INFO 2450 Final Exam Review

Format of the Exam: 50 multiple choice questions, similar to our quizzes.
Exam Materials cover all the lessons and projects since the first exam.
The exam is located in Blackboard in the Quizzes/Exam part of the course.

The exam will be administered in the UVSC testing center on Monday, April 21 – Tuesday, April 22.
If you are taking the course as an online course:
The Testing Center proctor will enter the password needed for you to take the exam online.
You will have two hours to complete the exam.

Web Graphics - Importing, Selecting and Modifying Graphics

Be able to define the seven elements of art design: Line, Direction, Texture, Value, Shape, Size and Color.
Color can be defined in terms of HSV: Hue, Saturation and Value.
Understand the color wheel, primary colors, secondary colors and tertiary colors.
Other color terms you should know: complimentary colors, compound colors, saturated colors, tints and shades.
The Principles of Design are ways you can apply the elements of design.
Know the definition of these principles of design: balance, domination, repetition, unity, gradation, contrast and harmony.
Know how logos are used to provide a recognizable, reproducible symbol for businesses or organizations.
Know the elements that make up a logo: forms, colors, fonts and finishes.
Know how to compost the components of a logo using: proportion, repetition, contrast and nuances.
Know the definition of symmetry and how it relates to repetition.
Logos usually contain an abstracted form or idea.
Know how a wireframe drawing can be used to layout content on a web page.
Know how the page background should be used to tie together page elements.
Know the different combinations of text and background color schemes.
Know the advantages and disadvantages or tiling or not tiling a background image.
An aesthetically pleasing web page makes use of basic art design principles.

GIMP Lesson 1 - Working with Images in Fireworks

Know graphical file formats:
    XCF – Gimp native format that allows for layers, simple animations, imagemaps, and transparency.
    PNG – Lossless compression supports transparency when not viewed in IE.
    GIF and Animated GIF - these files can be imported or exported from GIMP.

GIF files support transparency.

JPEG- Lossy compression scheme. These files can be imported as a bitmapped graphic or exported.

Know the difference between vector and bitmapped graphics.

GIMP does not support vector graphics except using the Gfig tool.

Know how to create a new document, size the canvas, set the resolution and background color.

The minimum resolution for web based images should be 72 dpi.

Be familiar with the Tool Bar tools in GIMP.

Know how to create a multi-sided polygon or star.

Know how to modify attributes of the selected tool using the Toolbar Options panel.

Know how to set fill and line colors, and textures.

Cropping allows you to trim the canvas around an image.

Rescaling the image blows it up or shrinks it down.

You can chain the width and height so they change proportionally.

You can rotate in a CW or CCS wise direction, by 90 or 180 degrees or flip horizontally or vertically .

Know how to create text and modify text attributes using the text tool and the toolbar options.

Know how to modify the brightness or contrast.

JPEG files can have a compression level set during exportation.

The lower the quality of JPEG compression, the smaller the file.

PNG and GIF indexed files are smaller in size. Indexed color conversion reduces the number of colors in the image.

You should understand the tradeoff between image quality and file size.

Native GIMP files are XCF files.

Always save your graphic as a XCF file in order to retain your graphical text and layers.

GIMP Lesson 2- Introduction to Layers

Images are made by combining layers.

Keep layers separate until completely finished.

Best Practices tell us to save image in XCF format with layers,

Then flatten layers and save image in final format, PNG, GIF or JPEG.

Stacking layers will show final image if layers contain transparency.

Turn or off a layer using the "eye" for visible or not visible.

Set the font, color and size you want by selecting the text tool and changing the text options.

Drag a rectangle on the image and enter the text in the text editor box.

Know the order of layers, highest layer is on top, lowest is on the bottom.

Know how to rearrange layers.

Know how to flatten layers.

Know how to create a drop shadow.

Know how to chain layers together to apply similar effects to multiple layers or to move them.

GIMP Lesson 3- Drawing

Know how to create a blank canvas, how to set the size and background color.
The pencil tool can be used to draw lines or curves.
The pencil lines are not antialiased, the edges have not been smoothed.
Choose the width of lines by selecting the diameter of brush you want.
Know how to change brushes or how to use animated brushes.
Parametric brushes have different heads: diamond, square, or round.
Know how to create new brushes using the brush editor.
Know the line drawing tool options include: opacity, mode, fade out, incremental or use of gradient.
Know the special drawing modes: normal, dissolve, behind and color erase.
The airbrush tool is always antialiased and has a soft edge.
Know the airbrush options: rate and pressure.
Know how to use the ink pen tool and choose the nib or point type you want.
Know the ink pen options: adjustment, sensitivity, type and shape.
The eraser took uses a transparency channel called the alpha channel.
Make sure the current channel has an alpha channel or the eraser will not work.
You can choose to erase with a hard or a soft edge.
Zoom in to erase more carefully.
Choose a larger brush to erase larger areas at one time.
Outlining selections is done by "Stroking".
Create a selection with the rectangle or oval or use the lasso to create a free style selection,
 then apply the stroke to the selection.
Know the options in the stroke selection dialog: set line width, line style, or color.
Fill a selection using the Edit=>Fill with FG Color option.
Know how to fill using the Bucket tool.
Know how to use the Threshold slider to affect fill areas.
Know how to set the pattern in the swatch, then use it to fill or stroke.
Know how to set a gradient or use the blend tool to blend the BG color and the FG color into a blended gradient.
Know how to set the direction wanted in a gradient or blend by dragging the arrow in the desired direction.
The reverse gradient will reverse the order of the gradient colors.
Know how to create temporary vector graphics in GIMP using the Gfig filter by using the Filter=>Gfig option.
When finished, graphics are inserted as raster graphics in their own layer and are no longer separate objects.
Graphics created in Gfig that are now raster graphics can be selected and transformed using scale, rotate or other options and can be moved.

GIMP Lesson 4 – Animations and Imagemaps

An animation is a sequence of layers that are converted into frames.
The lowest layer is the first frame and the top layer is the last frame.

Know how to create a shared background layer as the first layer.
Add each layer containing new objects.
To repeat objects from a previous layer, use the duplicate layer option.
Hide or show layers in order to adjust the positioning of things on the layers.
Use the Move Up or Move Down arrows in the layers panel to rearrange layers if needed.
Know how to merge a background with a layer using the Merge Down option.
Know how to test your animation using the Filters=>Animation=>Playback option.
After saving the animation as an animated GIF, know how to modify the timing and frame disposal method for the animation (combine or replace).
Know the default time for a frame is 100 milliseconds (ms).
Know how to save your final changes for your animation.
Imagemaps let you specify regions or "hotspots" that are clickable on an image.
Three types of hotspot regions are allowed: circle, rectangle and polygon.
The coordinates to these regions are created in a special Imagemap dialog box in GIMP by using the Filters=>Web=>Imagemap option.
Select the region shape you want and drag a circle, rectangle, or click around the shape to create a polygon.
Provide alternate text and a link destination for each hotspot region.
To insert the needed imagemap code into your web page, copy the source code including the <img> and entire <map> to </map> code.
Validation will require the addition of an id attribute in the map tag and make sure the usemap value has no spaces in it.

HTML Lesson 11 – Formatting Pages with Cascading Style Sheets

The first implementation of CSS was CSS1
Newest version CSS2 not supported by all browsers
CSS files are just text files, use the .css file extension
Cascading means style information can be combined from more than one source
External Style Sheets can be applied to more than one page
Embedded Styles are used only on one page
Inline Styles apply to only specific page elements
Order of Cascading, HTML formatting, Inline, Embedded, External Stylesheet
Inline Styles use the style attribute to apply a style.
The span tag can be used to surround a given amount of text so a style can be applied
Embedded styles are placed in the head of the page within a style open and closing tag
Attaching an external style sheet is done with the <link> tag
Selectors are used to give new styles to existing HTML elements
Contextual selectors are used to apply styles to nested selectors
Classes allow styles on user-defined groups of elements
Class names begin with the . character and are applied with a class attribute
IDs allow must be applied only once on a page, usually used for page layout styles

ID names begin with the # character and are applied with the id attribute
You should know about margin, padding, background, color, border,
font appearance and style, text alignment, float, CSS positioning, relative and
absolute
Pseudo-classes for link states

ASP.NET Lesson 1 – Getting Started with ASP.Net

Asp.Net is part of the integrated Visual Studio environment and is available
through the MSDNAA license
ASP.Net provides tools for website file management and development
The Design View provides a graphical WYSIWYG interface
The Source View allows the programmer to see and edit the source code
Page tabs allow the designer to easily move between files in the website
The Solution Explorer allows for file management
The Status bar shows the hierarchical ordering of HTML tags for a selected
element
IntelliSense shows the autocomplete pop up list for a selected tag
The CSS Style Editor allows for help creating CSS styles
Use the Properties dialog to open the CSS Style Editor
Automatic Validation is built into the ASP.Net environment
The DOCTYPE statement in the file designates the type of validation done
The Error List dialog shows validation warnings and errors

ASPNET Lesson 2 – Using HTML and CSS for Page Layout in ASP.Net

Web pages have two parts: the content and the presentation of the content.
The goal with using CSS in an external stylesheet is to separate the content from
the presentation as much as possible.
CSS files usually contain: selectors, IDs, classes, and pseudo-classes.
Selectors redefine the style for a specific HTML tag.
Classes create user-defined styles for selected elements and may appear many
times on a page.
IDs create styles for selected elements and may only appear once on a page.
IDs are usually used to help with layout positioning on a page.
Know the steps suggested for creating a CSS based site.
Know how the printer friendly version of a page be the same as the regular
version of a page.
Know what semantically correct markup means.
Know some of the best practices for layout.

ASPNET Lesson 3 – Using Master Pages in ASP.Net

When developing large websites, designers use templates like a blueprint for
new pages.

Templates can be used to rapidly create pages with the same layout and look and feel.

In ASP.Net, the template mechanism is achieved with a Master Page.

Master Pages have a .master file extension and are web forms.

Know about web forms as they are used in ASP.Net and about server-side programming.

Some part of the Master Page is permanent and cannot be changed and part of the template is editable.

Know how to create a new Master Page.

Know what the Master page directive does.

The meta tags from the start.htm file should be placed in the Master Page.

Know how to link a stylesheet to a Master Page.

In ASP.Net, editable regions are controlled on Master Pages with the ContentPlaceHolder control.

Positioning of the contentplaceholder editable areas is done through <div> tags and CSS.

Know how to make a content page(new web form) from a Master Page.

Know how to give the content page its own title.