


# **Design Tips & Tricks for Presentations and Posters**

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Rebecca Barham

This presentation will empower you to use the design principles of clarity, relevance, contrast, repetition, alignment, proximity, and much more to create understandable professional slides and posters. You will also learn how to lead the eye of the viewer, and to trust your own eyes in the design process.

## Screen/Slide Aspect Ratio

A light beige rectangular box representing a standard 4:3 aspect ratio.

Standard  
4:3

A white rectangular box representing a widescreen 16:9 aspect ratio.

Widescreen  
16:9

Check with the venue where you plan to present to see if their equipment supports the screen aspect ratio you want to create in. Widescreen 16:9 is the size most people use today and it is the default in PowerPoint 2019.

To change the aspect ratio of your slide in PowerPoint 2019, click on: **Design/Slide Size**.

# Clarity

## How to obtain clarity:

- Edit down the text on the slide.
- Use more slides to spread out the text if needed.
- Leave space between text areas.
- Don't use a background that makes it hard to read the slide.

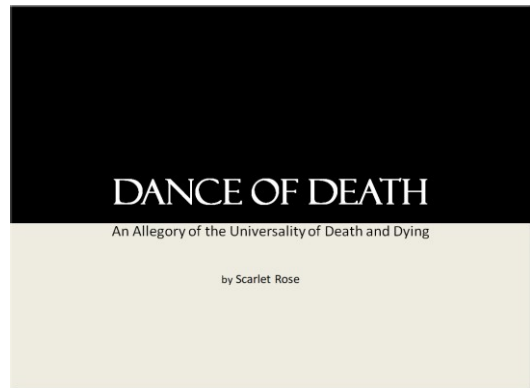
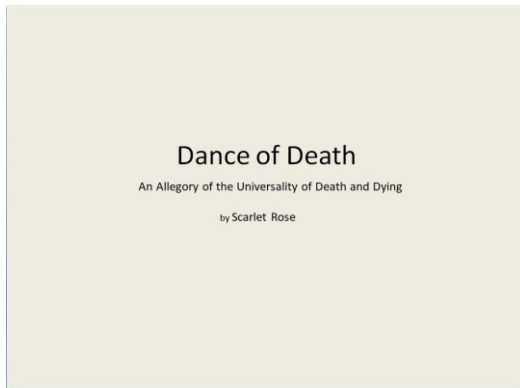
## Contrast

**Contrast** is the use and arrangement of opposite elements to create visual interest and drama.

### **Ways to Create Contrast:**

- Use dark fonts on a white or a very light background
- Use dark and light colors
- Use small and large shapes, or imagery

## Contrast



Contrast can be created with colors, fonts, and images.  
Fonts have a personality.  
Fonts in this slide: from Calibri to Felix Tilting

## Repetition

**Repetition** is the use of design features to create a unifying and consistent look throughout the presentation or poster.

**Ways to create repetition:**

- Use a banner
- Use a block of color or color sidebar
- Use designs or symbols

Repetition does not mean that everything has to look the same.

## Creating Repetition in Presentation Slides



Symbol



Different ways to use design elements to create repetition in a slide presentation.  
The subject of the slide presentation is Design Thinking.

## Creating Repetition in Posters

### Biophilic Design for Libraries: Integrating and Referencing Nature to Create More Human-Centered Spaces

Biophilic design is a concept based in environmental psychology that recognizes mankind's psychological affinity with nature and seeks to enhance and restore the experience of the natural world into the built environment. It is sometimes called restorative environmental design. Psychological and physical benefits for people who inhabit a biophilically designed environment include a sense of well-being, less stress, better performance, and increased comfort. Biophilic design places more focus on the human element compared to sustainable architecture's focus on renewable materials and efficiency.

Integrating Features Found in the Natural Environment	Designing with Natural Forms, Shapes, Patterns and Colors	Using Light as a Physical and Psychological Design Element	Creating Inside-Outside Spaces, Transitional or Bound Spaces	Referencing the Cultural, Historic, Indigenous or Ecological Aspects Specific to the Site	Creating a Psychological Sense of Refuge, Security and Protection
 Indoor Wall Garden, Los Angeles, CA	 Modern Office, Natural Materials and Colors	 Stained Glass Windows	 Rooftop Garden, Los Angeles, CA	 Green Building, New York, NY	 Cafeteria, Seattle, WA
 Outdoor Garden, Miami, FL	 Wooden Wall, Los Angeles, CA	 Stained Glass Windows	 Rooftop Garden, Los Angeles, CA	 Green Building, New York, NY	 Cafeteria, Seattle, WA
 Indoor Garden, Los Angeles, CA	 Wooden Wall, Los Angeles, CA	 Stained Glass Windows	 Rooftop Garden, Los Angeles, CA	 Green Building, New York, NY	 Cafeteria, Seattle, WA
 Indoor Garden, Los Angeles, CA	 Wooden Wall, Los Angeles, CA	 Stained Glass Windows	 Rooftop Garden, Los Angeles, CA	 Green Building, New York, NY	 Cafeteria, Seattle, WA
 Indoor Garden, Los Angeles, CA	 Wooden Wall, Los Angeles, CA	 Stained Glass Windows	 Rooftop Garden, Los Angeles, CA	 Green Building, New York, NY	 Cafeteria, Seattle, WA

Presented by:  
 Rebecca Barham, Art, Dance & Theatre Librarian; Erin O'Boyle, Science Librarian;  
 Dr. Susan Smith, Head Library Research and Support Services; University of North Texas Libraries

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 UNT

Poster categories are based on those found in the book:  
 Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life, by Hertzog, Judith H., Stephen H. Kellert, and Martin L. Mador, eds. Hoboken, NJ: Wiley, 2008.  
 Reference: <http://guides.library.unt.edu/libresearch/biophilicdesign/>

Design elements to create repetition in posters include: unifying boxes of color that images and text boxes are grounded upon. The use of a semi-transparent background image, or top to bottom/light to dark gradient, and top and bottom banners to enclose all the elements.



## Alignment

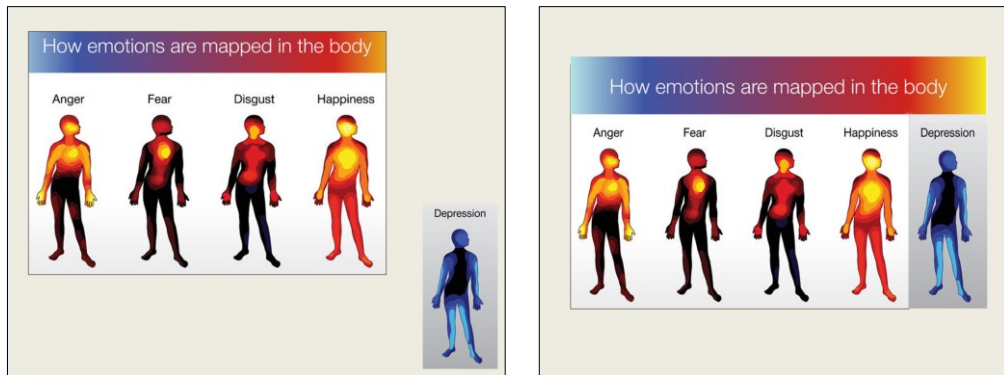
Alignment is the arrangement of the text and graphics along edges so that they have a unified look that is easier to read and understand.



The slide on the left is fine, but it is improved and looks more unified when the font and image are aligned along the edges in the second slide.

# Proximity

Proximity is the placement of text and or graphics that are related closer to each other.

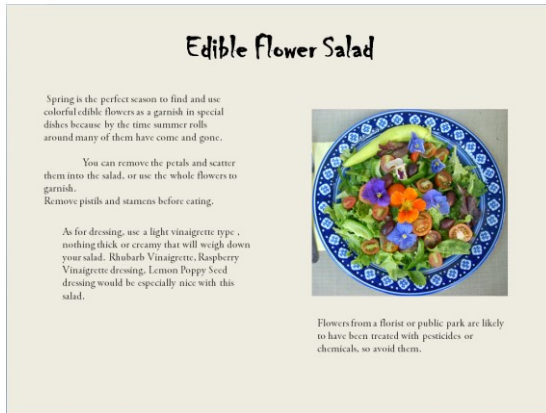


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Our minds read objects and text that are placed closer to each other as being related.

# Clarity, Relevance, Alignment, Contrast



**Clarity:** Text edited to important points, space between text areas.

**Relevance:** Images and text relate to the presentation topic.

**Alignment:** arrangement of text and graphics along edges.

**Contrast:** use of opposite elements to create visual interest & drama

This slide and the next four are part of an interactive learning activity to apply the concepts of clarity, relevance, alignment and contrast to improve the design of this slide.

# Clarity, Relevance, Alignment, Contrast

## Edible Flower Salad

Remove the petals and scatter them into the salad, or use the whole flowers to garnish.

Remove pistils and stamens before eating.

Dressing: use a light vinaigrette such as Rhubarb Vinaigrette, Raspberry Vinaigrette dressing, Lemon Poppy Seed dressing.

Flowers from a florist or public park are likely to have been treated with pesticides or chemicals, so avoid them.



**Clarity:** Text edited to important points, space between text areas.

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# Clarity, Relevance, Alignment, Contrast

## Edible Flower Salad



Edible flowers include: pansies, nasturtiums, roses, violets and lavender.

Use petals for salad.

Use whole flowers as garnish.

Dressings: Rhubarb Vinaigrette, Raspberry Vinaigrette, Lemon Poppy Seed.

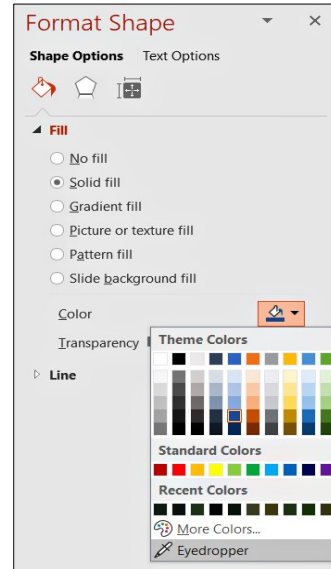
**Clarity:** Text edited to important points, space between text areas.

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# Clarity, Relevance, Alignment, Contrast



The design of our slide is improving. To make it visually pop even more, we can utilize the eye dropper in the **Format Shape** tools to copy colors from our image and then use that color in a side bar or font, etc. Versions of PowerPoint older than 2019 don't have the eye dropper.

## Clarity, Relevance, Alignment, Contrast

Edible  
Flower  
Salad



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Or we can just simplify the slide down to an image and title and present the other ideas in our talk.

## Visual Weight



Be aware of the perceived visual weight of the colors you use.

Notice which square seems heavier.

For best results, use lighter colors toward the top of the slide or poster and darker colors at the bottom.

If you want to use a gradient (a graduated range of color value from light to dark, or dark to light), create it so that the lightest part of the gradient is at the top of your slide or poster and the darkest is at the bottom.

This gives a sense of grounding and balance.



## Visual Weight: Gradient Backgrounds



When using gradients in backgrounds, choose one that graduates from top to bottom from lightest to darkest color.

## Eye Movement: Trapped, Jumping, Moving?

Our eye movement moves through and rests in white or blank space. It is harder to enter into and read large blocks of text with no space between the lines of text. But when lines of text are too far apart the eye has a hard time connecting the lines and ideas. When there is just enough space between the lines and a flow of white or blank space the eye can easily move through and read the text. Notice the movement of your eye. Can it enter a space, does it get stuck in the space, or jump from one area to the other. Trust your own eyes in the design process.

Our eye movement moves through and rests in white or blank space.

It is harder to enter into and read large blocks of text with no space between the lines of text.

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Our eye movement moves through and rests in white or blank space. It is harder to enter into and read large blocks of text with no space between the lines of text.

But when lines of text are too far apart the eye has a hard time connecting the lines and ideas. White space is also proximity.

When there is just enough space between the lines and a flow of white or blank space, the eye can easily move through and read the text.

Notice the movement of your eye. Can it enter a space, does it get stuck in the space, or jump from one area to the other?

## Ways to Lead the Eye of the Viewer

1. Good Use of White Space
2. Use of Contrast
3. Lines of Perspective



Clark Gardens, Mineral Wells, TX., Channel Garden, Photo by Rebecca Barham

### **White Space:**

You have already learned how good use of white space can lead eye movement.

### **Contrast:**

And that high levels of contrast between light and dark colors, or large and small objects can draw the eye to that spot.

### **Lines of Perspective:**

Perspective lines can also move the eye of the viewer to an intended area. The picture on the right contains lines of perspective that are formed by the edges of the pool. These lines help to guide the eye of the viewer to the central pavilion entry.



# Designing Posters in PowerPoint 2019

## From scratch in PowerPoint:

Watch This Video: <https://tinyurl.com/j8w65po>

1. File/New/Blank Presentation/Design/Page Setup/Enter the size of poster in inches/OK.

2. Add Guidelines:  
Guides/View/Animations/check Ruler, Guidelines, Guide.

3. Add Unifying Color Shapes:  
Insert/Shape/choose shape-rectangle is good/

4. Add Text Boxes:  
Insert/Text boxes

5. Insert PP Graphs:  
Insert/Smart Art/choose graph or other smart art/

6. When Finished:  
Save a final copy in PowerPoint  
Save a copy for the Printer: Save As/PDF or Tiff/ Will be 300 ppi

To Get an Idea of Final Size:  
Move the Zoom slider bar in the right corner of the screen to 100%. Now view from 3-5 feet away.

## From a already existing PP slide:

Have slide open in PP/Design/Slide Size/Custom/Set Inches and Landscape



Also choose **Slide Size** (far right corner of screen) ratio for your screen before you begin. Select Standard (4:3 aspect ratio) or Widescreen (16:9) or **Custom Slide Size**.

All PowerPoint posters will be 300 dpi.

## A Microsoft Science Poster Template

Science Project Title

Your Name / Teacher's Name / Subject

**Problem / Question**

Enter your question here (statement of the problem)

**Hypothesis**

- Add your answer/ solution here
- Write hypothesis before you begin the experiment
- This should be your best educated guess based on your research

**Project Overview**

- Add a brief overview or summary of your project (Use the Bullets button on the Home tab to remove the bullets.)

**Materials**

Material (number first)	Quantity (be specific)
Item	Amount
Item	Amount
Item	Amount
Item	Amount
Item	Amount
Item	Amount

**Procedure**

Step 1	Step 2	Step 3	Step 4
Describe this step in your experiment	Describe this step in your experiment	Describe this step in your experiment	Describe this step in your experiment

**Variables / Research**

Controlled variables	Independent variable	Dependent variable
These are kept the same throughout your experiments	The one variable you purposely change and test	The measure of change observed (measurements of equipment) Decide how you will measure the change

**Data / Observations**

- Observation 1
- Observation 2
- Observation 3

**Results**

Chart Title

Include results based on your experiments

- Result 1
- Result 2
- Result 3

**Conclusion**

- Brief summary of what you discovered based on results
- Discuss and explain whether or not the data supports your hypothesis

**Works Cited**

- Include print and electronic sources in alphabetical order

There is a downloadable Microsoft template for a science poster that is fully editable:

<https://templates.office.com/en-us/science-project-poster-tm00001151>

Here are more Microsoft Templates (all categories of templates):

<https://templates.office.com/#categories>

A nice poster template that is fully editable. Every element, color, text, image, etc. is editable and uses clarity, alignment and contrast well.

## Poster 2.0



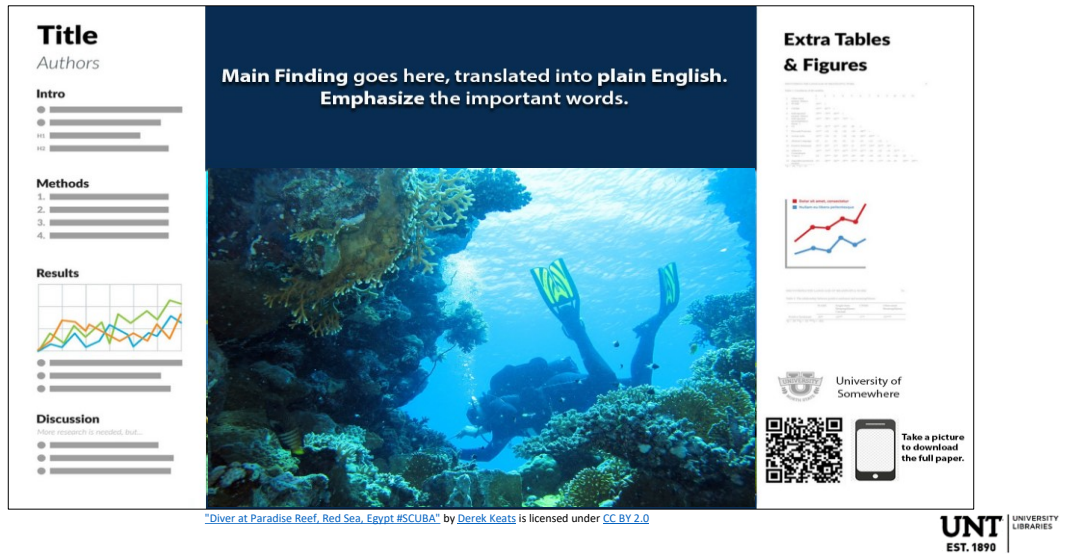
Poster 2.0 template downloads: <https://tinyurl.com/yc734evp>

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A *better poster* template was pioneered by Mike Morrison at Michigan State University to simplify research posters. He calls it Poster 2.0. His method breaks a poster down into 3 sections to make understanding and retaining information easier at poster sessions.

It is true that the eye is drawn to this central area in the upper part of the slide where the main finding would be included.

# My design of Poster 2.0



Here is my version of Poster 2.0 with the QR code, phone icon, university logo moved and an image of the scientist participating in the experiment or work that is the subject of the poster.

An image will add visual appeal, help to illustrate what the poster is talking about, and add a sense of humanity to the poster.



## Checking Image Resolution: Math Formula

Screen/PowerPoint = 72 dpi

Printing/Poster = 300 ppi standard, 150 ppi acceptable.

### Rough Math Formula:

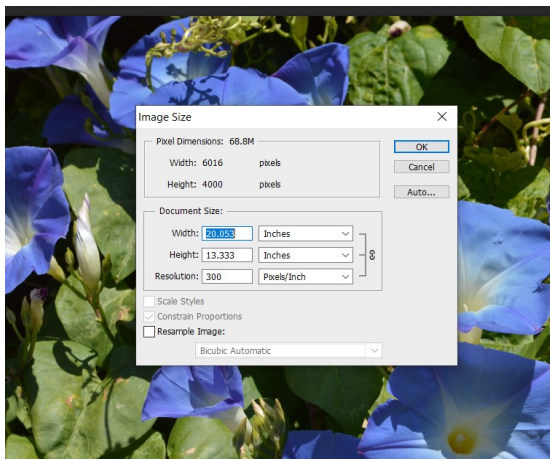
**Right click your image/Properties/Details** tab. Will see pixel dimensions of your image. Example: 1200 x 800 pixels.

Divide the pixels of one side of your image by the PPI you want = size in inches that it will print. Now do the same with the other side.



Here is a Pixel PPI and DPI Calculator: <https://uproer.com/articles/image-size-calculator-px-in/>

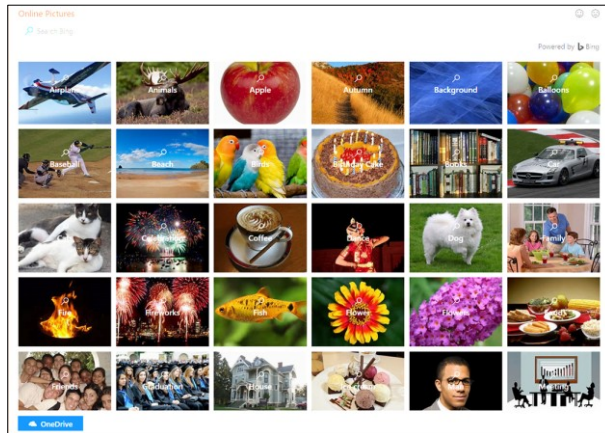
## Checking Image Resolution: Photoshop



**Photoshop Image Size check:**  
**Open/File/choose your image file/Image/Image Size.**

Uncheck **Resample Image** and input the **Resolution** you want to use to print to see the size it will print in inches.

## Creative Commons Images in PowerPoint 2019



Creative Commons  
Images in PowerPoint 2019  
(Click: **Insert/Online Pictures**)

Verify Creative Commons status.

There are some professional looking images that are listed as Creative Commons images that are linked through PowerPoint 2019.

Just click **Insert/Online Pictures** to get to them

You still need to research them a little because I found several that were traceable back to paid stock photos and not all the info needed for attribution is always there. It does include an attribution line when downloaded into your PP slide but not all the info may be there.

You can Right click the photo and click **Ask Cortana about this picture** and find where Bing found it on the web.

# Creative Commons Images

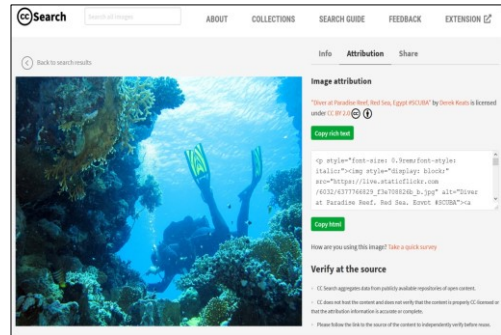
## Creative Commons:

<https://search.creativecommons.org/>

### How to Attribute a CC License:

- Title: The title of the image.
- Author: The name of the creator.
- Source: The URL where the image is hosted (plus optional link to author profile).

"[Diver at Paradise Reef, Red Sea, Egypt #SCUBA](#)"  
by [Derek Keats](#) is licensed under [CC BY 2.0](#)

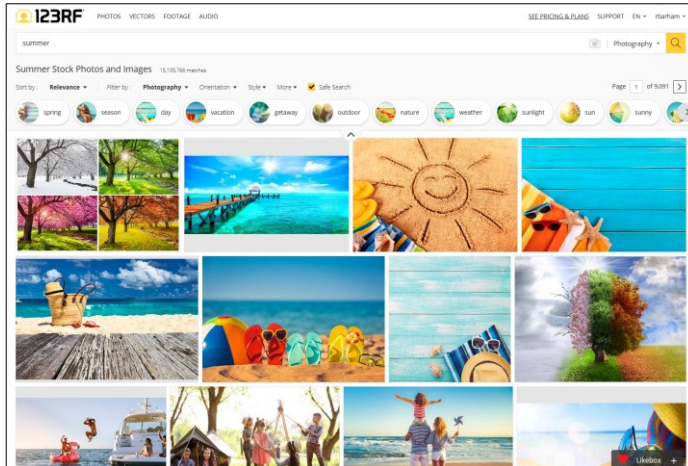


## Creative Commons

<https://search.creativecommons.org/>  
is a better place to search for a useable  
creative commons image.

You don't have to use their image  
categories, just type the exact imagery  
you are looking for in the search box.

# Paid Professional Stock Images



## 123RF.com

Photos, Vectors, Footage, Audio

**Plan:** 40 credits for \$45.00

Web size images = 2 credits

Print size image = 4 credits



If you don't want to deal with all the headaches associated with researching the use status of images, you might want to try paid professional stock images. I use 123RF.com. They offer Photos, Vectors, Footage, and Audio files. Credits expire in 1 year.

*Thank You*

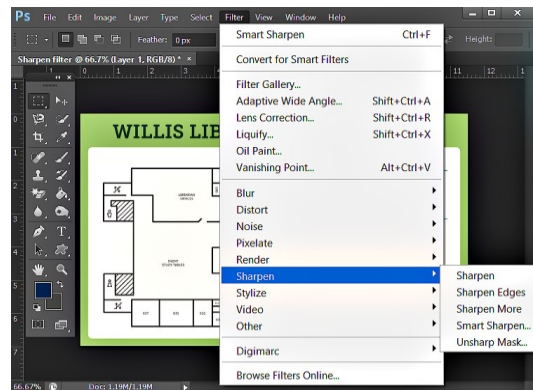
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# Photoshop Tip 1: Make thin letters and lines in screenshots more substantial and readable

## Tool: Sharpen Filters

1. Take Screenshot: **Shift Key + PrtScn** (Print Screen)
2. Go to Photoshop:  
**File/New/Ok/Click in Box, Paste** (Control V)
3. To sharpen:  
**Filter/Sharpen/Sharpen Edges OR Smart Sharpen**



## Photoshop Tip 2: Removing a White Background



To remove a white or other color background, open the file in Photoshop (**File/Open/Choose file/**).

1. Right click on the **Background Layer** in the Layers tab, and choose **Delete Layer**. Now you will just have Layer 1.
2. Choose **Magic Eraser** or **Background Eraser** from the tools bar. Click on the white background until it disappears.
3. Save File (**File/Save/as PNG** for a slide, or as a **TIFF** for a poster). Don't save as a JPEG (adds white background).



## **UNT Identity Guide: Logos, Lockups, etc.**

UNT Libraries Lock-Ups:

<https://identityguide.unt.edu/a-z-academic>

UNT Identity Guide:

<https://identityguide.unt.edu/create-our-look>

UNT Libraries PowerPoint Templates:

<https://tinyurl.com/y8nknwh5>

## Works Cited

Williams, R. (2018). *The Non-Designers Presentation Book: principles for effective presentation design*. San Francisco, CA: Peachpit Press.

# Questions?

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