 174.

Course Description

Addresses client-side development utilizing HTML5, cascading style sheets (CSS3), and relevant scripting libraries. Compare and contrast types of graphics and graphical editing tools. Apply client-side scripting to enable dynamic user interface presentation. Utilize external HTTP data sources. Deploy content to one or more external hosting providers. Use appropriate integrated development environment (IDE) to develop and deploy code. Explore current tools and techniques in client-side development.

Course Summary and Purpose

This course is designed to teach practical client side web development, including HTML5, Cascading Style Sheets (CSS3), JavaScript, JQuery and web graphics.

- 1. You will be able to create web pages and websites, complete with text and images, that are attractive and interactive.
- 2. You will understand the language used to create web pages (HTML), the language used to create web page interactivity and logic (JavaScript) and the method used to style web pages so that they are aesthetically pleasing to the user (CSS).
- 3. You will know what web graphics are, the differences between the major types of web graphics, and how to select the right type for your project.
- 4. You will be able to describe how the Internet works, what web servers are, what "the cloud" is, and how web browsers request information, then receive and render the results as a web page.

- 5. You will be able to write basic HTML, create small scripts that allow you to modify the HTML "on-the-fly" after it's been rendered and create CSS to style the pages.
- 6. You will be able to publish a website on the Internet so that it can be seen by the public

Course Content

- HTML4 and HTML5
- Cascading Style Sheets
- JavaScript and JQuery

Student Outcomes

- 1. Students will create static web forms utilizing HTML.
- 2. Students will create client-side web forms that utilize JavaScript and JQuery, accept input, produce output, and communicate with the server.
- 3. Students will apply basic programming techniques such as iteration, branching, and arrays within the JavaScript code on the client side web pages.
- 4. Students will create multiple forms and move data between them using relevant object models.
- 5. Students will create web forms that utilize Style Sheets while demonstrating an understanding of the separation of the presentation and application layers.
- 6. Students will design and implement error handling in JavaScript.

Degree Outcomes

Core Ability - Effective Communication. Graduates will be able to exchange messages in a variety of contexts using multiple methods

Potential Methods

- 1. Demonstration
- 2. Pair Programming
- 3. Objective Testing
- 4. Observation
- 5. Project

Course Layout and Time Requirements

The course is taught in (10) modules that span 10 weeks. There are modules that contains useful information about the course, college success skills and more. You

should view all of the pages in the these modules before you can begin actual coursework.

Some modules will be completed in one week, others span multiple weeks. You will see the modules as each week progresses, i.e. the module content and assignments when you log into the Canvas course website.

As a rule, you should expect to spend 4 hours per week per credit (4 hours x 5 credits = 20 hours) for satisfactory completion of any CIS course. You should expect to spend (5) hours per week in class, and at least (15) hours per week outside of class learning the material and completing practice and graded assignments in this course.

Class Schedule (order of topics subject to change)

The following schedule is tentative and subject to change as the course progresses.

Week 1 –Introduction to web programming;

Week 2 –How to use HTML to structure a web page; How to use CSS to format the elements of a web page

Week 3 –How to use the CSS box model for spacing, borders, and backgrounds, page layout

Week 4 –How to work with lists and links, forms, images and tables

Week 5/6 – How to use Responsive Web Design; CSS transitions, animations

Weeks 7/8 – Intro to JavaScript, How to use JavaScript and jQuery to enhance your web pages

Week 9/10 - Mobile Web Development, Node.js/PHP

All work is to be submitted as we progress through the course. Each quiz and assignment should be considered an exam (they are formative assessments), and all rules of exams shall apply. This shall apply to all students and all tutors. Check the applicable Pierce College policies if you have any questions on this matter

E-mail and Other Notifications

Please check your student emails and Canvas announcements on a daily basis during the work week. It may contain announcements, corrections and other important information regarding the course. The professor will NOT be available on weekends or holidays, so plan accordingly. You can expect a response to your questions within 24 weekday hours – again no emails will be answered on weekends.

Attendance

Since this is an online virtual class, attendance is NOT mandatory. There will be a weekly lab practice sessions.

Grading Scale

Class grading:

<u>Deliverables</u>	Grade %
Assignments – Lab, Zybooks	70%
Quizzes	20%
Participation/Professional Behavior/Teamwork-	10%

Forum/Posts/Surveys

You will always know your grading progress by using the "Grades" tool in Canvas. Grading for weekly assignments will be completed prior to the due date of the next week's assignments.

The complete grading scale is as follows:

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95-100 = A (4.0); 90-95 = A (3.5-3.9); 80-89 = B (2.5-3.4); 70-79 = C (1.5-2.4); 65-70 = D (1.0-1.5); less than 65 = 0.
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CIS students should note that to progress to the next level CIS courses (not CNE courses), a 2.0 is needed in this course.

Professional Behavior

You will be measured by the following interactions with fellow students, any teamwork, in-class behavior and the instructor. (These are also mentioned in the college student code of conduct.)

Professional behavior is defined by:

- 1- Positive Attitude Being courteous, respectful, kind and helpful to your classmates, and instructor
- 2- Professional Interactions Being constructive and positive in interactions with your classmates and the instructor
- 3- Taking Initiative Attempting to solve problems by yourself first, instead of depending on others to solve the problem for you. Problem solving is the bedrock of IT and programming skill building.
- 4- Learning Attitude Being a flexible, independent problem-solver, showing initiative in assignments, exhibiting creativity and an ability to adapt to change (these are characteristics that robots cannot replicate).

- 4- Personal responsibility Active class participation (which in turn requires regular class attendance)
- Netiquette (see Canvas for additional detail) i.e. courteous and respectful email communications with the instructor and fellow students.

Assignment Submission

Each assignment has a clearly spelled out due date. Each course has many students and several topics. In order for us to move forward and not be left behind, all assignments need to be reviewed and graded in a timely manner. This is a summary of the late grading policy:

- 1. There is a <u>10% penalty for late submissions</u>, <u>10+-25% penalty if assignment</u> is turned in later than 1+ week after the due date.
- 2. There is a built-in buffer of 3 extra days for ALL zybooks assignments. For example, the Canvas due date is April 11th, the zybooks due date will display April 14th. April 11th is the actual assignment due date, April 14th is the LATE due date. All late assignments will be deducted points in Canvas. No further late extensions will be provided for zybooks assignments beyond the 'automatic' late extension, (with the exception of proven extenuating circumstances). Plan to turn in ALL zybooks assignments by the automatic late due date.
- 3. At the instructor's sole discretion, and with prior approval from the instructor, an assignment may be turned in late under mitigating circumstances. These circumstances might include a medical emergency or work travel. If you need to turn in an assignment late, come to an agreement with the instructor ahead of time.
- 4. If you consistently turn in late assignments you could switch from an "A/B" student to a "C/D" student.
- 5. If you have an excused late assignment, you will be expected to submit the assignment within a reasonable period of time from when you are again capable. Generally, late assignments should be turned in a few days from when you begin participating in class after your absence.
- 6. Use the provided rubrics to ensure that you get the most points possible for your efforts, and that you understand the deliverables. All non-quiz graded assignments have rubrics attached that show the point breakdowns.

Cheating & Plagiarism

Cheating and plagiarism will not be tolerated in this class, and will result in a zero grade for the quarter. See the college catalog, or the instructor, if you are unsure of these concepts. http://www.pierce.ctc.edu/about/policy/studentrr.

The nature of some of the assignments involves creating a video file whereby you demonstrate your completed work, and fully explain what you have done. The intent here is to demonstrate that you are both doing your own work, and also learning and

applying the material. Other assignments are project-based. These must also be your own work. Quizzes must be done without assistance from others.

Finally, it is well understood that some or all of the instructor materials for all academic texts may be downloaded by unauthorized persons and used inappropriately. Doing so will be considered the highest form of cheating, will result in a zero course grade for a single offense, and subject the student(s) involved to disciplinary action by the institution. If you learn of this type of cheating being perpetrated by a fellow student, you MUST notify the instructor immediately. Failure to do so will result in your being considered a collaborator when the cheaters are eventually and invariably caught.

Access and Disability Support Services

Your experience in this class is important, and it is the policy and practice of Pierce College to create inclusive and accessible learning environments consistent with federal and state law. If you experience barriers based on disability, please seek a meeting with the Access and Disability Services (ADS) manager to discuss and address them. If you have already established accommodations with the ADS manager, please bring your approved accommodations (green sheet) to me at your earliest convenience so we can discuss your needs in this course.

ADS offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process between you and the ADS manager, and I am available to help facilitate them in this class. If you have not yet established services through ADS, but have a temporary or permanent disability that requires accommodations (this can include but not be limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are encouraged to contact ADS at 253-964-6526 (Fort Steilacoom) or 253-840-8335 (Puyallup).

The ADS page on the Pierce College website is at https://www.pierce.ctc.edu/dist/supportservices/ads/. Email addresses to ADS representatives are listed on this page.

Emergency School Closure

In the event of an emergency school closure, please check your college email during class time. In the event of an emergency school closure, we will conduct class via CANVAS.

Student Accommodation for Faith/Conscience

Reasonable Accommodations for Faith/Conscience: Students who will be absent from or endure significant hardship in course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Such requests must be made in writing within the first two weeks of the beginning of the course.

Students should review the Accommodations for Faith/Conscience Policy and follow the procedures: https://www.pierce.ctc.edu/policy-faith-conscience.

Procedures

Students must submit a completed Request for Accommodation for Faith/Conscience form. Forms are available in the Offices of the Vice President for Learning and Student Success at Fort Steilacoom and Puyallup, and of the Executive Director of Pierce College at Joint Base Lewis McChord (JBLM), as well as online at https://www.pierce.ctc.edu/policy-faith-conscience. The form must be submitted to the Office of the Vice President for Learning and Student Success, the Executive Director of Pierce College at JBLM, or via email to LSSoffice@pierce.ctc.edu within the first two weeks of the beginning of the course in which the absence/hardship will occur.

All requests under this policy must be approved in advance by either the Office of the Vice President for Learning and Student Success or the Executive Director of Pierce College at JBLM; consideration will be given for absence/hardships that occur within the first two weeks of the term. After the first two weeks of the beginning of the course, the college will not authorize an accommodation for an absence/hardship for a student without exceptional and compelling circumstances.

Once approved, students should obtain a signature from each professor with whom they have class on the affected day(s). After notification of the absence/hardship, each professor will determine what adjustments, if any, will need to be made to the scheduled assignments/activities. These adjustments should be communicated from the professor to the student within four business days of receiving the notification.

Students enrolled in Veterinary Technology, Nursing, Dental Hygiene, and other programs with an internship or clinical component should consult with their Program Director and consider Program Handbook policies and procedures early in this process to assure that a reasonable accommodation can be determined.

Students whose courses include a performance or residency requirement that conflicts with an anticipated absence/hardship should speak with the professor to determine whether a reasonable accommodation can be made (e.g. a concert cannot be rescheduled, a host institution may not be able to adjust their calendar, etc.).

If the student's absence/hardship occurs on a day when a test/assessment is scheduled or an assignment is due, the professor may require that the student take the test or submit the assignment before or after the regularly assigned date. If a substantial group engagement activity/project is planned, students should work with their professor to determine whether a reasonable accommodation can be made to minimize impact on other students and assure a similar opportunity for learning can be implemented.

If a student fails to complete the formal process, the professor is not obligated to make any accommodations for the student or treat an absence/hardship as authorized under this policy or the law.

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If there is disagreement with regard to determining reasonable accommodation, either party may make their concerns known to the campus vice president/JBLM executive director. Students who have concerns about approval or a grade impact may utilize the student grievance procedure for concerns not directly related to grades https://www.pierce.ctc.edu/policy-grievance, or to the grade appeal process in cases impacting a final grade https://www.pierce.ctc.edu/policy-grade-appeal.