# Web Design II
# Revised UBD Curriculum
# Egg Harbor Township High School
# Business and Computer Science Department



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**DISTRICT MISSION STATEMENT**

Our mission in the Egg Harbor Township School District is to partner with the student, family, school, and community to provide a safe learning environment that addresses rigorous and relevant 21st Century standards and best practices which will develop academic scholarship, integrity, leadership, citizenship, and the unique learning style of students, while encouraging them to develop a strong work ethic and to act responsibly in their school community and everyday society.

**CAREER AND TECHNICAL EDUCATION**

**Mission:**

New Jersey's Office of Career and Technical Education seeks to prepare students for career opportunities of the 21st century, succeed as global citizens and support healthy economic growth for New Jersey.  Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state.

**INTRODUCTION**

The most precious resource teachers have is time.  Regardless of how much time a course is scheduled for, it is never enough to accomplish all that one would like.  Therefore, it is imperative that teachers utilize the time they have wisely in order to maximize the potential for all students to achieve the desired learning.

High quality educational programs are characterized by clearly stated goals for student learning, teachers who are well-informed and skilled in enabling students to reach those goals, program designs that allow for continuous growth over the span of years of instruction, and ways of measuring whether students are achieving program goals.

**EGG HARBOR TOWNSHIP SCHOOL DISTRICT CURRICULUM TEMPLATE**

The Egg Harbor Township School District has embraced the backward-design model as the foundation for all curriculum development for the educational program.  When reviewing curriculum documents and the Egg Harbor Township curriculum template, aspects of the backward-design model will be found in the stated enduring *understandings/essential questions, unit assessments,* and *instructional activities*.  Familiarization with backward-design is critical to working effectively with Egg Harbor Township's curriculum guides.

**GUIDING PRINCIPLES: WHAT IS BACKWARD DESIGN?**
**WHAT IS UNDERSTANDING BY DESIGN?**

"Backward design" is an increasingly common approach to planning curriculum and instruction. As its name implies, "backward design" is based on defining clear goals, providing acceptable evidence of having achieved those goals, and then working 'backward' to identify what actions need to be taken that will ensure that the gap between the current status and the desired status is closed.

Building on the concept of backward design, Grant Wiggins and Jay McTighe (2005) have developed a structured approach to planning programs, curriculum, and instructional units. Their model asks educators to state goals; identify deep understandings, pose essential questions, and specify clear evidence that goals, understandings, and core learning have been achieved.

Program based on backward design use desired results to drive decisions. With this design, there are questions to consider, such as: What should students understand, know, and be able to do? What does it look like to meet those goals? What kind of program will result in the outcomes stated? How will we know students have achieved that result? What other kinds of evidence will tell us that we have a quality program? These questions apply regardless of whether they are goals in program planning or classroom instruction.

The backward design process involves three interrelated stages for developing an entire curriculum or a single unit of instruction. The relationship from planning to curriculum design, development, and implementation hinges upon the integration of the following three stages.

*Stage I: Identifying Desired Results:* Enduring understandings, essential questions, knowledge and skills need to be woven into curriculum publications, documents, standards, and scope and sequence materials. Enduring understandings identify the "big ideas" that students will grapple with during the course of the unit. Essential questions provide a unifying focus for the unit and students should be able to answer more deeply and fully these questions as they proceed through the unit. Knowledge and skills are the *"stuff"* upon which the understandings are built.

*Stage II: Determining Acceptable Evidence:* Varied types of evidence are specified to ensure that students demonstrate attainment of desired results. While discrete knowledge assessments (e.g.: multiple choice, fill-in-the-blank, short answer, etc...) will be utilized during an instructional unit, the overall unit assessment is performance-based and asks students to demonstrate that they have mastered the desired understandings. These culminating (summative) assessments are authentic tasks that students would likely encounter in the real-world after they leave school. They allow students to demonstrate all that they have learned and can do. To demonstrate their understandings students can explain, interpret, apply, provide critical and insightful points of view, show empathy and/or evidence self-knowledge. Models of student performance and clearly defined criteria (i.e.: rubrics) are provided to all students in advance of starting work on the unit task.

*Stage III: Designing Learning Activities:* Instructional tasks, activities, and experiences are aligned with stages one and two so that the desired results are obtained based on the identified evidence or assessment tasks. Instructional activities and strategies are considered only once stages one and two have been clearly explicated. Therefore, congruence among all three stages can be ensured and teachers can make wise instructional choices.

At the curricular level, these three stages are best realized as a fusion of research, best practices, shared and sustained inquiry, consensus building, and initiative that involves all stakeholders. In this design, administrators are instructional leaders who enable the alignment between the curriculum and other key initiatives in their district or schools. These leaders demonstrate a clear purpose and direction for the curriculum within their school or district by providing support for implementation, opportunities for revision through sustained and consistent professional development, initiating action research activities, and collecting and evaluating materials to ensure alignment with the desired results. Intrinsic to the success of curriculum is to show how it aligns with the overarching goals of the district, how the document relates to district, state, or national standards, what a high quality educational program looks like, and what excellent teaching and learning looks like. Within education, success of the educational program is realized through this blend of commitment and organizational direction.

## INTENT OF THE GUIDE

This guide is intended to provide teachers with course objective and possible activities, as well as assist the teacher in planning and delivering instruction in accordance with the New Jersey Core Curriculum Content Standards. The guide is not intended to restrict or limit the teacher's resources or individual instruction techniques. It is expected that the teacher will reflectively adjust and modify instruction and units during the course of normal lessons depending on the varying needs of the class, provided such modified instruction attends to the objectives and essential questions outlined below.

**Unit Name: Unit 1: Web Design Basics Project**    **Time Frame:  2-3 weeks (10-16 hours)**

**Author: Tracy A Meyer**

Subject: Business and Computers    Country: **US**

Course/Grade: Web Design II/ 9-12    State/Group: **NJ**

School: **Egg Harbor Twp High School**

## UNIT SUMMARY

In this unit, students are reintroduced to web design principles, HTML, and CSS. They use these skills to customize an existing widget. Students will also be refreshed about the phases of web production and about publishing web projects.

## UNIT RESOURCES

Adobe Project 1 Web Design Basics documents

- ➢ Design principles
- ➢ Analyzing websites
- ➢ Introduction to HTML and CSS
- ➢ Introduction to project planning, project management, and teamwork
- ➢ Getting started with Adobe Photoshop
- ➢ Getting started with Adobe Illustrator
- ➢ Wireframes
- ➢ Design comps
- ➢ Peer review
- ➢ Editing images and graphics
- ➢ Copyright and fair use
- ➢ Getting started with Adobe Dreamweaver
- ➢ Inserting content in Dreamweaver
- ➢ Working with CSS
- ➢ Publishing with Dreamweaver
- ➢ Presenting design projects

Adobe Dreamweaver CC

Adobe Photoshop CC

Adobe Illustrator CC

Syllabus

**Internet Resource Links:**

## STAGE ONE

### GOALS AND STANDARDS

This course is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and web planning, design and development technical skills using Adobe and other leading industry tools.

8.2.12.E.3  Use a programming language to solve problems or accomplish a task (e.g., robotic functions, website designs, applications, and games).

8.2.12.E.4  Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).

8.2.12.C.1  Explain how open source technologies follow the design process

8.1.12.A.3  Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.

8.1.12.D.1  Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

9.3.IT-WD.1  Analyze customer requirements to design and develop a Web or digital communication product.

9.3.IT-WD.2  Apply the design and development process to produce user-focused Web and digital communications solutions.

9.3.IT-WD.3  Write product specifications that define the scope of work aligned to customer requirements.

9.3.IT-WD.4  Demonstrate the effective use of tools for digital communication production, development and project management.

9.3.IT-WD.5  Develop, administer and maintain Web applications.

9.3.IT-WD.6  Design, create and publish a digital communication product based on customer needs.

9.3.IT-WD.7  Evaluate the functionality of a digital communication product using industry accepted  techniques and metrics.

9.3.IT-WD.8  Implement quality assurance processes to deliver quality digital communication products and  services.

9.3.IT-WD.9  Perform maintenance and customer support functions for digital communication products.

9.3.IT-WD.10  Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications.
9.3.IT-WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications


## ENDURING UNDERSTANDING

*Students will understand…*

- how CSS is used to create consistency and allow for easy site-wide changes
- design principles to inform the modifications and customizations made to the page's Cascading Style Sheet

## ESSENTIAL QUESTIONS
Why is it important for websites to comply to web standards?
What is the difference between HTML and CSS?
What are the major criteria that experts use to evaluate web sites?
What are the five basic steps to organizing information on a web page?

## KNOWLEDGE AND SKILLS

*Students will know..*

*Students will be able to:*

- Design for a specific audience and purpose
- Understand the phases of web development
- Analyze and critique websites
- Evaluate and analyze content validity
- Evaluate and analyze website navigation
- Understand copyright issues and fair-use guidelines
- Advocate and practice legal use of images
- Collect and analyze audience needs and
- purpose to inform design
- Participate in peer review
- Communicate and present design decisions
- Give feedback on a project
- Understand the Photoshop workspace
- Resize, rotate, and crop images
- Correct color
- Retouch images
- Generate multiple file formats
- Understand the Illustrator workspace
- Create vector artwork
- Modify and transform graphics
- Understand the Dreamweaver workspace
- Set up a web project

- Use the Insert panel
- Use the Assets panel
- Create and edit HTML
- Insert images
- Insert text
- Create, modify, and troubleshoot Cascading
- Style Sheets
- Edit and customize CSS rules
- Use the CSS Styles panel
- Use CSS text styles
- Use Live View
- Publish web files

## STAGE TWO

### PERFORMANCE TASKS

Activity 1: Design principles: Design principles worksheet
Activity 2: Analyzing websites: Analyzing websites; Usability worksheet
Activity 4: Introduction to project planning, project management, and teamwork: students to determine the audience and purpose of their web page
Activity 8: Design comps: students to create 2 or 3 design comps for their web page
Activity 9: Peer review: Ask several students to share their design comps with the class for feedback
Activity 12: Getting started with Adobe Dreamweaver: Create 2-4 specific HTML5 elements such as: section, article, aside, hgroup, header, footer, nav
Activity 13: Inserting content in Dreamweaver: Write and insert any text and links need for their webpage
Activity 14: Working with CSS: draft CSS for their website
Activity 15: Publishing with Dreamweaver: Have students use Preview in Browser to display the web page
Activity 16: Presenting design projects: Students to present their websites

### Performance Assessments

Student Product: Original Website

### Knowledge Assessment

Unit 1 Assessment: Web Design Basics

### Other Evidence

- Classroom discussion participation
- Teacher observation of classroom assignments/activities

## STAGE THREE

### LEARNING PLAN

**Lesson 1: Introduce students to goals of the project**
- Introduce web design principles
- Analyze websites for audience and purpose
- Introduce HTML and CSS
- Introduce wireframes and design comps
- Select, edit, and prepare images and graphics
- Edit and customize CSS rules
- Create a web page using HTML and CSS

**Lesson 2: Design principles**
- This activity introduces the concept of using design principles and typography to evaluate and inform design. Topics include color theory, layout, tone, and sustainable design. It is recommended to prepare examples of specific design principles for this activity.
- Show students at least two websites, one that is well designed and one that is not, and discuss them in relation to consistency and visual hierarchy. Ask students to identify the design elements on the sample websites. Identify visual elements on some of the web pages that can support content hierarchy, such as navigation scheme, the use of color, text headings, fonts (color, emphasis, and size), indentation and alignment, paragraph headings, and lists.

**Lesson 3: Analyzing websites**
- Identify the kind of information that determines purpose, audience, and audience needs of a website.
- Demonstrate website analysis techniques.
- Introduce how to assess for usability and accessibility.
- Introduce how to design for usability and accessibility.

**Lesson 4: Introduction to HTML and CSS**
- Presentation to reintroduce and discuss best practices for using CSS and HTML

**Lesson 5: Introduction to project planning, project management, and teamwork**
- Use this activity to introduce and discuss project planning, production phases, project management, and working in teams.
- Explain that in another project they will go through each phase of the production process. However, for this project they will only be working with wireframes and design comps to assist them in creating a web page.
- Ask students to determine the audience and purpose of their web page.

**Lesson 6: Getting started with Adobe Photoshop and Adobe Illustrator**
- Prepare students to create wireframes and design comps and edit images and graphics for use on their webpages.
- Use these two activities to introduce students to the interface, terminology, and basic panels in Photoshop and Illustrator.
- Explain that Photoshop and Illustrator are industry-standard tools for creating images and graphics for web sites.

**Lesson 7: Wireframes**

- In this activity you will introduce students to wireframes, why they are an important part of the design process, and how to create them.
- Ask students to think about their web page and the design elements that would make it consistent.

**Lesson 8: Design Comps**
- This activity introduces the concept of a design comp and how they are used to create and present multiple design ideas.
- Ask students to create 2 or 3 design comps for their web page.

**Lesson 9: Peer Review**
- Discuss with your students how to participate in peer review by communicating information and listening and providing feedback.
- Ask several students to share their design comps with the class for feedback.
- From the feedback ask students to select one design comp to use for their web page, and allow them time to make any needed adjustments to the design comp.

**Lesson 10: Editing Images and Graphics**
- Teach your students how to edit images and create graphic elements for their webpage by using Photoshop and Illustrator.
- Discuss the difference between vector and bitmap images and demonstrate how to how to crop, rotate, resize, and transform images, how to adjust colors, and how to create and modify vector artwork.
- Explain that students need to select images or create graphics to use on their web page.

**Lesson 11: Copyright and Fair Use**
- Teach students about copyright issues and fair use guidelines as they relate to using content in their webpages.

**Lesson 12: Getting Started With Adobe Dreamweaver**
- Understand the Dreamweaver interface, terminology, and workspaces
- Set up a web project
- Creating a new document
- Use the index.html page they created as their web page.
- Create a DOCTYPE declaration Create specific HTML tags such as: HEAD, TITLE, BODY, H1-H6, P, EM, STRONG, A HREF
- Create 2-4 specific HTML5 elements such as: section, article, aside, hgroup, header, footer, nav.

**Lesson 13: Inserting Content With Dreamweaver**
- Demonstrate how to use the Insert and Asset panels to add text, images, graphics, and links to a web page.
- Use the images and graphics they created earlier to add to their webpage.
- Write and insert any text they need for their webpage.
- Create and insert any links they need for their webpage.

**Lesson 14: Working with CSS**
- Introduce your students to designing with CSS
- Organize pages with CSS

- Edit and customize CSS rules
- Create CSS text styles
- Create, modify, and troubleshoot Cascading Style Sheets
- Use Live View
- Students will be provided time to make changes to their HTML and CSS files

**Lesson 15: Publishing with Dreamweaver**
- Have students use Preview In Browser to display the web page. Explain that to preview in a web browser
- Have students publish the web page to a web server

**Lesson 16: Presenting Design Projects**
- Students to present their web pages to the class, explaining the audience and purpose, the design choices they made in creating their web page, what HTML tags they used and why, what CSS rules they created and why, and lessons they learned in creating and publishing a web page

Formative Assessments

Classwork, homework, observation of group cooperation and interaction participation in classroom discussion, and unit pre-test/survey.

Summative Assessments

Unit pre-test/survey, benchmark assessment, and computer based simulations

**Unit Name: Unit 2: Web Design and Planning Project**　　**Time Frame: 3.5-5 weeks (12-18 hours)**

**Author: Tracy A Meyer**

Subject: Business and Computers　　　　　　Country: **US**

Course/Grade: Web Design II/ 9-12　　　　　State/Group: **NJ**

School: **Egg Harbor Twp High School**

## UNIT SUMMARY

In this unit, student teams work on a project to build a website for a client. The client selects the topic of the website and specifies the content to be included. Each student team interprets the client's needs in proposing design solutions for the site's navigation scheme, page layout, look and feel, and content flow. Students write specific design documents to help them communicate clearly with the client.

The focus of this project is working on a team and designing for someone else, emphasizing the following: the design-team process for website development, team-client interaction for incorporating feedback and changes throughout the development of the site, and team-client communication using the design document and evaluating websites in preparation for the design.

## UNIT RESOURCES

Adobe Project 2 Web Design and Planning Project documents

- Analyzing websites
- Introduction to project planning, project management, and teamwork
- Research and writing for design projects
- Working with clients
- Planning design projects
- Information architecture
- Design solution documents
- Copyright and fair use
- Wireframes
- Design comps
- Design project review and redesign
- Creating storyboards for web projects
- Prototypes

Adobe Dreamweaver CC

Adobe Photoshop CC

Adobe Illustrator CC

Syllabus

MS Project

**Internet Resource Links:**

## STAGE ONE

### GOALS AND STANDARDS

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8.2.12.E.4   Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).
8.2.12.C.1   Explain how open source technologies follow the design process
8.1.12.A.3   Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.
8.1.12.D.1   Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

9.3.IT-WD.1  Analyze customer requirements to design and develop a Web or digital communication product.
9.3.IT-WD.2  Apply the design and development process to produce user-focused Web and digital communications solutions.
9.3.IT-WD.3  Write product specifications that define the scope of work aligned to customer requirements.
9.3.IT-WD.4  Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.5  Develop, administer and maintain Web applications.
9.3.IT-WD.6  Design, create and publish a digital communication product based on customer needs.
9.3.IT-WD.7  Evaluate the functionality of a digital communication product using industry accepted  techniques and metrics.
9.3.IT-WD.8  Implement quality assurance processes to deliver quality digital communication products and  services.
9.3.IT-WD.9  Perform maintenance and customer support functions for digital communication

products.

9.3.IT-WD.10  Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications.

9.3.IT-WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications

## ENDURING UNDERSTANDING

*Students will understand…*

- the design-team process for website development
- creating a wireframe
- creating design comps
- creating a prototype
- exporting a prototype to Dreamweaver
- accessibility
- color theory, layout, contrast, and composition
- needs and audience
- interactive content

## ESSENTIAL QUESTIONS

Why is understanding the audience important for web design?
How is the design phase different from the production phase?
Why is understanding and employing project management tools in web design critical to success?

## KNOWLEDGE AND SKILLS

*Students will know..*

*Students will be able to:*

- Develop a project plan
- Develop a design solution document
- Analyze to select best examples
- Synthesize content based on analysis and reflection
- Manage and organize multiple tasks involved in
- Design versus production
- Understand roles and responsibilities
- Meet deliverables
- Communicate ideas and information through
- Provide multiple design ideas
- Synthesize information from design review
- Create wireframes
- Create design comps
- Create storyboards
- Create prototypes
- Apply design principles
- Apply information architecture

- Design for usability and accessibility
- Design consistent website pages
- Understand and apply design aspects such as
- Design for usability and accessibility
- Design for a specific audience and purpose
- Plan graphics and rich media content based on
- Design for a client while meet client requirements
- Evaluate and analyze content validity
- Edit website content
- Evaluate and analyze website navigation
- Understand and practice legal use of images
- Understand tools for create animation and
- Critique designs
- Communicate purpose and goal
- Communicate and present design decisions
- Give feedback on a project
- Ask questions to focus and clarify
- Listen and interpret feedback
- Understand and address client design issues
- Finalize design with a client
- Communicate ideas and information through simple wireframes
- Provide multiple design ideas
- Synthesize information from design review
- Create wireframes
- Create design comps
- Create storyboards
- Create prototypes
- Apply design principles

## STAGE TWO

### PERFORMANCE TASKS

Activity 1: Analyzing websites: analyzing websites worksheet
Activity 2: Introduction to project planning, project management, and teamwork: discuss and define the phases of a design project
Activity 3: Research and writing for design projects: Assessing content worksheet
Activity 4: Working with clients: Client debriefing worksheet; Client interview worksheet; Design Review worksheet
Activity 5: Planning design projects: Project plan worksheet
Activity 6: Information architecture: students to create a flowchart for the client site
Activity 7: Design solution documents: have teams write a design solution document; design solution worksheet
Activity 8: Copyright and fair use: investigate whether they need permission to use any of their digital assets
Activity 9: Wireframes: Ask students to create a wireframe for their site.

Activity 10: Design comps: each team to make two or more design comps of the home page and a sample content page

Activity 11: Design project review and redesign: revised design comps based on client feedback; Design project review and redesign worksheet

Activity 12: Creating storyboards for web projects: create a storyboard for their client website; Production storyboard worksheet

Activity 13: Prototypes: Prototype to be presented to Client

## Performance Assessments

Student Products: Web production project plan and design solution document; website prototype, storyboard, wireframes, and design comps

## Knowledge Assessment

Unit 2 Assessment: Web Design and Planning

## Other Evidence

- Classroom discussion participation
- Teacher observation of classroom assignments/activities

## STAGE THREE

## LEARNING PLAN

Introduce students to goals of the project:
- Analyze websites for purpose, audience, usability, and accessibility
- Define a plan for the web project and work with a client
- Structure the information architecture and create wireframes
- Create design comps, storyboard, and a project prototype

Introduce the project and provide information about the client organization, such as the following:
- Name of organization
- Organization mission and goals
- Product or service provided by the organization and explanation of how it works
- Background and history
- Why the organization is in search of a web-design team

Utilize the following series of activities to introduce students to the core skills needed to complete the planning and design phases of the client website project.

**Lesson 1: Analyzing Websites**
Use this activity to teach or review how to:

- Identify the kind of information that determines purpose, audience, and audience needs of a website
- Demonstrate website analysis techniques
- Introduce how to assess for usability and accessibility
- Introduce how to design for usability and accessibility

**Lesson 2: Introduction to Project Planning, Project Management, and Teamwork**
Use this activity to introduce and discuss the following when working on a project:
- Project planning
- Production phases
- Project management
- Working in teams

Form student design teams and, where possible, mix members with complementary strengths, such as visual design, technical skill, and project management.

**Lesson 3: Research and Writing for Design Projects**
In this activity you will introduce your students to the following:
- Writing, editing, organizing, and managing content
- Communicating information to particular audiences
- Accessing, evaluating, and, synthesizing content from multiple sources
- Understanding the journalistic code of ethics.

**Lesson 4: Working with Clients**
This activity introduces the best practices for working with clients to help them create projects that address client's audience, purpose, and goals. Through this activity students will learn about:
- Interviewing clients
- Designing for clients
- Communicating and presenting design ideas to clients
- Understanding and addressing client design issues
- Finalizing a design with a client

In preparation for the client interview, discuss the kind of information design teams need from their clients about the clients' goals and target audience. Help students identify criteria for determining whether content is relevant to the site goals and appropriate for the target audience.

Have students conduct an interview with the client. After the interview, have teams review websites recommended by the client. Encourage teams to collect potential assets and design ideas as they review sites.

**Lesson 5: Planning Design Projects**
Follow these steps to utilize this activity for this project:
- Use this activity to teach students how to create a project plan while managing projects.
- Discuss the website production phases again in the context of creating the client websites. Some things to discuss include:

- When the completed client site is due
- Reasonable time frames for each phase
- Setting due dates
- Designating task owners for each task on their lists
- Responsibility of the task owner, especially who is accountable for getting a task completed regardless of who actually works on the task

Ask students to create a project plan for organizing their tasks within the project phases.

**Lesson 6: Information Architecture**
Follow these steps to utilize this activity for this project:

This activity introduces students to information architecture. Students should understand how to organize web projects so users have easy access to content and information.

Ask students to create a flowchart for the client site.

**Lesson 7: Design Solution Documents**
Follow these steps to utilize this activity for this project:
- Use this activity to introduce how to create a design solution document to help students identify the goals, objectives, audience, delivery requirements, site content, site structure, and visual design for a web project.
- Ask teams to organize and outline their content. Have them consider technical features that might be relevant to convey the content provided by the client, such as text and copy, forms, rollover images, pop-up menus, animations, interactive media, video, or preparation of photographs.
- Introduce and discuss Adobe Edge Animate, Adobe Flash, JavaScript, CSS3, and other rich media tools and their ability to create animation and interactive media. Discuss and analyze with your students what kind of rich media they can realistically create for their client sites.4.8
- Have teams write a design solution document, using their conclusions from the client interview, their content organization, and their knowledge of information architecture and usability.

**Lesson 8: Copyright and Fair Use**
As students consider the content for their client websites, they need to understand copyright and fair use best practices when using content from a third party. Use this activity to introduce your students to copyright issues and fair use guidelines.

**Lesson 9: Wireframes**
Follow these steps to utilize this activity for this project:
- In this activity you will introduce students to wireframes, why they are an important part of the design process, and how to create them.
- Ask students to create a wireframe for their site.

**Project Mid-point Presentation and Feedback**
At this juncture it is recommended to ask students to present their design documents (including flowcharts), wireframes, and project plans to the client.2.6 Ask the client to give an assessment of how

the information organization, visual placement, and project schedule meet their goals and address their target audience. Make sure at least one member of each team takes notes on the client's comments.

Have teams revise their design documents, flowcharts, wireframes, and project plans in response to the client's feedback.

**Lesson 10: Design Comps**
Follow these steps to utilize this activity for this project:
- This activity introduces the concept of a design comp and how they are used to create and present multiple design ideas.
- Explain that students will create design comps, using their wireframe, for the client website. Show students some sample design comps. You can use the example electronic files in the activity.
- Ask each team to make two or more design comps of the home page and a sample content page for each wireframe.
- After individuals have completed their comps, ask each team to select their two best home page comps and their two best content page comps to share with clients.

**Lesson 11: Design Project Review and Redesign**
Follow these steps to utilize this activity for this project:
- This activity introduces students to conducting a review and redesign cycle. In this project, students will conduct the review and redesign with the client.
- Remind students of what they learned earlier in the Working with clients activity and ask students to prepare a presentation for the client that includes some or all of the following:
    - How their two design comps address the client's goals, audience, and content requirements
    - Screenshots of the color, font, and page samples, accompanied by the reasons for the design, page layout, and navigation choices
    - Question-and-answer session in which the client gives feedback

- Ask the clients to give feedback to each team. At this point have each team ask their client to select the color and font samples and the visual layouts they prefer, indicating any changes they believe should be made. (If a person from outside the classroom is acting as the client, the instructor might mediate the question-and-answer sessions to help student teams take note of the requested changes.)
- Ask teams to revise the design comps based on client feedback and present their comps to the clients again. Ask students to get client approval for the finalized color and font samples and the page layout and navigation designs. Students should document these elements in their design documents before proceeding to production. Teams can begin to incorporate final graphics and content as parts of the comps are approved.

**Lesson 12: Creating Storyboards for Web Projects**
Use this activity to introduce the storyboard concept to tell the visual story of a web project, with sufficient detail to enable the production crew to understand what they will create. Have your students create a storyboard for their client website

**Lesson 13: Prototypes**

Follow these steps to utilize this activity for this project:

- Use this activity to introduce building a prototype to give a realistic preview of what all or part of a web project will look like and how it will work.
- Have each team present the prototype to their client for approval in preparation of the technical site build.
- Allow time for any necessary revisions based on client feedback.

Formative Assessments

Classwork, homework, observation of group cooperation and interaction participation in classroom discussion, and unit pre-test/survey.

Summative Assessments

Unit pre-test/survey, quizzes, benchmark assessment, computer based simulations

**Unit Name: Unit 3: Web Development and Deployment**     **Time Frame: 5-7 weeks (20-35 hours)**

**Author: Tracy A Meyer**

Subject: Business and Computers          Country: **US**

Course/Grade: Web Design II/ 9-12          State/Group: **NJ**

School: **Egg Harbor Twp High School**

## UNIT SUMMARY

In this unit, student teams use their client-approved design documents for the technical build of a website. Teams will learn about technical features to enhance the look and feel, consistency, and usability of their websites. They will also learn how to conduct technical and usability tests of their client websites and make any necessary revisions.

The main focus of this project is for students to develop reusable content, templates, and Cascading Style Sheets (CSS) based on the page layout described in their design documents and production storyboards. The emphasis is on collaboratively building websites for their clients by using web standards to complete their home pages and content pages. Each team will test and deploy its site, make any necessary revisions based on client review, and then redeploy the site. Teams will create a presentation for their clients explaining how the site accomplishes the client goals.

## UNIT RESOURCES

Adobe Project 3 Web Development & Deployment documents

  ➢ Getting started with Adobe Dreamweaver
  ➢ Introduction to HTML and CSS
  ➢ Web production collaboration and organization best practices
  ➢ Working with CSS
  ➢ Implementing reusable web design
  ➢ Editing images and graphics
  ➢ Inserting content in Dreamweaver
  ➢ Working with interactive media elements
  ➢ Creating forms and data tables
  ➢ Designing for multiple screens
  ➢ Technical testing in Dreamweaver
  ➢ Testing for usability
  ➢ Publishing with Dreamweaver
  ➢ Promoting a website
  ➢ Presenting design projects Adobe Dreamweaver CC

Adobe Photoshop CC

Adobe Illustrator CC

Syllabus

MS Project

**Internet Resource Links:**

http://edex.adobe.com/digital-design

https://edex.adobe.com/digital-careers

https://edex.adobe.com/resource/1a-c29/download/1f33f7b3-6db9-435f-9a4f-e40c565ecaae/

https://edex.adobe.com/resource/23191da5/

http://tv.adobe.com/

www.managementhelp.org/plan_dec/project/project.htm

http://dev.w3.org/html5/markup/elements.html#elements

www.adobe.com/devnet/dreamweaver/css.html

## STAGE ONE

### GOALS AND STANDARDS
This course is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and web planning, design and development technical skills using Adobe and other leading industry tools.

8.2.12.E.3  Use a programming language to solve problems or accomplish a task (e.g., robotic functions, website designs, applications, and games).
8.2.12.E.4  Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).
8.2.12.C.1  Explain how open source technologies follow the design process
8.1.12.A.3  Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.
8.1.12.D.1  Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

9.3.IT-WD.1  Analyze customer requirements to design and develop a Web or digital communication product.
9.3.IT-WD.2  Apply the design and development process to produce user-focused Web and digital communications solutions.
9.3.IT-WD.3  Write product specifications that define the scope of work aligned to customer requirements.
9.3.IT-WD.4  Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.5  Develop, administer and maintain Web applications.

9.3.IT-WD.6  Design, create and publish a digital communication product based on customer needs.

9.3.IT-WD.7  Evaluate the functionality of a digital communication product using industry accepted  techniques and metrics.

9.3.IT-WD.8  Implement quality assurance processes to deliver quality digital communication products and  services.

9.3.IT-WD.9  Perform maintenance and customer support functions for digital communication products.

9.3.IT-WD.10  Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications.

9.3.IT-WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications

## ENDURING UNDERSTANDING

*Students will understand…*

- How technical features can be used to enhance the look and feel, consistency,
- How to conduct technical and usability tests of their client websites and make any necessary revisions
- collaboratively building websites for their clients by using web standards
- Using design documents for the technical build of a website

## ESSENTIAL QUESTIONS

Why is it important to conduct technical and usability tests?
Why do you need to consider multiple screen use in your design?
What tactics can be employed to promote a website?

## KNOWLEDGE AND SKILLS

*Students will know..*

*Students will be able to:*

- Follow and execute a project plan
- Follow and execute a wireframe and prototype
- Follow up and follow through on roles and responsibilities
- Define and prioritize tasks
- Produce deliverables and meet deadlines
- Manage files and us file-name conventions
- Execute a review and redesign cycle
- Execute quality assurance tests
- Design for multiple screens
- Consider screen size and device requirements
- Incorporate layout and color consistently

- Design a quality assurance test
- Communicate ideas clearly
- Present a website to a group
- Take notes on critiquing
- Provide manful but not overly critical feedback
- Listen and interpret information and feedback
- Demonstrate the realization of redesign goals
- Conduct usability analysis
- Create quality assurance tests
- Optimize images
- Create buttons
- Resize images
- Rotate images
- Crop images
- Create navigation bars
- Create pop-up menus
- Understand the Dreamweaver workspace
- Set up a web project
- Set document properties
- Using the Insert panel
- Use the Files panel
- Use the Assets panel
- Insert images
- Insert text
- Create lists
- Create data tables
- Use CSS starter layouts
- Provide consistency and accessibility
- Provide universal navigation
- Integrate images, text, and multimedia
- Plan graphics and multimedia based on needs and audience
- Create web pages us web standards
- Design with CSS
- Organize pages with CSS
- Understand HTML
- Using basic HTML
- Create templates and reusable designs
- Adapt content for readability and emphasis
- Use CSS text styles
- Create, modify, and troubleshoot Cascading Style Sheets
- Create templates
- Develop a website for multiple screens
- Check files in and out
- Insert HTML5 video
- Check links
- Test in different operate systems and multiple browsers

- Publish web files

## PERFORMANCE TASKS

Lesson 1: Getting started with Adobe Dreamweaver: Index page
Lesson 3: Web production collaboration and organization best practices: File Management worksheet
Lesson 4: Working with CSS: students continue creating the style sheets for their client sites
Lesson 5: Implementing reusable web design: template for their content pages;
Lesson 6: Editing images and graphics: students to import each asset and graphic element, such as logos, buttons, and mottos, from Photoshop and/or Illustrator into the Dreamweaver Assets panel
Lesson 7: Inserting content in Dreamweaver: link text between web pages; apply previously created CSS styles to text and links
Lesson 8: Working with interactive media elements: students to add any necessary interactive media elements
Lesson 9: Creating forms and data tables: Students add these elements to their websites
Lesson 10: Designing for multiple screens: students to use either Fluid Grid Layouts or CSS Media Queries to prepare their client sites
Lesson 11: Technical testing in Dreamweaver: pair teams to test each other's sites
Lesson 12: Testing for usability: Usability worksheet
Lesson 13: Publishing with Dreamweaver: students to use a web browser to open their newly published sites, navigate to each page, and make sure all files were successfully published and function as they should
Lesson 14: Promoting a website: students research and implement specific tactics for optimizing their client website
Lesson 15: Presenting design projects Adobe Dreamweaver CC: students to create formal presentations and then present the site to their clients

## Performance Assessments

Student Product: Client Website

## Knowledge Assessment

Unit 3 Assessment: Web Development & Deployment

## Other Evidence

- Classroom discussion participation
- Teacher observation of classroom assignments/activities

## STAGE THREE

## LEARNING PLAN

Explain that in this project, students will use their design documents, storyboards, and prototypes from Project 2 to build, test, and publish their client websites using Adobe Dreamweaver. Introduce the goals of the project:
- Learn web development best practices

- Implement reusable designs
- Build a website with web standards
- Design for multiple screens
- Conduct technical and usability tests
- Publish, present, and promote a website

2. Remind students to continually refer to and assess their project plans throughout the site build to make sure they are on task, team members are aware of responsibilities, and deliverables are completed by the expected due dates.

**Lesson 1: Getting Started with Adobe Dreamweaver**
Follow these steps to utilize this activity for this project:
- In this activity, you will introduce students to the interface, terminology, and workspaces in Adobe Dreamweaver.
- During this activity, demonstrate the following:
  - How to work with the Dreamweaver workspace
  - Setting up a web project
- Ask students to open a new document, save it, define the site structure, and name the file index.html as the homepage for their project.

**Lesson 2: Introduction to HTML and CSS**
Use the presentation in this activity to review and discuss best practices for using HTML and CSS (including HTML5).

**Lesson 3: Web Production Collaboration and Organization Best Practices**
Follow these steps to utilize this activity for this project:
- This activity introduces best practices for efficient collaboration and organization, including file management, file organization, checking files in and out, and Subversion integration. Use this activity to teach or review how to:
  - Manage files and using file-naming conventions
  - Use the Files panel
  - Check files in and out.
- Ask students to propose ways they might organize their files in Dreamweaver and conventions that might help manage their files and folders, such as using names that help others recognize the contents of a folder or file. Decide as a class what conventions you will use and explain that they should employ these practices as they work on a team to build, test, and publish their client website.
- Give students time to get their file and folder structure set up and ready to begin website production.

**Lesson 4: Working with CSS**
Follow these steps to utilize this activity for this project:
- Use this activity to introduce your students to designing with CSS by teaching how to:
  - Organize pages with CSS
  - Create, modify, and troubleshoot Cascading Style Sheets
  - Create, edit, and customize CSS rules

- o Use CSS text styles
- o Use CSS starter layouts
- o Use Live View
- From the specifications in their design documents, ask students to build a home page using CSS. Explain that students should create the CSS layout and add the CSS rules and styles for their website as outlined in their design document.
- Have the students continue creating the style sheets for their client sites, applying what they have learned about creating and editing styles to implement the styles required by their design comps for the home page they created.

**Lesson 5: Implementing Reusable Web Design**
Follow these steps to utilize this activity for this project:
- This activity introduces the best practices for implementing reusable web design, including universal navigation and templates.
- Using their wireframes, storyboards, and prototypes, ask each team to decide what reusable components will appear on all pages of the site.
- Ask student teams to use Dreamweaver to create a template for their content pages, following their storyboards and wireframes. Their templates should incorporate the Cascading Style Sheets they created. Students may need to supplement their CSS with new styles or create new CSS for their content pages.
- Ask students to use their templates to create the rest of the pages for their client websites, inserting elements from the Assets panel as appropriate. Explain that by using a template, all team members can work on the pages while maintaining uniformity of site design.

**Lesson 6: Editing Images and Graphics**
Follow these steps to utilize this activity for this project:
- Use this activity to teach your students how to edit images and create graphic elements using Photoshop and Illustrator by discussing the difference between vector and bitmap images and demonstrating how to create vector artwork, how to adjust colors, and how to crop, rotate, resize, and transform images and graphics.
- Ask students to use Photoshop and/or Illustrator to create the common graphic elements from their final comps, such as creating a navigation bar in Photoshop. Remind them that the look of their graphics should coordinate with their site designs.
- Ask students to import each asset and graphic element, such as logos, buttons, and mottos, from Photoshop and/or Illustrator into the Dreamweaver Assets panel, including the library, for later use throughout the site. Explain they will use these graphics on their home and content page templates and encourage them to create as many reusable assets and graphics as possible and use them across their content pages.

**Lesson 7: Inserting Content in Dreamweaver**
Follow these steps to utilize this activity for this project:
- This activity introduces students to inserting content, including images, text, and links, in Dreamweaver.
- Ask students to insert images, text, and other assets they may have, including those from the Assets panel and library, in the appropriate places according their design decisions.
- Ask students to link text between web pages.

- Ask students to apply previously created CSS styles to text and links on their home and content pages.

**Lesson 8: Working with Interactive Media Elements**
Follow these steps to utilize this activity for this project:
- Use this activity to discuss and demonstrate the best practices for adding video, audio, and other interactive media elements to a web page, including Edge Animate, Flash, and HTML5 video.
- Ask students to add any necessary interactive media elements, according to their design documents.

**Lesson 9: Creating Forms and Data Tables**
Use this activity to teach your students the uses for and how to create forms and data tables. If client websites required either of these elements, give students time to add these elements to their websites.

**Using the skills they have learned ask students to continue to build their client websites and prepare an initial version for client review.**

**At this juncture it is recommended that students show their clients what they have built so far. Remind students of what they learned earlier in the Working with clients activity. One way of doing this, specially if you want students to learn specific technical techniques to prepare for the Adobe Certified Associate, Web Authoring exam, might be to have them build test pages or sample features to show their clients how the technical features would be implemented or as a learning exercise for students to complete. Students should make any changes to the website as required by the client review.**

**Lesson 10: Designing for Multiple Screens**
Follow these steps to utilize this activity for this project:
- In this activity you will introduce and discuss various devices for viewing web content and making design decisions based on the screens, specifically how to:
  - Consider screen size and device requirements
  - Use Fluid Grid Layouts
  - Use CSS Media Queries
  - Deploy web content to multiple screens.

- Ask your students to use either Fluid Grid Layouts or CSS Media Queries to prepare their client sites for at least one screen other than a desktop.

**Lesson 11: Technical Testing in Dreamweaver**
Follow these steps to utilize this activity for this project:
- This activity introduces the topic of quality assurance (QA) and how to conduct technical testing, including accessibility requirements, checking links, and previewing websites on different operating systems and in multiple browsers.
- You might want to pair teams to test each other's sites or have members of each team follow the test checklist on their own site. Make sure testers write down the bugs and problems they find so the team knows everything they need to fix.
- Allow teams time to revise their site based on their technical tests.

**Lesson 12: Testing for Usability**
Follow these steps to utilize this activity for this project:
- Use this activity to introduce the topic of usability testing and have students create a usability-test interview sheet for testers to fill out as they conduct usability tests.
- For usability testing, pair students from different teams. Ask one partner to test the other's site, following the usability-test worksheet. The other partner should observe the tester and document the tester's actions, looking for latent behavior. After the first tester finishes, have partners switch roles and perform the usability test for the other student's site.

**Lesson 13: Publishing with Dreamweaver**
Follow these steps to utilize this activity for this project:
- Use this activity to teach your students how to publish web files, including how to set up a remote server and use FTP servers.
- To connect this activity to real-world job skills discuss the common practice in web design and development firms of publishing to a testing server or internal development server prior to live publication.
- If students have access to a remote server, allow time for them to publish their sites. Ask students to use a web browser to open their newly published sites, navigate to each page, and make sure all files were successfully published and function as they should.

**Lesson 14: Promoting a Website**
Follow these steps to utilize this activity for this project:
- Use this activity to introduce Search Engine Optimization (SEO) and describe the primary components of a website that search engines crawl to find relevant search results, including meta tags.
- Have students research and implement specific tactics for optimizing their client website for search engines.

**Lesson 15: Presenting Design Projects Adobe Dreamweaver CC**
Follow these steps to utilize this activity for this project:
- This activity introduces your students to presenting their work to a variety of audiences, including clients. Use the tips in this activity to help your students learn how to communicate their ideas clearly.
- Ask students to create formal presentations and then present the site to their clients. Make sure at least one team member takes notes on the client's comments.
- Allow students time to redesign their sites based on client feedback. Ask students to finalize and re-publish their websites.

Formative Assessments

Classwork, homework, observation of group cooperation and interaction participation in classroom discussion, and unit pre-test/survey.

Summative Assessments

Unit pre-test/survey, quizzes, benchmark assessment, computer based simulations

| | |
|---|---|
| **Unit Name: Unit : Portfolios** | **Time Frame: 2.5-5 weeks (10-20 hours)** |

**Author: Tracy A Meyer**

Subject: Business and Computers          Country: **US**

Course/Grade: Web Design II/ 9-12          State/Group: **NJ**

School: **Egg Harbor Twp High School**

## UNIT SUMMARY

Portfolios communicate accomplishments, works in progress, or personal history. Individuals use portfolios to showcase their work when applying for a job, pitching to clients, or applying for higher education. Traditionally a portfolio is a book containing design samples. Portfolios can also be electronic, easily and quickly sharing a designer's work with anyone in the world.

In this project, students create the elements of a portfolio that features work they have completed and work to be completed, concentrating on a particular career area. As students create their portfolios, they plan, implement, and test their designs; students then reflect on and evaluate their work.

## UNIT RESOURCES

Adobe Project 4 Portfolios documents

- ➢ Planning a Portfolio
- ➢ Career Research
- ➢ Research and Writing for Design Projects
- ➢ Design Project Review and Redesign
- ➢ Presenting Design Projects

Adobe Photoshop CC

Adobe Illustrator CC

Syllabus

MS Project

## Internet Resource Links:

http://edex.adobe.com/digital-design

https://edex.adobe.com/digital-careers

https://edex.adobe.com/resource/1a-c29/download/1f33f7b3-6db9-435f-9a4f-e40c565ecaae/

https://edex.adobe.com/resource/23191da5/

http://tv.adobe.com/

www.managementhelp.org/plan_dec/project/project.htm

http://dev.w3.org/html5/markup/elements.html#elements

www.adobe.com/devnet/dreamweaver/css.html

## STAGE ONE

### GOALS AND STANDARDS

This course is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and web planning, design and development technical skills using Adobe and other leading industry tools.

8.2.12.E.3   Use a programming language to solve problems or accomplish a task (e.g., robotic functions, website designs, applications, and games).
8.2.12.E.4   Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).
8.2.12.C.1   Explain how open source technologies follow the design process
8.1.12.A.3   Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.
8.1.12.D.1   Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.


9.3.IT-WD.1  Analyze customer requirements to design and develop a Web or digital communication product.
9.3.IT-WD.2  Apply the design and development process to produce user-focused Web and digital communications solutions.
9.3.IT-WD.3  Write product specifications that define the scope of work aligned to customer requirements.
9.3.IT-WD.4  Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.5  Develop, administer and maintain Web applications.
9.3.IT-WD.6  Design, create and publish a digital communication product based
on customer needs.
9.3.IT-WD.7  Evaluate the functionality of a digital communication product using industry
accepted  techniques and metrics.
9.3.IT-WD.8  Implement quality assurance processes to deliver quality digital communication
products and  services.
9.3.IT-WD.9  Perform maintenance and customer support functions for digital communication
products.
9.3.IT-WD.10  Comply with intellectual property laws, copyright laws and ethical practices when
creating  Web/digital communications.
9.3.IT-WD.10 Comply with intellectual property laws, copyright laws and ethical practices when

creating  Web/digital communications


**ENDURING UNDERSTANDING**

*Students will understand…*

- Importance of a digital portfolio
- How to research digital careers
- Design project review and redesign
- Research and writing for design projects

**ESSENTIAL QUESTIONS**
Why is it important to conduct technical and usability tests?
Why do you need to consider multiple screen use in your design?
What tactics can be employed to promote a website?

**KNOWLEDGE AND SKILLS**

*Students will know..*

*Students will be able to:*

- Planning and creating a portfolio
- Describing the goals and uses of a portfolio
- Identifying the purpose and audience for a portfolio
- Organizing and managing content
- Creating flowcharts
- Publish web files
- Selecting appropriate content
- Designing for a specific audience and purpose
- Providing consistency and accessibility
- Providing universal navigation
- Investigating and researching career areas
- Communicating information to particular audiences
- Defining the goals and uses of a portfolio
- Soliciting and providing feedback
- Writing and editing content
- Selecting the important information
- Researching relevant job skills and career opportunities
- Building a portfolio
- Formatting and adding portfolio content
- Updating a portfolio
- Testing a portfolio


**STAGE TWO**


**PERFORMANCE TASKS**

Activity 1: Planning a Portfolio
Activity 2: Career Research
Activity 3: Research and Writing for Design Projects: students to begin to add content to their portfolios; assessing content worksheet
Activity 4: Design Project Review and Redesign: students to build their portfolios; Design project review and redesign worksheet
Activity 5: Presenting Design Projects: portfolio presentations

## Performance Assessments

Student Product: Portfolio

## Knowledge Assessment

Unit 3 Assessment: Portfolio: Key terms and concepts

## Other Evidence

- Classroom discussion participation
- Teacher observation of classroom assignments/activities

## STAGE THREE

## LEARNING PLAN

Discuss the goals of this project:
- Understand the goals and uses of portfolios.
- Research career areas in design and/or video production.
- Plan and create a flowchart for a portfolio.
- Select and organize content for a portfolio.
- Construct, review, redesign, and finalize a portfolio.
- Explain they will create two portfolios. One at the midway point of the course or term, and the final version at the end of the course or term.

**Lesson 1: Planning a Portfolio**
This activity introduces the concept of a portfolio, its purpose, and its audience. It also explains how to select and organize content using flowcharts and the many different formats for portfolios. It is recommended when teaching this activity to gather some examples of portfolios and show the class a variety of print and online portfolios and discuss their purpose and audience.

**Lesson 2: Career Research**
Use this activity to teach students how to research career areas and job titles in their desired career area. They will create a career research document and select the focus for their portfolios based on their research.

**Lesson 3: Research and Writing for Design Projects**
Follow these steps to utilize this activity for this project:
- In this activity you will introduce your students to how to research and write content for theme, purpose, and audience, specifically the following:

- o Writing, editing, organizing, and managing content
- o Communicating information to particular audiences
- o Accessing, evaluating, and, synthesizing content from multiple sources
- o Understanding the journalistic code of ethics.

When they have selected their content, ask your students to write some or all of the following for their portfolios:

- An introduction or mission statement that focuses on the goals of the portfolio.
- A learning plan.
- Narratives for each project, including how it showcases their skills. For example, one way to integrate a
- client project into a web portfolio is to create a summary web page in the portfolio and link it to the client site, instead of adding a client site link to the main navigation. This summary page should contain a description of the client site, its goals, and its audience.
- Titles for each project to include in the opening of their portfolio.

### Lesson 4: Design Project Review and Redesign

Use this activity to teach your students how to engage in a formal review and redesign process to help them improve and expand their design skills. Considering the feedback, allow students time to implement any changes to their portfolios based on the results of the review.

### Lesson 5: Presenting Design Projects

Follow these steps to utilize this activity for this project:

- Use this activity to teach your students how to present their work to an audience.
- For the mid-point portfolio it is recommend that they include the following in their presentation:
  - o Their career goals.
  - o The first iterations of their portfolios to show how they improved or changed their design or content and explain why they chose to make those changes.
  - o The types of jobs they are seeking, using specific examples from their research.
  - o The skills, qualifications, training, and so on necessary for a job in their career area.

- For the final portfolio it is recommended that students also include the following in their presentation:
  - o How they meet or plan to meet the requirements and skill set of the jobs they are seeking.
  - o What they have learned by making a portfolio and throughout the course.
  - o What they feel they still need to learn to realize their career goals.
  - o How they improved or changed their content or design and how their changes grew out of their revised purpose and target audience.

Formative Assessments

Classwork, homework, observation of group cooperation and interaction participation in classroom discussion, and unit pre-test/survey.

Summative Assessments

Unit pre-test/survey, quizzes, benchmark assessment, computer based simulations

**Unit Name: Unit 5: Student Based Collaborative Projects  Time Frame: Ongoing**

**Author: Tracy A Meyer**

Subject: Business and Computers                Country: **US**

Course/Grade: Web Design II/ 9-12             State/Group: **NJ**

School: **Egg Harbor Twp High School**

**UNIT SUMMARY**

In this project, Web Design II students will work collaboratively with students across the CTE programs to create individual digital portfolios of work produced in graphic arts, business, fashion, etc.  As the Web Design students create the portfolios, they will work collaboratively with the individual students on a reciprocal basis; Web Design students will create portfolios for tangible or informational projects and CTE course recipients will produce logos or other art, product, or information requested. Collaboration by students across the CTE courses will drive innovation by diversification across the CTE subject area.

Digital Portfolios communicate accomplishments, works in progress, or personal history. Individuals use portfolios to showcase their work when applying for a job, pitching to clients, or applying for higher education. Traditionally a portfolio is a book containing design samples. Portfolios can also be electronic, easily and quickly sharing a designer's work with anyone in the world.

**UNIT RESOURCES**

CTE Course students and faculty participation

CTE Resources

Cannon Rebel EOS

Adobe Photoshop CC

Adobe Illustrator CC

Syllabus

MS Project

**Internet Resource Links:**

http://edex.adobe.com/digital-design

https://edex.adobe.com/digital-careers

**GOALS AND STANDARDS**

This course is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and web planning, design and development technical skills using Adobe and other leading industry tools.

8.2.12.E.3  Use a programming language to solve problems or accomplish a task (e.g., robotic functions, website designs, applications, and games).

8.2.12.E.4  Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).

8.2.12.C.1  Explain how open source technologies follow the design process

8.1.12.A.3  Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.

8.1.12.D.1  Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

9.3.IT-WD.1  Analyze customer requirements to design and develop a Web or digital communication product.

9.3.IT-WD.2  Apply the design and development process to produce user-focused Web and digital communications solutions.

9.3.IT-WD.3  Write product specifications that define the scope of work aligned to customer requirements.

9.3.IT-WD.4  Demonstrate the effective use of tools for digital communication production, development and project management.

9.3.IT-WD.5  Develop, administer and maintain Web applications.

9.3.IT-WD.6  Design, create and publish a digital communication product based on customer needs.

9.3.IT-WD.7  Evaluate the functionality of a digital communication product using industry accepted  techniques and metrics.

9.3.IT-WD.8  Implement quality assurance processes to deliver quality digital communication products and  services.

9.3.IT-WD.9  Perform maintenance and customer support functions for digital communication products.

9.3.IT-WD.10  Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications.

9.3.IT-WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating  Web/digital communications

### ENDURING UNDERSTANDING

*Students will understand…*

- Importance of a digital portfolio
- Importance of Collaboration
- How diversity leads to innovation

### ESSENTIAL QUESTIONS
How does diversity inspire innovation?

Why is it important to work collaboratively to achieve mutual or complimentary goals?

## KNOWLEDGE AND SKILLS

*Students will know..*

*Students will be able to:*

- Planning and creating a portfolio
- Describing the goals and uses of a portfolio
- Identifying the purpose and audience for a portfolio
- Organizing and managing content
- Selecting appropriate content
- Designing for a specific audience and purpose
- Providing consistency and accessibility
- Communicating information to particular audiences
- Defining the goals and uses of a portfolio
- Soliciting and providing feedback
- Writing and editing content
- Selecting the important information
- Building a portfolio
- Formatting and adding portfolio content
- Showcase creative style
- Finalize design with a client
- Ask questions to focus and clarify
- Listen and interpret feedback
- Understand and address client design issues
- Synthesize information from design review

## STAGE TWO

## PERFORMANCE TASKS

- ➢ Work with CTE Faculty to determine project needs
- ➢ Collaborate with point of contact (student peer) to determine project timeline, resources needed, and objective
- ➢ Present CTE faculty with project information for approval
- ➢ Obtain CTE supervisor approval
- ➢ Work Collaboratively draft project
- ➢ Redesign as needed
- ➢ Present final project to corresponding CTE faculty

## Performance Assessments

Student Product Presentation

## Other Evidence

- Classroom discussion participation
- Teacher observation of classroom assignments/activities
- Collaboration Meeting minutes
- Project log

## STAGE THREE

### LEARNING PLAN

Formative Assessments

Classwork, homework, observation of group cooperation and interaction participation in classroom discussion.

Summative Assessments

Computer based simulations, project drafts

# Curriculum Resources - Differentiated Instruction

## Special Education Interventions in General Education

Visual Supports
Extended time to complete tests and assignments
Graphic Organizers
Mnemonic tricks to improve memory
Study guides
Use agenda book for assignments
Provide a posted daily schedule
Use of classroom behavior management system
Use prompts and model directions
Use task analysis to break down activities and lessons into each individual step needed to complete the task
Use concrete examples to teach concepts
Have student repeat/rephrase written directions
Heterogeneous grouping

*Resources:*

Do to Learn:
http://www.do2learn.com/

Sen Teacher:
http://www.senteacher.org/

Intervention Central:
http://www.interventioncentral.org/

Learning Ally:
https://www.learningally.org/

## English Language Learners Interventions in Regular Education
*Resources:*

FABRIC - Learning Paradigm for ELLs (NJDOE)
www.nj.gov/education/bilingual/pd/**fabric/fabric**.pdf

Guide to Teaching ELL Students
http://www.colorincolorado.org/new-teaching-ells

Edutopia - Supporting English Language Learners
https://www.edutopia.org/blog/strategies-and-resources-supporting-ell-todd-finley

Reading Rockets
http://www.readingrockets.org/reading-topics/english-language-learners

**Gifted and Talented Interventions in Regular Education**
*Resources:*

Who are Gifted and Talented Students
http://www.npr.org/sections/ed/2015/09/28/443193523/who-are-the-gifted-and-talented-and-what-do-they-need

Hoagies Gifted Education Page
http://www.hoagiesgifted.org/programs.htm

**21st Century Learning**
*Resources:*

Partnership for 21st Century Learning
http://www.p21.org/

Career Ready Practices (NJDOE)
http://www.nj.gov/education/cte/hl/CRP.pdf