

The University of Toledo  
College of Education

## **Introduction to Multimedia and Web Design**

ETPT 5210/7210

Course Syllabus – Fall Semester 2008

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### **General Course Description:**

This course is designed to provide teachers/professionals with the knowledge and skills necessary to create Web pages using Hypertext Markup language (HTML) or Macromedia's Dreamweaver authoring software. The course is specifically designed to develop combined visual layout tools with text-based HTML editing features for the creation, management and maintenance of Web sites. On the large scale, the purpose of the course is to teach teachers to use telecommunications technology for instructional purposes. Topics covered include basic Internet concepts, creating Web pages, working with graphics, creating links, elements of page design, adding user interactivity, managing your site, using libraries, using templates, creating frames, creating layers, using style sheets, using find and replace, creating forms, animating with timelines and extending Dreamweaver to illustrate and enhance Web page design. In addition, the course will include instruction in the use of Internet services and the fundamentals of Web page design and Web site development.

In addition, this course is also designed to provide educators with the knowledge and skills necessary to create Podcasting/Vodcasting to empower educators with the emerging new tools to enhance the teaching and the learning process. The course is designed to cover Podcasting Essentials: Creating, Editing, Publishing and Subscribing. Podcasts are the new phenomenon of professional, educational and homemade audio broadcasts available on the Internet. Unlike traditional radio shows with set schedules, Podcasts can be listened to anytime with free, easy to access software tools. Anyone with a web browser and QuickTime or Apple iTunes can

download and listen to Podcasts. Podcasts can be audio or video recordings mixed together with music to create your own rich and professional sounding experience.

It is not coincidental that Ohio has made a major commitment to installing telecommunications technology in every classroom in the state and ETPT 5/7120 evolving into an investigation in the use of telecommunications technology for teaching and learning.

### **Course objectives:**

After successful completion of this course, the students should be able to:

- ✚ Format text in different sizes, colors, and styles
- ✚ Use HTML styles to speed up your text-formatting process
- ✚ Import and clean up text from text files, Word documents, and spreadsheets
- ✚ Insert graphics and control their appearance
- ✚ Create and manage internal and external links throughout your site
- ✚ Learn how to make changes directly within the HTML code
- ✚ Place text and graphics with tables to achieve more control over the layout
- ✚ Make use of image rollovers and other interactive elements
- ✚ Use the Site window to manage your files and folders
- ✚ Develop library items in order to use the same elements quickly and repeatedly
- ✚ Create templates to set the look and feel of a site
- ✚ Create frames and target links to develop a clear navigation
- ✚ Make your pages accessible and redirect visitors according to the browser version they are using
- ✚ Incorporate different types of files such as Flash objects and Flash Text
- ✚ Insert a background graphic or change the background colors of your pages
- ✚ Specify text attributes using cascading style sheets to gain control over the appearance of text
- ✚ Use the extensive Find and Replace feature to make changes in single documents or throughout the entire site
- ✚ Create forms to collect information from visitors
- ✚ Create animations and control the placement of objectives with layers
- ✚ Test and run reports on your Web pages to verify their compatibility with multiple types of browsers
- ✚ Customize and extend Dreamweaver's capabilities to suit your needs
- ✚ Use GarageBand to record live audio performance, classroom lecture or classroom discussion, and to edit and mix audio files
- ✚ iMovie to record live video performance, lecture or classroom discussion, and to edit and mix final video file
- ✚ iTunes to compress audio file
- ✚ Vodcaster to create a channel, create xml, copy and publish podcasts and vodcasts to a specified URL
- ✚ iTunes to subscribe to a podcast or vodcast, to listen to a podcast or view a vodcast and to move podcast to an iPod

- ✚ Web Browser: Safari, Firefox, etc., to view RSS feeds related to published podcasts and vodcasts and to view page pages on content management systems that contain URLs to podcasts and vodcasts

**ISTE STANDARDS:**

- 1.1.1 operate a multimedia computer system with related peripheral devices to successfully install and use a variety of software package.
- 1.1.2 use terminology related to computers and technology appropriately in written and oral communications.
- 1.1.3 describe and implement basic troubleshooting techniques for multimedia computer systems with related peripheral devices.
- 1.1.4 use imaging devices such as scanners, digital cameras, and/or video cameras with computer systems and software.
- 1.2.1 use productivity tools for word processing, database management, and spreadsheet applications.
- 1.2.2 apply productivity tools for creating multimedia presentations.
- 1.2.3 use computer-based technologies including telecommunications to access information and enhance personal and professional productivity.
- 1.2.4 use computers to support problem solving, data collection, information management, communications, presentations, and decision-making.
- 1.2.5 demonstrate awareness of resources for adaptive assistive devices for student with special needs.
- 1.2.6 demonstrate knowledge of equity, ethics, legal, and human issues concerning use of computers and technology.
- 1.3.1 explore, evaluate, and use computer/technology resources including applications, tools, educational software and associated documentation.
- 1.3.5 practice responsible, ethical and legal use of technology, information, and software resources.
- 2.2.1 use advanced features of word processing, desktop publishing, graphics programs and utilities to develop professional products.
- 2.2.5 identify, select, and integrate video and digital images in varying formats for use in presentations, publications and/or other products.
- 2.2.7 use features of applications that integrate word processing, database, spreadsheet, communication, and other tools.
- 2.3.1 access and use telecommunications tools and resources for information sharing, remote information access and retrieval, and multimedia/hypermedia publishing.
- 2.3.2 use electronic mail and Web browser applications for communications and for research to support instruction.
- 2.3.3 use automated online search tools and intelligent agents to identify and index desired information resources.

- 2.4.2 develop simple hypermedia and multimedia products that apply basic instructional design principles.
- 2.4.4 participate in collaborative projects and team activities.
- 2.4.7 use a computer projection device to support and deliver oral presentations.
- 2.4.8 design and publish simple online documents that present information and include links to critical resources.
- 3.2.6 identify strategies for troubleshooting and maintaining various hardware and software configurations.
- 4.2.1 use and apply more than one computer authoring and/or programming environment.
- 4.2.2 describe the characteristics and uses of current authoring environments and evaluate their appropriateness for classroom applications.
- 4.2.3 describe the characteristics and uses of current programming and scripting environments and evaluate their appropriateness for classroom use.
- 4.2.5 describe and practice strategies for testing and evaluating instructional products designed.
- 4.3.1 identify and use information access and telecommunication tools to support research and instruction throughout the curriculum.
- 4.3.3 create multimedia presentations using advanced features of a presentation tool and deliver them using computer projection systems.
- 4.3.4 install, configure, and use local mass storage devices and media to store and retrieve information and resources.
- 5.5.3 demonstrate knowledge of effective group process skills.

## **Assignments and Course Expectations**

### **1. Professional Conduct**

Read assignments and engage in a positive way in all class discussions and activities. On-time attendance is required. Know and follow university policy regarding academic honesty. Be accountable for what you send, acknowledge online sources you reference.

### **2. Podcasting/Vodcasting**

Podcasting and vodcasting are the new phenomenon of professionals, educational and homemade audio broadcasts available on the Internet. Unlike traditional radio, podcasts can be listened at anytime and anywhere with the access to web Brower and QuickTime player or Apple iTunes to listen podcasts. However, while it's easy to produce recording for a podcasting, the first step is to plan preparation similar to a storyboard.

### **3. Web Page Evaluation**

Because web authoring is easy and inexpensive, a proliferation of web sites has appeared. Many web sites undergo no review or quality control process. When using or creating web pages for use with students, an essential step is evaluation of the pages for criteria including authority, appropriateness, accuracy, aesthetics, and access.

### **4. Web site Mapping**

Before developing any web site, it is important to think about the scope of the content, ways to present the content in logical and organized way, and multimedia and interactive elements that will add to the effectiveness of the site. Your web site project will be a set of web pages that you create for a specific educational purpose. The specifications can be found below. The first step is a site map, similar to a storyboard. The site map should be created as a digital diagram using software such as Inspiration, Vision, or Word Organization Chart. The map will be a plan that evolves through the semester, and its purpose is to be a visual reference and organizer for your site.

The map should show the purpose of the site, and display each page that you plan to include in your site, with the links between pages and to external pages, and notes listing topics and special elements of each page. The map should be incorporated into your site as site map or illustration.

### **5. Multimedia Web Page Assignment**

Media elements add impact and power to a web page when they add to the message. In class, we will work with a variety of media elements including graphics, sound and animation. For this assignment, you will create a page or short series of pages that have an educational theme. The theme may relate to the topic of your project. The page must include at least one photograph, clipart image, moving image and sound. A table should be used for media placement at some point in the page. Each media element must be carefully selected and placed to add to the message of the page, and each must incorporate principles of good design.

### **6. Interactive Web Page Assignment**

Users tend to spend more time on a web page and feel the page is more valuable to them when they interact with the page. Interactions range from clickable image and rollover buttons to forms. We will work with most common types of interactions currently used on the web, those involving text or graphics. For this assignment, you will create a page or short series of pages that have an educational theme. The theme may relate to the topic of your project. The page must include at least one image-based interaction such as a rollover or image map, and at least one form-based interaction, such as text box, radio button, check box, and drop-down box or popup menu. Each element must be carefully selected and placed to add the message of the page, and each must incorporate principles of good design.

## **7. Web Site Project**

The project is your opportunity to synthesize and apply your skills to develop a comprehensive web site that presents well-designed educational information. You may work individually or with a partner. You may develop a site for your own use or for a client. Your site will be shared in the final class meeting. The page may incorporate your map, multimedia pages and/or interaction page.

### **Course Requirements, Assignment Guidelines, and Grading:**

For each of the major areas of creating Web pages you will develop sample applications. This will include practice exercises as well as personal project(s) in each area.

You will be tested over the knowledge base of the course. This assessment will include quizzes, a midterm and final examination. Tests will be based on the information contained in the course lectures, demonstrations, handout materials, lessons, and projects. The final exam will include a performance requirement.

### **Podcasting/Vodcasting Project**

Your podcasting/vodcasting project should include three simple steps that is recording editing and publishing. You may work independently or in a partnership.

Your podcast/vodacast should include the following competencies:

- Podcasts can be audio or video recordings mixed together with music
- Podcasts can be published on campus storage servers?
- Podcasts can be published on iTunes so that can be listened or download podcasts to their iPod to listen anytime and anywhere as they like.
- Shoot for show length of 15-20 minutes.
- Show introduction monologue (who you are, what you're going to talk about); 13-20 seconds
- Keep topics moving, and limit topic coverage to 4-6 minutes.
- Try to use guests as a way to break up the conversation, pace and tone of your show.
- Closing remarks (thank audiences for listening) 10 seconds
- Closing music for about 10 seconds

Podcasting/Vodcasting Project Assignment (20 points)

## **Web Site Plan**

You will turn in a web site plan mapping the possible pages in your web site project with links among the pages and out to the web. The plan will indicate the topic of each page and your plan for media elements on the pages. The visual map may be completed using Word Organization Chart, Inspiration (Provide in class), or Vision. Turn in either a print or electronic file.

The plan also includes a written summary of the goal and audience for the site. Include:

- Target audience description: age, skills, and assumptions
- Nature of your site: reference, teaching, other
- Main messages your site will convey
- Need for the site
- Critical success factors and constraints
- Topics you will include in the site: sources, how it will be made appropriate for the audience, how the audience will use it
- Site structure: theme for design and navigation, interactive features
- Interface design: ideas about style, tone look and feel
- Team and resources: site developers and the resources they will provide

Web Site Plan Assignment (5 points)

## **Multimedia Web Page**

Your multimedia web page will consist of at least one web page at least one photograph, one clipart/line art image, one moving image, and one sound. All elements must add to the educational theme of the page and follow principles of good design. Turn in an electronic file and a print copy.

Multimedia Web Page Assignment (5 points)

## **Interactive Web Page**

Your interactive web page will consist of at least one web page and at least one image-based interaction and one form-based interaction. All elements must add to the educational theme of the page and follow principles of good design. Turn in an electronic file and a print copy.

Interactive Web Page Assignment (5 points)

## **Issue Paper**

Choose an issue in educational web design and develop a paper that describes current viewpoints on the issue in 3-5 double-spaced pages, using 12-point font and standard margins. Use current online and paper sources, and cite the sources using APA style for citing references. Use the list here for guidance: <http://www.psychww.com/resources/apacrib.htm>

Turn in the paper electronically and in print.  
Possible topics:

- Review of Excellent Web Sites in Content Area or Grade Level
- Web Accessibility for Educators
- Web Page Design for Students
- Webography of Web Design Sites
- Making the Most of Multimedia/Interactive Web Sites in Education
- Trends in Use of the Web in Education
- The Future of the Web in Education: Wireless, etc.

Issue Paper Assignment (10 points)

### **Web Site Project**

Your web page site project is a connected group of web pages used for an educational goal displaying evidence of good design principles. You may work independently or in a partnership.

Your site should include the following competencies:

- Appropriate META tags
- Appropriate graphics with ALT tags, and documentation that all graphics are public or used with permission
- Logical text formatting where possible
- Good design practice
- Wise chunking, with few clicks to materials
- Credit sources of all non-original material
- Descriptive title tag
- Educational objective appropriate for the selected audience
- Contact information for page author
- Consistent and easily-used navigation
- Accurate content
- Content that is largely free from language error

Note: Please consider the following steps for your final project:

- Identify project purpose
- Consider audience needs
- Collect materials
- Prepare materials
- Create the pages
- Add the content
- Build the navigation
- Preview, evaluate, and revise
- Upload to the Web

Web Site Project Assignment (55 points)

Grading will be criterion referenced. This concept means that your projects will be graded using criteria established for each one. Your grade will depend on the degree to which your project reflects achievement of the specified criteria. In addition, you should be able to complete 90% of

each graded assignment from memory. If you're unable to complete an assignment without references, you probably need more practice.

The two grading scales for projects that will be used in this course are summarized below. A four-point scale will be used to score the practice exercises. A ten-point scale will be used to score the graded assignment.

### Practice Exercises

- 3 Criteria met, only minor problems
- 2 Several minor problems  
or 1 major problem
- 1 2 major problems
- 0 3 or more major problems

### Graded Assignments

- 10 Criteria met, only minor problems
- 9 1 major problem
- 8 2 major problems
- 7 3 major problems
- 6 4 major problems
- 0-5 5-9 or more major problems

Your final grade will be determined using a weighted percentage scale based on total possible points accumulated on the exercises, projects and exams. The grading scale will be:

93-100%=A	90-92.9%=A-	87-89.9%=B+
83-86.9%=B	80-82.9%=B-	77-79.9%=C+
73-76.9%=C	70-72.9%=C-	67-69.9%=D+
63-66.9%=D	60-62.9%=D-	Below 60%=F

**Note:** Due to the laboratory nature of the course it is important that you **attend each class session**. Therefore, **attendance will be counted as a grade factor**.

### Course Policies

#### Late Assignments:

Practice exercises and projects are intended to help you learn important capabilities. Each exercise is intended to help you understand information that is prerequisite to future exercises and projects. The commutative nature of this learning requires that you complete your exercises and projects in a timely fashion. For these reasons, **all exercises and projects are due at the next class session**. However, you may still submit them up to one week after the original due date. **Any project over 1 week late will be penalized by the equivalent of one letter grade**. In other words, if a project represents **B** quality work (8 points) and it is handed in late, the maximum grade would be a **C** (7 points).

Of course, there are unpredictable and critical crises such as your own hospitalization or death in the immediate family that would be sufficient grounds to not enforce this penalty. If something of this critical nature occurs contact me or have somebody call me, or e-mail me immediately and not after, you have missed class for one, two, or three week.

Any student who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate his or her educational opportunity.

**Scholastic Dishonesty:** Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the University.

### **Additional Information:**

In addition to completing the readings and project assignments for the course, practice using the assigned applications is essential to mastering the goals of the course. You should expect to spend **3-5 hours per week** (minimum) at a microcomputer outside of the scheduled class hours.

The Carver Center's Computer Lab equipment is available for use during regular operating hours-except during other computer classes. Additional systems are available in the Center proper as well as printing services-although it is a charged service outside of the scheduled course laboratory times. If you have questions about availability, call first. **Carver's telephone number is (419) 530-2454.**

### **Copyright Notice:**

Some goals and objectives of this course may be through use of commercial or copyrighted software programs. You may not copy or otherwise duplicate these programs in any form. The unauthorized copying of computer software is a violation of copyright laws and subject to university disciplinary measures.

### **Required Materials:**

The text for this course is:

Gary Shelly, Thomas Cashman, Dolores Wells, and Steven Freund. (2007). Macromedia Dreamweaver 8: Introductory Concepts and Techniques. *Thomson Course Technology*. (ISBN-10: 1-4188-5991-5)

**Note:** Each student is required to purchase a Flash Drive to save and back-up data on a regular basis. This minimizes the risk of losing your working files and reinforces good computing behavior.

### **Resources for Educational Web Design:**

#### **Code examples:**

- Web Site Goodies <http://www.websitegoodies.com>
- Character Code <http://www.unicode.com>

## Universal design:

- designing a Global and Localized Web Site  
<http://www.microsoft.com/technet/Analpln/globloc2.asp>

## Web accessibility and usability

- Bobby Accessibility Test <http://www.cast.org/bobby>
- IBM HomePage Reader <http://www-3.ibm.com/able/hpr.html>
- Microsoft Usability Research <http://www.mirosoft.com/usability/>
- Usable Information Technology <http://www.useit.com/>
- Usable Web <http://usableweb.com/>
- W3C Web Content Accessibility Guidelines  
<http://www.w3.org/TR/WAI-WEBCONTENT>
- Web Metrics Tools <http://zing.ncsl.nist.gov/webmet>

## Web design guidance:

- About.com Web Design  
<http://webdesign.about.com/compute/webdesign/>
- Bad Human Factors Design <http://www.baddesigns.co/index.html>
- Building Web Sites for Kids <http://www.builder.com/Graphics/kids/>
- Elements of Web Design <http://builder.cnet.com/Graphics/Design/>
- Navigation Design <http://www.builder.com/Graphics/Navspotlight>

## Guide and tutorials

- HTML Forms Tutorial <http://www.echoecho.com/htmlforms.htm>
- HTML forms Tutorial  
<http://html.about.com/compute/html/library/weekly/aao72699.htm>
- HTML Tutorial Coding Forms  
<http://www.2kweb.net/html-tutorial/forms/index.html>

## College Mission Statement

**Individuals** at the center of their own learning within a rich **intellectual environment** characterized by choice.

**Note: This syllabus is subject to change to accommodate extenuating circumstances.**