

# *Wallenpaupack Area School District*

**COURSE:** Multimedia Design and Applications

**GRADE LEVEL:** 11-12

**LENGTH OF COURSE:** 1 semester

**TEXT:** A Guide To Web Development Using MACROMEDIA DREAMWEAVER MX with Fireworks MX and Flash MX

**PUBLISHER:** Lawrenceville Press

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**COURSE DESCRIPTION:**

This course includes an in depth examination and application of modern multimedia design theories and practices. This course also provides adequate tutorials and labs including moderate applications of advanced skills in the Macromedia MX suite of software including Dreamweaver, Flash, and Fireworks. Graphic editing using various industry standard software is also covered.

**CURRICULUM WRITING TEAM:**

Eric E. Greenberger

**DATE OF REVISION:**

April 2005

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Overview of Course,  
Introduction to curriculum,  
Introduction to basic  
networking

**PA Standards:** 3.7.10.A  
3.7.10.C  
3.7.10.E

<b>Topics:</b> Computer Lab Safety Class Conduct in a Lab Environment Definition of Network Simple Network Topology Basic Software Packages Network Architecture Common Elements to all Networks Fundamental application and management of Networks Certifications available to networking professionals	<b>Skills:</b> Identify the characteristics of networked computers relative to standalone systems Identify the elements of a network Describe several specific uses for a network Identify certifications available to networking professionals
<b>Activities:</b> Class Discussion Multimedia Curricula Handouts	<b>Performance Assessments:</b> Question and Answer Dialog Written Examination

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11-12

**Unit:** Multimedia Design and Network Distribution

**PA Standards:** 3.7.10.E  
3.7.12.E  
3.7.10.E

<b>Topics:</b>	<b>Skills:</b>
The World Wide Web Browsers Media Displays Designing Multimedia Presentations for specific media displays Careers in Multimedia	Identify the significant and relevant aspects of the internet Use and apply specific browsers Work with various media displays for specific applications Describe definite aspects of careers built on multimedia applications
<b>Activities:</b>	<b>Performance Assessments:</b>
Teacher Lead Demonstration Class discussion Interactive Multimedia Curricula	Class Session Questioning Instructor Designed Examination

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11-12

**Unit:** Networking Standards and the OSI Model

**PA Standards:** 3.7.10.E  
3.7.12.E  
3.7.10.E

<b>Topics:</b> Multimedia standards and organizations Defined applications of multimedia Various facets of media conducive to multimedia presentations Applications of audio, video, and interactive Media	<b>Skills:</b> Identify the organizations that set standards for multimedia Identify applications of multimedia Demonstrate components essential to multimedia presentations Apply interactive media to specific scenarios
<b>Activities:</b> Teacher Lead Demonstration Class discussion Interactive Multimedia Curricula	<b>Performance Assessments:</b> Class Session Questioning Instructor Designed Examination

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Networking Protocols

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.C  
3.7.12.B

<b>Topics:</b>	<b>Skills:</b>
Multimedia Browsers Uniform Resource Locators File organization and File types HTML concepts	Identify the characteristics of various Multimedia Browsers Manage and demonstrate use of Uniform Resource Locators Organize and manage appropriate file types Demonstrate compound HTML concepts
<b>Activities:</b>	<b>Performance Assessments:</b>
Instructor Led Demonstration Class Discussion Hands On Lab Exercises	Written Examination Lab Exercise Reports

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Multimedia Resources

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.C  
3.7.12.A

<b>Topics:</b> Acquiring resources Citing References Searching for multimedia components Multimedia related protocols	<b>Skills:</b> Acquire resources necessary for various multimedia presentations Cite references used for multimedia presentations Identify and apply various protocols related to assorted multimedia
<b>Activities:</b> Teacher Led Demonstration Exhibition of Products and Application Practice Lab Exercise	<b>Performance Assessments:</b> Class Discussion Written Examination Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** HTML

**PA Standards:** 3.7.10.A  
3.7.10.C  
3.7.12.B

<b>Topics:</b>	<b>Skills:</b>
HTML core tags Structure and document organization HTML Components Code application Framesets Hyperlinks and Anchors	Identify essential HTML document components Apply HTML code to various applications Create effective HTML files Make use of various tags and components
<b>Activities:</b>	<b>Performance Assessments:</b>
Instructor Led Demonstration Class Discussion Hands On Lab Exercises	Written Examination Lab Exercise Reports

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Dreamweaver

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.C  
3.7.12.A

<b>Topics:</b> Defining an application in Dreamweaver Managing files Creating essential components Creating a Table Using a Table to arrange content Document Views Editing a Multimedia Document Dreamweaver commands and controls	<b>Skills:</b> Explain concepts related to the Dreamweaver environment Create static multimedia presentations in Dreamweaver Use Dreamweaver to create adequate user interfaces
<b>Activities:</b> Teacher Led Demonstration Exhibition of Products and Application Practice Lab Exercise	<b>Performance Assessments:</b> Class Discussion Written Examination Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications  
**Unit:** Multimedia Development

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.E  
3.7.12.A

<b>Topics:</b> Concepts of Design Organizing content Maintaining consistency Establishing media libraries Copyright Information	<b>Skills:</b> Describe basic and hybrid LAN technologies Explain operating characteristics of various topologies Describe a variety of Network topologies Explain the structure and function of the Ethernet Transport System Explain the structure and function of the Token Ring Transport System
<b>Activities:</b> Teacher Led Demonstration Exhibition of Products and Application Practice Lab Exercise	<b>Performance Assessments:</b> Class Discussion Written Examination Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Multimedia document organization

**PA Standards:** 3.7.10.E  
3.7.12.E

<b>Topics:</b> Document Layout Multimedia document components Organization of documents and file components File compression formats Copyright / Trademarks	<b>Skills:</b> Define layout options and distribute components effectively Identify components essential to multimedia presentations Organize documents and components effectively Demonstrate various file compression formats Identify legal issues pertaining to copyrights and trademarks
<b>Activities:</b> Teacher Led Demonstration Lab Exercises	<b>Performance Assessments:</b> Written Examination Student Lab Exercise and Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Graphic Editing

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.E  
3.7.12.A

<b>Topics:</b>	<b>Skills:</b>
Graphic File Formats Graphic Hyperlinks Image Mapping Using spacers for layout Introduction to Fireworks	Understand the differences between various graphic file formats Create graphic hyperlinks using Dreamweaver Use spacers for appropriate document layout Explain basic concepts of the Fireworks environment
<b>Activities:</b>	<b>Performance Assessments:</b>
Teacher Led Demonstration Exhibition of Products and Application Practice Lab Exercise	Class Discussion Written Examination Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Graphic Editing

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.C  
3.7.10.D  
3.7.10.E  
3.7.12.C  
3.7.12.D  
3.7.12.E

<b>Topics:</b>	<b>Skills:</b>
Drawing Objects in Fireworks Adding Text in Fireworks Aligning Objects Modifying a canvas	Draw objects using Fireworks tools Add text to graphic images in Fireworks Align graphic objects in Fireworks files Modify the Fireworks canvas to accommodate current projects
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Graphic Editing

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.C  
3.7.10.D  
3.7.12.C  
3.7.12.D

<b>Topics:</b> Optimizing and Exporting a Fireworks document Creating graphical button symbols Assigning button rollover effects Exporting graphic images from Fireworks Preparing Fireworks graphics for use elsewhere Changing Fireworks file behaviors	<b>Skills:</b> Optimize a Fireworks document for clarity and file size Create graphical button symbols Export graphic images into other applications Alter Fireworks file behaviors for various applications
<b>Activities:</b> Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	<b>Performance Assessments:</b> Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Graphic Editing

**PA Standards:** 3.7.10.C  
3.7.10.D  
3.7.12.C  
3.7.12.D

<p><b>Topics:</b></p> <ul style="list-style-type: none"> <li>Editing an image in Fireworks from Dreamweaver</li> <li>Cropping images in Fireworks</li> <li>Text use in graphical applications</li> <li>Design considerations</li> <li>Paragraph alignment in graphical applications</li> <li>Graphics for use in a Cascading Style Sheet</li> <li>Creating and applying a CSS Class</li> </ul>	<p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Edit an image in Fireworks for appropriate use</li> <li>Crop images for image size constraints</li> <li>Describe essential considerations for design</li> <li>Utilize alignment tools for text alignment in graphical applications</li> <li>Create and apply a CSS class</li> </ul>
<p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Handout Supplement</li> <li>Interactive Media</li> <li>Teacher Led Demonstration</li> <li>Lab Exercise and Application</li> </ul>	<p><b>Performance Assessments:</b></p> <ul style="list-style-type: none"> <li>Examination</li> <li>Class Discussion</li> <li>Lab Exercise Report</li> </ul>

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Integration (Dreamweaver / Fireworks)

**PA Standards:** 3.7.10.C  
3.7.10.D  
3.7.12.D

<b>Topics:</b>	<b>Skills:</b>
<ul style="list-style-type: none"> <li>Working with CSS styles</li> <li>Emphasized CSS components</li> <li>Formatting Headings</li> <li>Using Block quotes</li> <li>Using lists</li> <li>Integrating content from other resources</li> </ul>	<ul style="list-style-type: none"> <li>Apply Discuss details of CSS styles to various multimedia projects</li> <li>Practice skills required to produce productive CSS components</li> <li>Use lists to produce effective multimedia presentations</li> <li>Integrate content from various applications</li> </ul>
<b>Activities:</b>	<b>Performance Assessments:</b>
<ul style="list-style-type: none"> <li>Handout Supplement</li> <li>Interactive Media</li> <li>Teacher Led Demonstration</li> <li>Lab Exercise and Application</li> </ul>	<ul style="list-style-type: none"> <li>Examination</li> <li>Class Discussion</li> <li>Lab Exercise Report</li> </ul>

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Graphic Editing

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.C  
3.7.10.D  
3.7.12.A  
3.7.12.D  
3.7.12.E

<b>Topics:</b>	<b>Skills:</b>
Introduction to Photoshop Photoshop Tools The Photoshop interface Photoshop effects and filters	Describe some similarities and differences between Fireworks and Photoshop Navigate the Photoshop environment Apply several Photoshop filters and effects to multimedia graphics
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.C  
3.7.10.E  
3.7.12.A  
3.7.12.E

<b>Topics:</b>	<b>Skills:</b>
History of Flash programming Introduction to XML (action scripting) The role of Flash MX as a multimedia tool Launching a typical Flash project The Flash MX user interface	Identify the evolution of the Flash program Navigate the Flash MX user interface Open and create a Flash movie Insert necessary components into a Flash movie Save and Publish a Flash movie
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.E  
3.7.12.A  
3.7.12.E

<b>Topics:</b>	<b>Skills:</b>
Flash Authoring Tools Action Script Syntax Establishing requirements Flash Drawing Tools Introduction to Vector Graphics Flash View Tools	Identify and use basic Flash authoring tools Identify standard action script commands Establish requirements necessary for specific Flash movies Describe the concepts related to vector graphics Use View tools to preview Flash movies
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Flash

**PA Standards:** 3.7.10.D  
3.7.10.E  
3.7.12.D  
3.7.12.E

<p><b>Topics:</b></p> <ul style="list-style-type: none"> <li>Using the Timeline to work with animations</li> <li>Timeline header</li> <li>Frames and Keyframes</li> <li>Timeline Options</li> <li>Basic Image editing in Flash</li> <li>Grouping Content</li> <li>Breaking Content</li> <li>Editing Strokes</li> <li>Using Flash Panels</li> </ul>	<p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Create standard animations using frame by frame and tweens</li> <li>Use the timeline header to plan and adjust presentations</li> <li>Edit images using Flash image editing tools</li> <li>Manipulate Flash content for specific files</li> <li>View and utilize appropriate panels for specific tasks</li> </ul>
<p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Handout Supplement</li> <li>Interactive Media</li> <li>Teacher Led Demonstration</li> <li>Lab Exercise and Application</li> </ul>	<p><b>Performance Assessments:</b></p> <ul style="list-style-type: none"> <li>Examination</li> <li>Class Discussion</li> <li>Lab Exercise Report</li> </ul>

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<b>Topics:</b>	<b>Skills:</b>
Animation Basics Frame management Frame Rate Using Symbols in Animations Graphic Symbols Creating Button Symbols Movie Clip Symbols Using Symbols and Instances Modifying a Symbol Instance	Describe the elements of standard animations in Flash Manage timeline components and vary the frame rate Create and incorporate various Flash Symbols into Flash movies
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<b>Topics:</b> Importing Vector and Bitmap images into Flash movies Using Audio files in Flash movies Integrating video with Flash files	<b>Skills:</b> Incorporate various image file types into Flash movies Use sound loops and effects to enhance Flash movies Edit various audio file types in the Flash user interface Integrate various video file types in Flash
<b>Activities:</b> Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	<b>Performance Assessments:</b> Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<b>Topics:</b>	<b>Skills:</b>
Advanced Animation Techniques Multi-scene movies Multi-Level scenes Flash Preloaders Testing through a Bandwidth Profiler Animating buttons Morphing buttons Rolling Text Boxes Simulating Transitions Designing Interfaces	Create complex Flash movies Design and implement movie Preloaders Create advanced movie clips and complex buttons Develop animation effects Design and customize interfaces
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Flash

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<p><b>Topics:</b></p> <ul style="list-style-type: none"> <li>Understanding ActionScript</li> <li>The Dot Notation Syntax</li> <li>Specific Commands</li> <li>The ActionScript Environment</li> <li>Find and Replace commands</li> <li>Customizing ActionScript with preferences</li> <li>Using Auto Format and Auto Complete</li> <li>Code Hinting and Completion</li> <li>Techniques and Uses</li> <li>Controlling the Browser</li> <li>Script Structures and Commands</li> <li>Troubleshooting and debugging</li> </ul>	<p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Understand ActionScript</li> <li>Work with the MX scripting environment</li> <li>Deploy ActionScript techniques</li> <li>Work with ActionScript structures and commands</li> <li>Troubleshoot and debug ActionScript syntax</li> </ul>
<p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Handout Supplement</li> <li>Interactive Media</li> <li>Teacher Led Demonstration</li> <li>Lab Exercise and Application</li> </ul>	<p><b>Performance Assessments:</b></p> <ul style="list-style-type: none"> <li>Examination</li> <li>Class Discussion</li> <li>Lab Exercise Report</li> </ul>

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Grade Level:** 11 & 12

**Unit:** Flash

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<b>Topics:</b>	<b>Skills:</b>
<ul style="list-style-type: none"> <li>Understanding Flash MX components</li> <li>Working with components in Flash movies</li> <li>Scroll Bar component</li> <li>Radio Button component</li> <li>List Box</li> <li>Combo Box</li> <li>Scroll Pane</li> <li>Activating components through ActionScript</li> <li>Installing additional components in Flash MX</li> </ul>	<ul style="list-style-type: none"> <li>Identify Flash MX components</li> <li>Work with Flash MX components</li> <li>Activate Flash MX components with ActionScript</li> <li>Install additional components in Flash MX</li> </ul>
<b>Activities:</b>	<b>Performance Assessments:</b>
<ul style="list-style-type: none"> <li>Handout Supplement</li> <li>Interactive Media</li> <li>Teacher Led Demonstration</li> <li>Lab Exercise and Application</li> </ul>	<ul style="list-style-type: none"> <li>Examination</li> <li>Class Discussion</li> <li>Lab Exercise Report</li> </ul>

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<b>Topics:</b>	<b>Skills:</b>
XML Rules and Syntax CGI Rules and Syntax Integrating JavaScript and Flash MX	Identify languages that work with Flash MX Work with Extensive markup Language Work with Common Gateway Interface Work with JavaScript
<b>Activities:</b>	<b>Performance Assessments:</b>
Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	Examination Class Discussion Lab Exercise Report

# Wallenpaupack Area School District

**Course:** Multimedia Design and Applications

**Unit:** Flash

**Grade Level:** 11 & 12

**PA Standards:** 3.7.10.A  
3.7.10.B  
3.7.10.D  
3.7.12.A  
3.7.12.C

<b>Topics:</b> Optimizing for printing and publishing Optimizing images for publishing Optimizing video for publishing Optimizing Audio Quick Start Templates	<b>Skills:</b> Optimize Flash MX movies for publishing Optimize work with Quick Start templates Publish in different file formats
<b>Activities:</b> Handout Supplement Interactive Media Teacher Led Demonstration Lab Exercise and Application	<b>Performance Assessments:</b> Examination Class Discussion Lab Exercise Report