TEC207 - Creating Graphic Presentations
(Basic Graphic & Interface Design Principles)
(4 hours)

Welcome to
Creating Graphic Presentations

Presenter: Carolyn Tan
Fall 2006

Advanced Certificate requirement
PREREQUISITES: *basic computer skills.
This class covers the basics of creating good presentations, including planning and page design concepts; different types of graphic presentations and files; and sources of graphics for a presentation.

Presentation Notes: http://swc2.hccs.edu/tan/imc/
TEC207 - Creating a Graphic Presentation  
(Basic Graphic & Interface Design Principles)  
**Discussion Topics**

1. Graphic & Monitor Resolution  
2. Graphic types – Print, Multimedia & Web  
3. Graphic Applications  
4. Graphic Design Principles  
5. Design Analysis or Hands on Choice  
6. Good & Bad Design Tips from Robin Williams  
7. Handouts, Graphic Resources & Accessibility & References

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1. Graphic & Monitor Resolutions

- **Presentation on Monitor Resolution** (Hands on Practice)
  Resolution - How large or small everything appears on the adjusted pixels on the monitor. More pixels (1024x768px versus 640x480px) = smaller (pixels are “squeezed” into a smaller area)
- Color Bit demonstration

**Importing images into your computer**

- Scanning Techniques
  300 versus 72 dpi – What is the difference?
  PPI (Pixels per inch) Demonstration
- Digital Cameras
  Megapixels (1 million pixel) 4 megapixel = ???
- Computer Screen Shots (Hands on Practice)
  Alt + Print Screen (PC: Snag it; Mac: Cmd+Shift+4) > Open an application & Paste & Edit image.
- Snag it Demo OR Hands on??
- Download from the internet (NOTE COPYRIGHT LAWS!); buy digitize images etc.

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2. Graphic Types

- Print, Multimedia or Web?
- Bitmap versus Vector Graphics (STATIC graphics)
  - **Presentation Overview on Web Graphic format types**
    [http://swc2.hccs.cc.tx.us/tan/IGLectures/notes/FWlectures/GraphicTypes.html](http://swc2.hccs.cc.tx.us/tan/IGLectures/notes/FWlectures/GraphicTypes.html)
- Animated & Interactive Graphics (MOTION graphics)
  - **Sample 1** (cartoon animations) [http://www.pennmanor.net/schools/hs/canady/](http://www.pennmanor.net/schools/hs/canady/)
  - **Sample 2** (animation & audio) [http://swc2.hccs.cc.tx.us/tan/SampleFinals/louis.swf](http://swc2.hccs.cc.tx.us/tan/SampleFinals/louis.swf)
- **Detailed Description on Web Graphic formats**
  ([http://swc2.hccs.cc.tx.us/tan/IGLectures/notes/iglectures/graphicsType.html](http://swc2.hccs.cc.tx.us/tan/IGLectures/notes/iglectures/graphicsType.html))

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Carolyn Tan 2006 Graphics Presentations (Foundational Design Principles)
Raster ("Bitmap") versus Vector Graphics

Observe the differences in the images below.
- Vector graphics are made up of lines and curves based on mathematical calculations. They have VERY clean edges.
- Raster ("Bitmap") graphics are made up of little squares called pixels. (Original meaning of Bitmap = 1 bit image – black and white, NO gray. Line Drawings)

Example of PIXILATION
3. Graphic Applications (Digital Graphics)
(Resource for learning the various applications – Lynda.com online OR
HCCS – Digital Communication Department onsite)

- Raster Graphics/Bitmap
  - Adobe Photoshop
  - Macromedia Fireworks
  - Paint Shop Pro
  - Corel Draw

- Vector Applications
  - Adobe Illustrator
  - Macromedia Fireworks
  - Corel Draw
  - Macromedia Flash ***

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4. What is graphic design?

Topics of Discussion

A. Definition of Graphic Design
B. Overview of Graphic Design Elements
C. Page Layout Principles
D. Color Practice
E. Typography

What is graphic design? (PPT9 p.1/3)

Graphic design is design with a purpose. The design has a message that is communicated in a creative way. It is --

- The marriage of images and words.
- A visual language, with simplicity and legibility
- A vehicle to communicate specific information to a specific audience, and
- A cooperative effort between designer, client, photographer, and all the team members.

What is graphic design? (PPT10 p. 2/3)

- Visual Communication
- It involves communication, design principles, aesthetics, marketing, and psychology.
- It's about creativity: concepts, ideas, solving problems, taking risks, and devising unique and surprising solutions.
- A graphic designer must be able to solve a specific “problem” for the “client”. This is done by creating a design that is original and communicates a message to a specific audience.

What is graphic design? (PPT11 p.3/3)

Toor quotes Philip Meggs, a graphic designer and author, from his book, *A History of Graphic Design*. "As has happened so often in the past, the tools are changing with the relentless advance of technology, but the essence of graphic design remains unchanged. The essence is to give order to the information, form to ideas, and expression and feeling to artifacts that document human experience (Meggs as quoted by Toor, p. 4)."

Now that we know what the definition of graphic design is, how do we apply the principles?

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The thinking process... (PPT12 p.1/2)

- **Defining the problem**
  - Who is your audience (learners with different learning styles, age, characteristics)?
  - What are your objectives?
  - What is your message?
  - What format will you use to convey the message?
  - What is the image you wish to project for your learners, and what has the organization done before? How will the learners involved react to the change?
  - What are the current trends?

The thinking process... (PPT13 p.2/2)

- **Discovering current trends**
  - Browse/Look at magazines
  - Observe TV commercials
  - Visit museums, galleries, look at art periodicals, browse the Web
  - Look at the billboards; signs you see everywhere
  - Check it out with the students, kids, etc?

A. Graphic Design Elements (PPT14 p.1/1)

- The formal elements of graphic design are line, shape, color, value, texture, and format. These are the building blocks of two-dimensional design. It is important to remember that all of the elements below interact and are interdependent on each other.

B. Page Layout Principles (PPT15 p.1/7)

- **The four basic page design principles in design are**
  - Alignment
  - Proximity
  - Repetition
  - Contrast

- **Alignment - is how items are lined up on a page in relation to each other. (PPT16 p.2/7)**
  - Horizontal and vertical alignments, example button or text navigation items placed on the page are both equally important.
  - Items can either be left, right or center aligned. They must look well balanced on a page. Consistency in alignment is a unifying force
  - In imbalanced page have all items to align to the left with lots of white or negative space on the right.
  - Use of indents or margins can give the audience a "visual relief" or "breathing space". This adds visual contrast - positive & negative space, thus adding interest to the page.
Page Layout Principles – PROXIMITY (PPT18 p.4/7)

- Proximity - refers to how items placed on a page relates to each other in spacing or distance.
- The grouping of items give a sense of organization and hierarchy information. Similar items should be grouped close together. Spatial relationships communicate the relationship of items. For example, captions should be placed close to the graphics, or headlines should be placed close to their related body text.

Page Layout Principles – PROXIMITY (PPT19 p.5/7)

- Good proximity - note heading and subheading. Spaces spell relationship of items
- Headings, subheaders and text are grouped too closely. Example of bad proximity

Page Layout Principles – REPETITION (PPT20 p.6/7)

- Repetition - elements such as colors, style, typography, format, page layout and illustrations used on a page that helps in unifying the web site.
- Repetition helps the audience know instantly that the page is part of the website.
Whether a page is a single page, repetitive elements can be used to give the page a consistent and unified look.

Page Layout Principles – Good & Bad (PPT21 p.7/7)
Page Layout Principles – CONTRAST (PPT22 p.1/1)

- Color contrast

- Typographic styles

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COLOR APPLICATION (PPT 23-25)

C. Color Practice (PPT24 p.1/1) (Free color wheel chart!)

- Color Presentation – An overview
- Colorwheel Pro – An application (PDF)
- Color theory Reference from ColorWheel Pro - [http://swc2.hccs.edu/tan/imc/graphics/ColorsDoc.pdf](http://swc2.hccs.edu/tan/imc/graphics/ColorsDoc.pdf)
- Color In Motion - [http://www.mariaclaudiacortes.com/](http://www.mariaclaudiacortes.com/)
- Color for Accessibility –
  - [http://www.lighthouse.org/color_contrast.htm](http://www.lighthouse.org/color_contrast.htm)

HANDS ON COLOR FUN!!!

Getting to know your color schemes & harmonies!
D. TYPOGRAPHY (PPT26 p.1/3)

- Mundi Design Presentation (Technical)
- A designer must understand how to select the right typeface (FONT) for screen design. Lynch and Horton states, "Typeface is a unique tone that should produce a harmonious fit between the verbal and visual flow of your content " (p126) Good legibility on a page can help keep the reader focused on a page. Often times a user leave a page when it is hard to read the content (no visual flow) where incorrect typefaces or too many typefaces are used.

Which type is easiest to read? (PPT27 p.2/3)

- Example of Times New Roman - 10 pts (Excerpt taken from WebStyle Guide)
  Each typeface has a unique tone that should produce a harmonious fit between the verbal and visual flow of your content. With the first versions of HTML, Web authors had no control over typefaces ("fonts" in personal computer terminology). Fonts were set by the browser, so pages were viewed in whatever font the user specified in his or her browser preferences. The more recent versions of HTML and CSS allow designers to specify the typeface. This is useful not only for aesthetic reasons but also because of the differing dimensions of typefaces. A layout that is carefully designed using one face may not format correctly in another.

- Example of Georgia - 10 pts (Excerpt taken from WebStyle Guide)
  Each typeface has a unique tone that should produce a harmonious fit between the verbal and visual flow of your content. With the first versions of HTML, Web authors had no control over typefaces ("fonts" in personal computer terminology). Fonts were set by the browser, so pages were viewed in whatever font the user specified in his or her browser preferences. The more recent versions of HTML and CSS allow designers to specify the typeface. This is useful not only for aesthetic reasons but also because of the differing dimensions of typefaces. A layout that is carefully designed using one face may not format correctly in another.

- Example of Verdana - 10 pts (Excerpt taken from WebStyle Guide)
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TYPOGRAPHY (PPT28 p.3/3)

Examples of good use of typefaces for screen design are Georgia and Verdana (any type of sans serif fonts). There is a difference between reading on a printed page versus screen page. Why use Georgia instead of
Times New Roman? Times New Roman looks more compact as opposed to Georgia. The white space between each word and broader type is easier on the eye.

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Hands-on Design OR Discussion?
(PPT 29-40 Links, Resources & References)
Miscellaneous Notes

Good & Bad Design - http://www.ratz.com/features.html

Remember: These suggestions can be very subjective based on the individual’s situation. “Design is subjective – so as long as you can logically justify your reasons for the choices”

Handouts (PDFs)
- Color Design
- Page Layout Design (Grids)
- Design Principles (Basics)
- Interface Design

Graphic Design Resources
- Fonts http://www.1001freefonts.com/
- Free Clip Art for Educators http://www.awesomeclipartforeducators.com/
- Colors
  - Articles - http://colorcube.com/articles/articles.htm
  - Illusions & Color playground - WARNING on Color Addition!
    http://colorcube.com/illusions/illusion.htm

Variety (Miscellaneous)
- Tutorials
  - Lynda.com: http://www.lynda.com
  - VTC.com: http://www.vtc.com
- Design Sites
  - Best Designs http://www.thebestdesigns.com/
- Accessibility Guidelines
  - Text Accessibility - http://www.webaim.org/techniques/textlayout/___
  - http://www.w3.org/Graphics/
  - Test web pages for accessibility http://webxact.watchfire.com/
- References
Mundi Designs
Effective Color Contrast http://www.lighthouse.org/color_contrast.htm
Good & Bad Web Design http://www.ratz.com/featuresgood.html

Thank you for your participation!

Any Questions?

Class Completion
- Fill out the Class Evaluation Form at http://icrc16.hccs.edu
- Fill out the Verify Class Completion Form
- Class Name: Advance Certificate Module>Creating A Graphic Presentation
- Instructor’s Name: Carolyn Tan