Wallenpaupack Area School District
Planned Course Curriculum Guide

Department
Business, Computers, and Information Technology (BCIT)

Name of Course
Web Design and Development

Course Description:
This course provides an introduction to web technologies. An overview of web page design and the World Wide Web is provided as students are introduced to web page authoring, web design, and content development. Elements of graphic design, programming languages, and functions of websites are explored. Research, organization, and presentation skills are essential components of this course. This course is project-based with a focus on authentic tasks.

Initial Creation Date (if applicable) and Revision Dates: December 2023

Wallenpaupack Area School District Curriculum	
COURSE: Web Design and Development	**GRADE/S:** 9-12
UNIT 1: Introduction	**TIMEFRAME:** 5 Blocks

PA COMMON CORE/NATIONAL STANDARDS:
- 15.3.12.A – Evaluate work product and make recommendations based on content.
- 15.3.12.D. – Evaluate business materials (including web based resources) for value related to purpose, quality, and appropriateness.
- 15.3.12.S. – Evaluate electronic communication options based on need.
- 15.3.12.U. – Critique the effectiveness of various electronic communication options related to desired outcomes.

UNIT OBJECTIVES (SWBATS):
- Evaluate the purpose/type of a variety of websites
- Recognize and analyze and the components of a website
- Locate elements of website design while looking at a website
- Articulate the different web development languages and what they do

INSTRUCTIONAL STRATEGIES/ACTIVITIES:
- Class Discussions
- Survey and Analysis of Different Websites

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):
- In-class assignments (OneNote assignments, graphic organizers, etc.)
- Final analysis of a website of students' choosing

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):
- Students will have the ability to go as in-depth with any of the topics covered as their interest and ability levels allow them to (i.e. a student may choose to look at and start learning a specific web development language or they may choose to dive deeper into the graphic design content).

RESOURCES (Technology Based Resources, Text Resources, etc.):
- Types of Websites
- Key Components of a Great Website
- Modern Web Design Elements
- Common Web Development Languages
- OneNote

KEY VOCABULARY: Ecommerce, Blog, Nonprofit/Organization, Membership, Portfolio, Personal, Forum, Knowledge Base, Typography, Hamburger Menus, Semi-Flat Design, HTML, CSS, Java, JavaScript, Python, SQL, PHP, .NET, Angular, Perl, Ruby, ColdFusion, Elm, Rust

Wallenpaupack Area School District Curriculum	
COURSE: Web Design and Development	**GRADE/S:** 9-12
UNIT 2: Critical Thinking and Planning	**TIMEFRAME:** 5 Blocks

PA COMMON CORE/NATIONAL STANDARDS:
- 3.4.10.C1. – Apply the components of the technological design process.
- 3.4.10.E4. – Evaluate the purpose and effectiveness of information and communication systems.

UNIT OBJECTIVES (SWBATS):
- Complete the Critical Thinking CareerSafe course
- Develop a plan for their course project

INSTRUCTIONAL STRATEGIES/ACTIVITIES:
- CareerSafe Course
- Independent/Group Activities
- Planning Graphic Organizers

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):
- CareerSafe Certificate of Achievement
- Completed Planning Document

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):
- Students will be welcome to research any of the topics covered in the Critical Thinking course or do a personal inventory of their own skills (strengths and weaknesses).

RESOURCES (Technology Based Resources, Text Resources, etc.):
- CareerSafe – Critical Thinking
- OneNote

KEY VOCABULARY: Critical Thinking, Strategic Thinking, Reasoning, Cognitive Flexibility, Emotional Intelligence

Wallenpaupack Area School District Curriculum	
COURSE: Web Design and Development	**GRADE/S:** 9-12
UNIT 3: Project	**TIMEFRAME:** 25 Blocks

PA COMMON CORE/NATIONAL STANDARDS:
- 3.4.10.C1. – Apply the components of the technological design process.
- 3.4.10.E4. – Evaluate the purpose and effectiveness of information and communication systems.
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UNIT OBJECTIVES (SWBATS):
- Complete a project of their choosing to demonstrate their understanding of Web Design and Development
  - o Create a SharePoint(s) for in-house clients (Lakeside Café, Class Advisors, Pathways, etc.)
  - o Create a website for their own small business
  - o Complete the Build a Website with HTML, CSS, and GitHub Pages course on Codecademy
  - o Other student-driven ideas

INSTRUCTIONAL STRATEGIES/ACTIVITIES:
- Independent and Group Work
- Independent and Group Conferences

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):
- Daily Work Log/Journal
- Finished Product based on the chosen project

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):
- Students will choose their project and whether they work independently or in a group

RESOURCES (Technology Based Resources, Text Resources, etc.):
- SharePoint
- Joomla
- Word Press
- Codecademy
- OnePoint

KEY VOCABULARY: Design, Finished Product, Reflection

Wallenpaupack Area School District Curriculum	
COURSE: Web Design and Development	**GRADE/S:** 9-12
UNIT 4: Career Project	**TIMEFRAME:** 10 Blocks

PA COMMON CORE/NATIONAL STANDARDS:
- 15.2.12.A. – Analyze personal characteristics, talents, skills, abilities and career assessment results as related to career pathways, clusters, or occupations.
- 15.2.12.J. – Analyze career goals based on, but not limited to, interest, lifestyle, skills, and values in order to transition from high school.

UNIT OBJECTIVES (SWBATS):
- Build a SharePoint to a highlight a career of their choosing
- Organize required information into an easy to navigate webpage
- Illustrate how the career they chose is a good fit for them based on the results of a career assessment

INSTRUCTIONAL STRATEGIES/ACTIVITIES:
- Independent Work
- Individual Student Conferences

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):
- Daily Work Log/Journal
- Completed SharePoint (graded with a rubric)

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):
- Students will choose the career they wish to complete this project on based on the results of their career test.

RESOURCES (Technology Based Resources, Text Resources, etc.):
- CareerExplorer Career Test
- OneNote
- SharePoint
- Teacher Created Rubric

KEY VOCABULARY: Career Pathways, Career Clusters, Occupation, Interest, Ability, Talent