Unit 7: Enhancing the CHS Website (Grades 10-12)

Content Area: **Computer Science**
Course(s):
Time Period: **Marking Period 4**
Length: **3-4 Weeks**
Status: **Published**

Summary

Introduction: Students will enhance the CHS Website by updating existing pages or by developing additions to the site. Students will analyze data to determine adjustment needs on the high school's site. They will also be tasked with maintaining various sections of the site, which will require them to communicate not only with each other, but with other members of the school community.

Revision Date: July 2026

Information Literacy: This unit challenges students to locate, evaluate, and use information effectively. Information literacy includes, but is not limited to, digital, visual, media, textual, and technological literacy. Lessons may include the research process and how information is created and produced; critical thinking and using information resources; research methods, including the difference between primary and secondary sources; the difference between facts, points of view, and opinions, accessing peer-reviewed print and digital library resources; the economic, legal, social, and ethical issues surrounding the use of information.

P.1	Act as a responsible and contributing community members and employee.
1.a	Include the unique perspectives of others and reflect on one’s own perspectives when designing and developing computational products.
1.2.12prof.Cr1	Generating and conceptualizing ideas.
L.SS.11–12.1	Demonstrate command of the system and structure of the English language when writing or speaking.
1.b	Address the needs of diverse end users during the design process to produce artifacts with broad accessibility and usability.
P.4	Demonstrate creativity and innovation.
P.4	Demonstrate creativity and innovation.
P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
P.6	Model integrity, ethical leadership and effective management.
P.6	Model integrity, ethical leadership and effective management.
2.a	Cultivate working relationships with individuals possessing diverse perspectives, skills, and personalities.
L.KL.11–12.2	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
2.b	Create team norms, expectations, and equitable workloads to increase efficiency and

	effectiveness.
2.c	Solicit and incorporate feedback from, and provide constructive feedback to, team members and other stakeholders.
P.8	Use technology to enhance productivity increase collaboration and communicate effectively.
P.9	Work productively in teams while using cultural/global competence.
4.b	Evaluate existing technological functionalities and incorporate them into new designs.
5.c	Modify an existing artifact to improve or customize it.
8.1.12.DA.6	Create and refine computational models to better represent the relationships among different elements of data collected from a phenomenon or process.
8.1.12.AP.5	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
1.2.12prof.Cn11b	Critically evaluate and effectively interact with legal, technological, systemic, and vocational contexts of media arts, considering ethics, media literacy, social media, virtual worlds, and digital identity.

Essential Questions/Enduring Understandings

- How do you analyze data to make decisions about website development?
- Who is involved in the development of a website?
- Building on the work of others is a common, but difficult, task.
- Knowing how web design code works is an important aspect of designing websites.

Objectives

Students Will Know

- how to utilize advanced web design topics such as:
    - JavaScript countdowns
    - mouseovers
    - formulas
    - clickable layers
    - menus
    - educational games
    - Actionscripts
    - iFrames
    - Animated Gifs
    - Multimedia embedding

Students Will be Skilled At

- containing content within parameters developed by someone else.
- using a template designed by someone else.

Learning Plan

- Review data about user viewership from Google Analytics.
- Develop a list of adjustments to be made based on the data.
- Preview the essential questions and connect to learning throughout the unit.
- Research the club section of the school's website.
- Obtain and adjust content to reflect current times/advisors/clubs.
- Research 'life at CHS'.
- Develop a webpage from the CHS template that describes life at CHS using an advanced web design topic.

Assessment

Assessments

- Formative: Daily assessments using examples from class notes and CodeHS.com, AP Classroom/Albert Checks for Understanding

- Summative: Teacher-created assessments/projects and CodeHS Computer Science Projects, AP Classroom/Albert Unit Assessments

- Benchmark: Check for understanding benchmark assessments on CodeHS, AP Classroom/Albert/Khan Academy Diagnostics

- Alternative Assessments: Student-centered activities such as a doorbell coding project, game design projects, and other activities listed below:

- Create a website-based resume.
- Present the resume in a mock interview based setting.
- Receive feedback from rubrics and comments from students/teachers/administration.
- Make adjustments and complete self assessment.
- Answer the essential questions.

- develop a webpage based on a template for various possible extensions of the CHS website. A rubric will be utilized in assessing understanding.
- develop and update club pages for the CHS website.
- answer the essential questions.

Materials

- Core instructional materials: Core Book List

Supplemental materials:

- District Approved Textbook
- HTML5 Resources
- CSS3 Resources
- Internet Access
- Khan Academy
- Codeacademy
- Codehs
- Computers

Integrated Accommodation and Modifications

Possible accommodations/modification for Web Design 2