# **Creating a Poster in Microsoft PowerPoint**

**Digital Media Commons** 

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This guide was developed with PowerPoint 2016 and PowerPoint for Mac 2011. Last updated by Jane Zhao on Friday, February 2, 2018.

# **Objectives**

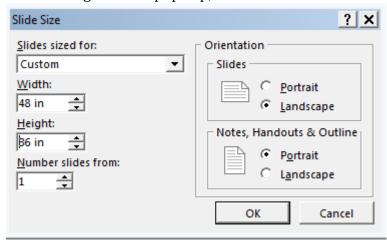
- Set up a correct poster size
- Use rulers and guides when needed
- Learn the general rules for creating a poster in terms of font, font size, etc.
- Be able to insert and edit text boxes, shapes, and images
- Master the concept of image resolution and tell whether an image will print fine or not based on its pixel dimension
- Choose proper colors for foreground and background
- Print a poster

# I Creating a poster and adding text

#### 1. Creating your poster to the actual size you want it printed

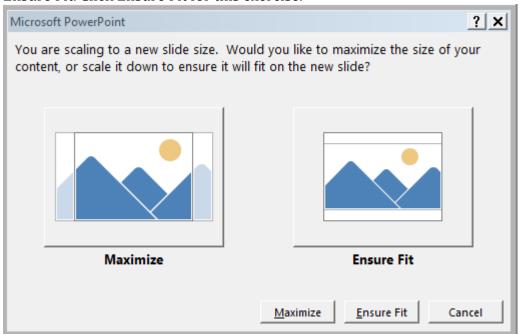
Open PowerPoint,

- In Windows: select the **Design** tab, then click **Slide Size->Custom Slide Size...** In Macs: **File -> Page Setup**
- In the dialog box that pops up, select **Custom** under **Slides sized for**:

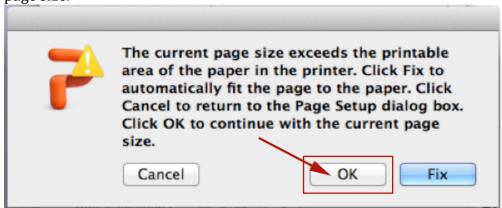


• Then enter the width and height of your poster, in inches. PowerPoint will automatically set portrait or landscape orientation based on the measurements you enter. Click **OK** button.

• Since you don't have any content yet, it doesn't matter you click Maximize or Ensure Fit. Click Ensure Fit for this exercise.



• If PowerPoint pops up a new message warning you the page size exceeds the printable area of the paper in the printer, click **OK** to continue with the current page size.



#### PowerPoint slide size limitation

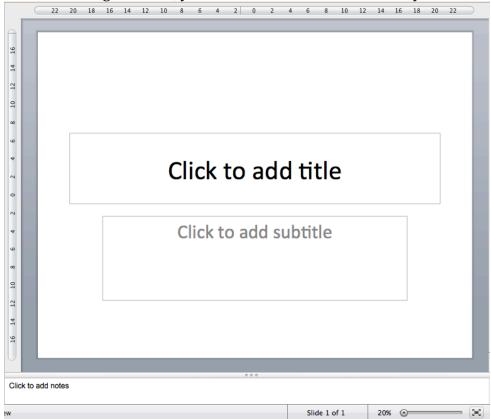
- The maximum size PowerPoint will allow for a slide is 56".
- Don't resize a poster within PowerPoint once it is done since resizing a poster will mess up the layout of the poster including spacing between objects and formats of text and images. So it is very important that you start your poster with the right size.
- Check the instructions for the poster sessions where you are presenting your poster. Create your poster to the actual size that you want it printed to reduce printing problems. Typical poster sizes include 20"x30", 36"x24", 48"x36", 60"x48", and 42"x42".

#### 2. Turning on the ruler and guides

- Ruler and guides can help you divide your poster evenly into three or four columns.
- They can also help you lay out the poster elements better.

#### 1) Turning on the ruler

- In Windows, View tab -> Ruler
   In Macs, go to View -> Ruler
- You can see the rulers appear on the top and left hand side of your slide/poster. At the lower right corner, you can also see the zoom level of your current view.



Note: the zero point is in the center of the ruler and there is no way you can change the way ruler displays in PowerPoint.

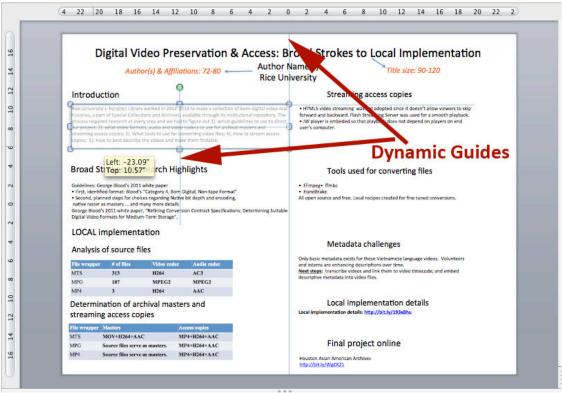
# 2) Turning on the guides

- In Windows, **View** tab -> **Guides**
- In Macs, View -> Guides -> Static Guides and Dynamic Guides

#### 3) Creating and deleting static guides

- Hold down Option key on Mac or Control key on PC, and drag away the existing guide will create a new guide.
- Drag away the guide out of the slide area will make the guide disappear.

#### 4) Using dynamic/smart guides



When you drag an object on a slide, the dynamic guides/smart guides try to determine where you want to put the object or what other objects on the slides you might want to align with it. In the example above, the dynamic guides attempt to align it with the middle of the slide.

#### 3. Poster content

In general, your academic poster will have the following elements:

- 1) Title and author list
- 2) Abstract/introduction/motivation/problem statement
- 3) Methods
- 4) Results/findings (to date) or expected
- 5) Possible applications, value to society
- 6) Future work
- 7) Acknowledgement
- 8) References

## 4. Poster layout

- Based on the content you will cover in your poster, decide the layout of your poster. Let content dictate layout.
- Flow of the poster has to be top left to lower right.
- Top to bottom, left to right in vertical column is the most commonly used layout.



 Decide whether you want to have one column, two columns or three columns for your layout.

#### 5. Text and Text Box

To make your poster succinct, use bulleted points and phrases in lists instead of full paragraphs.

#### 1). Text font

Use San Serif font since these fonts are more legible from a distance. Serif (i.e. a small line attached to the end of a stroke in a letter or symbol) is more readable in print/document. Below are typical san serif typefaces:

- a. Calibri (default font for Microsoft Office 2010, 2013, and 2016).
- b. Arial
- c. Helvetica
- d. Futura
- e. Gill Sans
- f. Trade Gothic
- g. Caslon

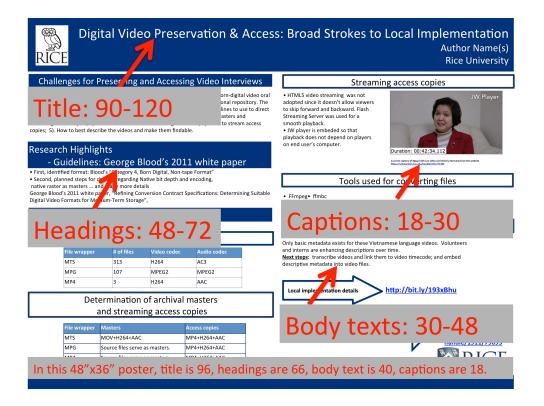
#### 2). Text size

Make sure text is legible 3-6 feet away.

Title: 90-120Headings: 48-72Body text: 24-36Caption: 18-20

#### Note:

- To be legible 6 feet, use 30 pt.
- To be legible 12 feet, use 60 pt.



## 3). Text box

You can use Text box to insert any types of text.

- To insert a Text Box: Home -> Insert -> Text -> Text Box, click and drag on the top of the poster to create a text box. The text box is automatically resized to the font size.
- **To format text**, select the text box (i.e. *You can click inside the text box, then click on the edge of the text box to select the text box)*, then adjust the settings for all the text that is contained in that text box. Or select specific text and adjust the settings.
- To use the same setting to create a new text box, right click on the text box border and select Set as Default Text Box.
- To duplicate a text box to maintain a consistent setting, hold down Ctrl key on PC /Option key on Mac, then drag away the selected text box. Release the mouse button first, then release the Ctrl/Option key. This is also the time that you will find out that having dynamic guides turned on will aid you align the objects better. Note:
  - The default font of the blank presentation theme is Calibri that is a good font for posters. If you choose a different font such as Helvetica, it is more convenient that you use "Set as Default Text Box" function, or you duplicate an existing Helvetica text box instead of changing the default font size on the slide master. This custom default setting will only apply to

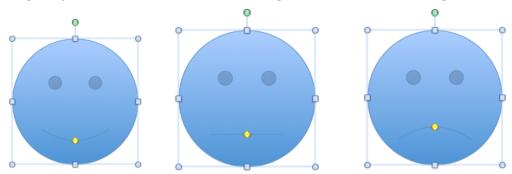
- that PowerPoint file. If you create a new PowerPoint file, everything will go back to Microsoft's default setting (i.e. the default font will go back to Calibri).
- If you copy text from a Word file, use paste "Keep Text Only (T)". This will make the copied text use the font selected for the textbox.
- To format Shape Fill and Shape Outline of a text box, use Shape Fill
  - and Shape Outline to change settings respectively. Click on the triangle on the button to access Fill Effects and Line Effects.
- To move a Text Box, park your pointer over a part of the edge of the Text Box. The pointer should become a four-headed arrow. Click and drag the Text Box to move.
- **To rotate a Text Box,** drag the rotation handle, the green circle above the text box.
- **To work faster,** you can group shapes, pictures, or other objects. Select the shapes or other objects, then right click over the selected objects, choose **Group**. Note: The Group button may be grayed out if the shape, picture, or object has been inserted into a placeholder or you are trying to group a placeholder, as placeholders can not be grouped with other shapes and objects.

# II Inserting shapes, tables, charts, and images

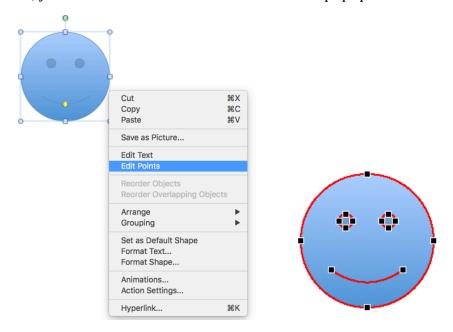
### 6. Adding Shapes

- 1) **To insert a shape,** Home -> Insert -> Shape -> Rectangles, click and drag to create two rectangles.
- 2) **To format Shape**, use Shape Fill and Shape Outline settings respectively.
- 3) **To Resize Shape**, drag the corner or side handles.
- 4) **To Rotate Shape**, mouse over the green dot over the shape, press down the left button and hold, and move the mouse.
- 5) To Edit Shape

a) Drag the yellow diamond handle to change the smile face to straight face to sad face.



b) Right click over the shape, choose Edit Points. Right click over any black square edit point, you can choose different actions from the popup menu.

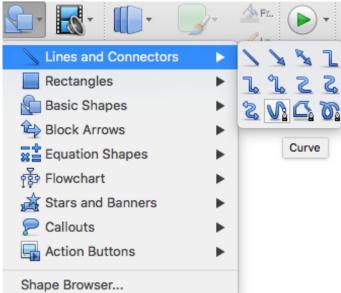


6) **To change a shape into a text box,** click in the shape and start typing. The shapes are converted to text boxes.

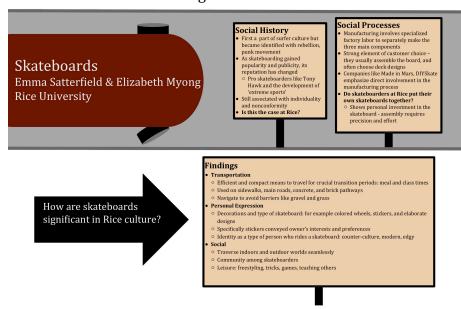
## 7. Drawing a curve

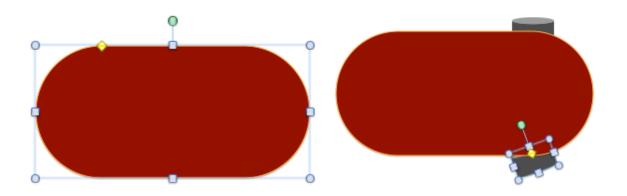
1) On the Insert tab, in the Illustrations group, click Shapes.

2) Under Lines, click Curve.



- 3) Click where you want the curve to start, move your cursor to a point where you want a curve and click, then at the ending point, double-click to end the shape.
- **4)** You can group two or more shapes together and scale it up and down and format them together.
- 5) Since Line doesn't have fill effect, you can't select a line and start typing.
- **6)** In the poster below, the Skateboard could be made of a Rounded Rectangle and two Cans. The Rounded Rectangle was customized with the yellow handle to have a very round curve on the short edge.





#### 8. Adding Tables and Charts

- On PC, go to **Insert** tab, click on **Table**;
- On Mac, select: **Insert > Table...** or from the **Tables** tab -> New
- If you copy a table from a Word file, when you paste, among the paste options, you can choose
  - Use Destination Style(S)
  - Keep Source Formatting (K)
- Double click the table to get the Table Tools tab displayed. Then format the table the way you want it.
- Note: You can only format a table at a time. You can't select two tables and format them at the same time.

#### 9. Inserting images

#### 1) To insert image

On PC, go to **Insert** tab, click on **Picture**;

On Mac. select: Insert > Picture > From File...

#### 2) Image format and resolution

- a) The common accepted file formats are jpeg, png, and tiff.
- **b)** After inserting a photo, scale it up and down to make it fit to your poster. Double click on the photo, on the upper right corner, the photo dimension in inch will be displayed.



**c)** 200 ppi (pixels per inch) is required for a decent printout. Use the formula *Image dimension x 200ppi* to calculate the pixels needed. In this case, you will need at least these amount of pixels 5.72x200=1144 pixels for height and 10.11x200= 2022 pixels for width to print out a sharp looking image.

#### 3) Check image resolution

• On Mac, open the image with Preview, Tools -> Adjust Size..., next to Width and Height, choose Pixel, image pixel dimension will be displayed 1021x577.

 On PC, right click over the image, choose Size and Position, or open the image with Paint, Home -> Resize, check Pixel option, the image pixel dimension will

be displayed.



So the safe print out size for this image is about 5"x3". You can probably scaled it up to 10"x6". But you don't want to scale it over 200% to make it look super blurry or pixelated.

You can also add more pixels in to prevent pixel artifact from displaying. This
process will make the image look blurry (i.e. not that sharp anymore) and will
not increase the amount of details. This applies to PowerPoint for Mac 2011.
You don't have to do anything on PC since PowerPoint 2010 on PC will
automatically add more pixels when the image is scaled up.

# 4) Problems of low resolution images

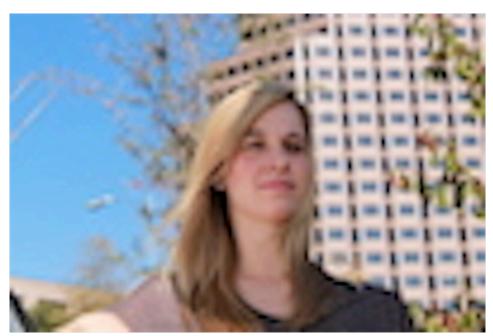
If an image is in a very low resolution, it may look pixelated or blurry when it is enlarged and printed.



A thumbnail image with pixel resolution of 100x67.

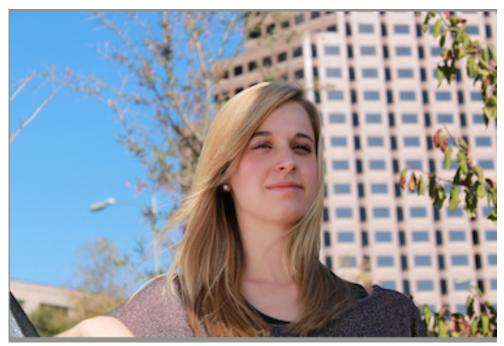


The original thumb nail image printed in 6"x4", looking very pixelated. (note: this is what the 6"x4" printout looks like when the thumbnail image is scaled up and printed in PowerPoint for Mac 2011.)



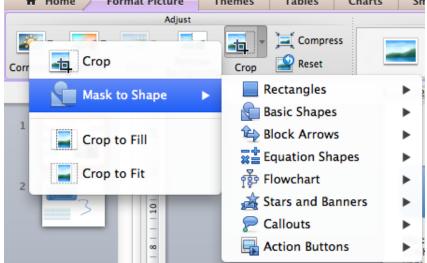
The edited image with more pixels added in, 1200x804, printed in 6"x4", not pixelated, but very blurry.

(note: this is what the 6"x4" printout looks like when the 100x67 thumbnail image is scaled up and printed in PowerPoint 2010. More pixels have been automatically added in by PowerPoint 2010 so you don't see the pixelated effect.)



The original image with resolution of 1200x800, printed 6"x4", sharp and not pixelated.

- 5) To scale image, drag the corner handle, you will resize the image proportionally; if you drag the side handle, you will stretch the image that way.
- 6) There is no text wrapping function (i.e. text wrapping around objects such as tables, pictures) in PowerPoint. You can use multiple text boxes to surround a square/rectangle object, or put the irregular object behind the text box and use space key to move the text away from the underlining object. See wrap text around an object in PowerPoint 2010 for more details.
- 7) Crop a picture or place it in a shape
  - Select the picture that you want to crop to a specific shape
  - Format -> Crop to Shape for PC or Mask to Shape for Mac Home **Format Picture** Themes Charts Tables



 For instance, cropping a picture to a parallelogram shape like the screenshot below.



• Below is a sample poster that uses this technique.



# III Choosing colors and fine tuning the poster

## 10. Using high contrast colors between foreground and background

You can borrow PowerPoint's built-in color themes or refer to it for inspiration. There are visibility rules built into the theme. The light colors are always visible over the dark colors and vice versa, such as when dark color text is used over a light background. There are six accent colors that look good over any of the four possible background colors.

a) **Design -> Variants -> Colors**, for instance, select **Office**,



b) Go to the bottom of the panel, select Customize Colors...

- c) You can see what colors are used for text (i.e. foreground) and background. In general, light text and graphics will go with dark background and dark text and graphics will go with light background.
  - Dark background with light text and graphics
    - o Background a dark blue or dark purple
    - o Text and graphics white or yellow
    - o Accent colors red, lime green, camel orange, light blue



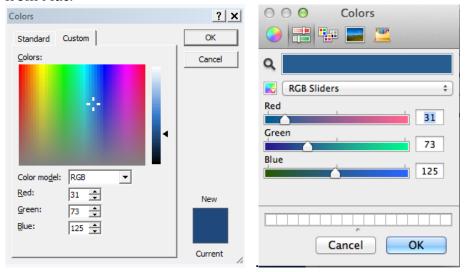
- Light background with dark text and graphics
  - o Background warm beige or white
  - o Text and graphics dark blue, black, dark purple

Accent colors – dark green, burgundy



Note: Accent 1 in the theme will be the default color when you draw lines and shapes. It is also the head cell colors for tables.

**d)** If there is a particular combination of foreground and background you like, you can double click on the color square to open the Colors window and write down the RGB value. Clicking on Text/Background – Dark 2 square in the above image will open a Colors window like below, left is a screen shot from PC and right is a screen shot from Mac.



- When you choose a color for Shape Fill, Shape Outline, or background, you can always match the RGB values on the Colors window with what you have. For instance, Rice blue is RO G36 B106. Under More colors, type in the RGB value.
- e) Color combinations to avoid
  - Red & Green these two colors clash with each other and are hard to read.



o Orange/Red & Blue – these two colors vibrate against one another.



## f) Changing the background color

Try to stay away from anything that is too distractive or busy. A solid color might be the best option .

- In Windows: on the **Design** tab- > **Format Background**.
   In Macs: on the **Theme** tab -> **Background -> Format Background**.
- Select a fill Color and/or Transparency. The transparency setting allows you to make the background image less saturated and make images underneath partly visible.
- To use an image as your background, select Picture or Texture fill and then Insert From File.

# g) To Match a color from an image (Mac only)

You can select any color in an image and apply it to an object or the slide as the background color.

- Under Color, click on the Automatic drop down menu and choose More colors...
- In the upper left corner of the **Colors** dialog box, click the magnifying glass.



• Your cursor will turn into a magnifying glass. You can even move the cursor onto an image outside of PowerPoint.



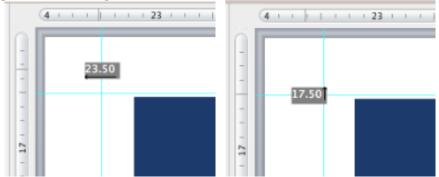
• On the image click the color that you want to apply to the object/slide, then click the OK button to apply the color.

# 11. Fine tuning all the elements

- Leave at least ½"margin around the entire poster so that you could print your poster at its actual size.
  - Any printers will have a non-printable margin. E.g. Plotter HPZ6800 has 5mm (i.e. 0.2 inch) non-printable margins on all four sides. For instance, a 36"x48" poster, if the content of your poster goes all way up to the edge.

you either have to fit the poster to the loaded 36"x48" roll of paper, or you can print your poster at actual size on a bigger size paper. Ask a professional staff to help you if you are not sure how to get the print settings right.

- Line up the objects on your posters with snapping feature and guides
   In Windows, View tab -> Guides and Gridlines
   In Macs, go to View -> Guides -> Static Guides
  - Hold down Option key on Mac or Control key on PC, and drag away the existing guide in the gray area will create a new guide.
  - Drag away the guide out of the slide area will make the guide disappear.
  - When you drag a guide to a corner to mark the ½" margin, you will notice a number displaying on the guide, which indicates the exact position of the guide.



 Once you have the guides in the position you want, you can then drag the object to line up with the guides.



You can use Zoom bar at the right bottom corner to zoom in and out as necessary.
 Note: in Macs, the dynamic guides replace grids. There is no setting to turn on grids.

## 12. Proofreading your poster

Make the spell check process part of your overall workflow to avoid some potentially embarrassing situations.

- 1) On Pc, go to Review -> Spelling
- 2) On Mac, go to Tools -> Spelling

At this point, the Spellcheck runs through the whole slide and helps you correct any typos.

# **IV Printing**

#### 13. Printing

File -> Save As.., Format -> PDF, save the PowerPoint file to a PDF file. Carefully check the newly created PDF file to make sure all the spacing and formats are preserved from the PowerPoint file, then print the PDF file from Adobe Acrobat.

#### Resources

- Poster templates available on the DMC Guides web site: <a href="https://wiki.rice.edu/confluence/display/DMCGUIDES/DMC+PowerPoint+Poster+Templates">https://wiki.rice.edu/confluence/display/DMCGUIDES/DMC+PowerPoint+Poster+Templates</a>
- Sample poster web sites:
  - Gallery of customer work at PhD Posters http://phdposters.com/gallery.php
  - Eposters, the online journal of scientific posters. http://www.eposters.net/
  - Pimp My Poster Flickr Group https://www.flickr.com/groups/pimpmyposter/
  - SURP Poster Awards 2005 from Stanford U. http://web.stanford.edu/dept/undergrad/urp/SURP/surpawards05/
- Cain Project: Poster Resources. (n.d.). Retrieved January 20, 2012, from <a href="http://www.owlnet.rice.edu/~cainproj/ih\_posters.html">http://www.owlnet.rice.edu/~cainproj/ih\_posters.html</a>
- The parts of a scientific poster <a href="http://www.makesigns.com/tutorials/scientific-poster-parts.aspx">http://www.makesigns.com/tutorials/scientific-poster-parts.aspx</a>
- Designing conference posters <a href="http://colinpurrington.com/tips/poster-design">http://colinpurrington.com/tips/poster-design</a>
- Guidelines for Posters. (n.d.). Retrieved January 20, 2012, from http://www.pitt.edu/~etbell/upj-space/PosterGuide.htm
- Poster Design Tips PRI Help. (n.d.). Retrieved January 20, 2012, from <a href="http://help.pop.psu.edu/publishing-and-research-methods/poster-design-tips">http://help.pop.psu.edu/publishing-and-research-methods/poster-design-tips</a>
- Poster Presentations University at Buffalo Libraries. (n.d.). Retrieved January 20, 2012, from <a href="http://library.buffalo.edu/libraries/asl/guides/bio/posters.html">http://library.buffalo.edu/libraries/asl/guides/bio/posters.html</a>
- Wertheimer, A. (2009). 2009 Poster Mini-Conference. Retrieved from http://www.flickr.com/photos/andrew\_wertheimer/4178828660/
- An Effective Poster: Creating Effective Poster Presentations. (n.d.). Retrieved January 20, 2012, from http://www.ncsu.edu/project/posters/NewSite/index.html

• Group or ungroup shapes, pictures, or other objects in PowerPoint 2007 <a href="https://support.office.com/en-IN/Article/Group-or-ungroup-shapes-pictures-or-other-objects-in-PowerPoint-2007-2e4219e2-ad55-45b5-a428-4e05210d398a">https://support.office.com/en-IN/Article/Group-or-ungroup-shapes-pictures-or-other-objects-in-PowerPoint-2007-2e4219e2-ad55-45b5-a428-4e05210d398a</a>

#### **PowerPoint Tips**

- "How to Create a Custom Color Palette in PowerPoint: Speaking PowerPoint." Accessed December 9, 2014. <a href="http://speakingppt.com/2012/12/21/how-to-create-acustom-color-palette-in-powerpoint/">http://speakingppt.com/2012/12/21/how-to-create-acustom-color-palette-in-powerpoint/</a>.
- "Create Effective Business PowerPoint Presentations; Dave Paradi." Accessed December 12, 2014. <a href="http://www.thinkoutsidetheslide.com/">http://www.thinkoutsidetheslide.com/</a>.
- Wrap text around an object in PowerPoint 2010 <a href="https://support.office.com/en-au/article/Wrap-text-around-an-object-in-PowerPoint-2010-386d81b1-925a-494d-83f5-f17b45b4b657">https://support.office.com/en-au/article/Wrap-text-around-an-object-in-PowerPoint-2010-386d81b1-925a-494d-83f5-f17b45b4b657</a>
- Draw a curve or circle shape <a href="https://support.office.com/en-us/article/Draw-a-curve-or-circle-shape-75e0b5a6-409f-49b2-ad8e-877bafde2ac7">https://support.office.com/en-us/article/Draw-a-curve-or-circle-shape-75e0b5a6-409f-49b2-ad8e-877bafde2ac7</a>
- How to permanently change the default font in PowerPoint https://www.shapechef.com/blog/change-the-default-font-inpowerpointhttps://www.shapechef.com/blog/change-the-default-font-inpowerpoint