Creating Posters for Professional Meetings

Goal: Create a poster to be displayed at professional meetings.

Tasks to be covered:

1. Getting Started
2. Content
3. Poster Design Tips
   a. Color
   b. Text
   c. Illustrations
   d. Layout
4. Adobe Illustrator Basics
5. Using Adobe Illustrator tools
6. Inserting and Editing Files from Other Applications (Excel charts, Word documents, JPEGs/image files)
7. Saving and Exporting your file as a PDF
8. Printing a Preview of Your Poster
9. Preparing Your Poster for Professional Printing
10. Online Guidelines, Tips and Instructions for Preparing Posters
11. A few recent books added to the Demography Library collection on generating graphics with statistical data

Templates with the Penn Logo for large professional posters (created in Adobe Illustrator) are available in the shared network drive (psc$ on 'pscworld (pscworld.ssc.upenn.edu)') in a folder called "Templates". To access these poster templates, go to My Computer. Open the Network Drive (psc$ on 'pscworld (pscworld.ssc.upenn.edu)') and then open the folder "Templates" and then open the folder "PAA poster templates" [J:\Templates\PAA poster templates].

These poster templates are available in 96" x 48", 96" X 40", 60" x 40", and 80" x 40". There are a few different color schemes and designs to choose from **but you can modify them in any way you would like including poster size.**

Download the Penn Logo of your choice with your PennKey here:
http://www.upenn.edu/webguide/style_guide/logo.html

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1. Getting Started

The goal of a poster presented at a professional meeting is to:

(1) attract attention to your research with a well designed poster
(2) efficiently communicate information about your research

(3) give you an opportunity to network with other researchers interested in the field.

Your poster should be visually appealing, easy to understand, accurate and should provide a snapshot of your research.

In many cases, you should be present at the poster session to explain your poster and to answer questions. Part of your goal is to engage your audience and to share your research. It's a good idea to have business cards or a few handouts on hand to give to people who are interested in following up with you about your research later, but read your conference poster session guidelines to find out what is or is not allowed.

2. Content

Each conference will have its own poster session guidelines. Be sure to follow those instructions regarding specific poster elements.

For advice or opinions about the content of your poster, please consult a GGD Faculty member, PSC Research Associate, or your advisor for assistance.

No additional mounting is necessary if you print your poster on one of the media described in section 9.

3. Poster Design Tips

Color

Color in a poster presentation is a very useful tool. An effective color scheme is more than just making the poster look pretty. Color can be used to draw attention to your poster and make it stand out from the many other posters in the room. Small bits of color strategically placed around the poster can highlight areas that are important.

1. In the very beginning, choose a few colors that you will be working with throughout the entire poster design process.
2. Use these colors when creating your graphs, charts, illustrations, etc.
3. Avoid harsh, contrasting, primary, or neon colors. While your poster should standout, it should also be pleasing (*and easy*) to look at.
4. Text should be placed on a contrasting light/dark color. (Light-colored text on a dark background or dark-colored text on a light background.)
5. *Avoid large amounts of light text on dark backgrounds. This can be useful in small amounts—titles, headings, etc. In large paragraphs, it can be tiring on the eyes.*

6. Kuler at: http://kuler.adobe.com/ is a great resource for finding color themes that you might want to use in your poster. Once you find a theme you like click on this icon, which allows you to view the color values and make changes to the theme.

Text

1. Title should be at least one inch high (approx. 120pt type size.)
2. Main text should be a 24pt or 36pt type size.
3. Avoid text in all UPPER CASE. IT CAN BE DIFFICULT TO READ IN LARGE AMOUNTS OF TEXT. MAKE TEXT AS EASY TO READ AS POSSIBLE.
4. Use **bold** or *italics* for emphasis.
5. Choose fonts that are appropriate for a professional publication.
   Fonts often used in main text (serif fonts): **Times New Roman, Palatino**
   Fonts often used in titles and headings (sans serif fonts): **Arial, Tahoma, Myriad**
   (These are merely suggestions--any of these fonts would be fine choices.)
6. Avoid fonts that are distracting or difficult to read. Avoid all fonts that are designed to look like hand-writing. (Comic Sans, Monotype Corsiva, Curlz.)
7. The "Title" banners often contain author(s) and affiliations as well

Illustrations

1. Use illustrations as much as possible (graphs, charts, tables, figures, maps, images, etc.).
2. Text should be used to support the illustrations *(see the poster guidelines for your conference).*
3. Include a legend describing the content of the figure and your conclusions.
4. Label illustrations and figures with a title or heading.
5. They should be able to viewed and read from a distance.

Layout

1. Do not overcrowd the poster.
2. Allow margins of at least 3-4 inches between all major poster components.
3. Organize components into columns. Columns of text should be no more than approx. 14 inches wide avoiding long textual passages.
4. Columns are easier to read at a large scale than rows.
5. Use bulleted lists wherever possible (instead of long paragraphs).
6. Graphs and charts should be labeled using either numbers or letters at least one inch high *(see the poster guidelines for your conference).*
7. Other graphic elements (such as arrows or lines) can be used to lead the reader's eye from one point to another.

* Non-traditional and non-linear posters have also won awards. Sometimes experimenting with layout can be an effective way of conveying the content of your poster. If you have any ideas or other layouts in mind but are not quite sure how to do it,

please contact Demography Library staff for assistance. We are more than happy to meet with students individually.

4. Adobe Illustrator Basics (Instructions may vary slightly between versions)

Illustrator is a desktop publishing program that is most useful when creating large posters of this size. Demography Library staff have created several templates to choose from with most major design elements already incorporated into the poster. These templates are available in the shared network drive in a folder called "Templates," see: J:\Templates\PAA poster templates. You may also create your own files without the use of any templates.

Instructions for working with Adobe Illustrator in the PSC Lab (the PC to the left and the PC to the right of the scanner have Illustrator installed on them:

Opening a template.
1. Launch Adobe Illustrator.
2. File > Open > Choose template from the "Templates" folder on the shared network drive "psc$ on 'seadog".
3. Save file.

OR Create a new file.
1. Launch Adobe Illustrator. (Shortcut is located in the *Multimedia folder* on the desktop.)
2. File > New
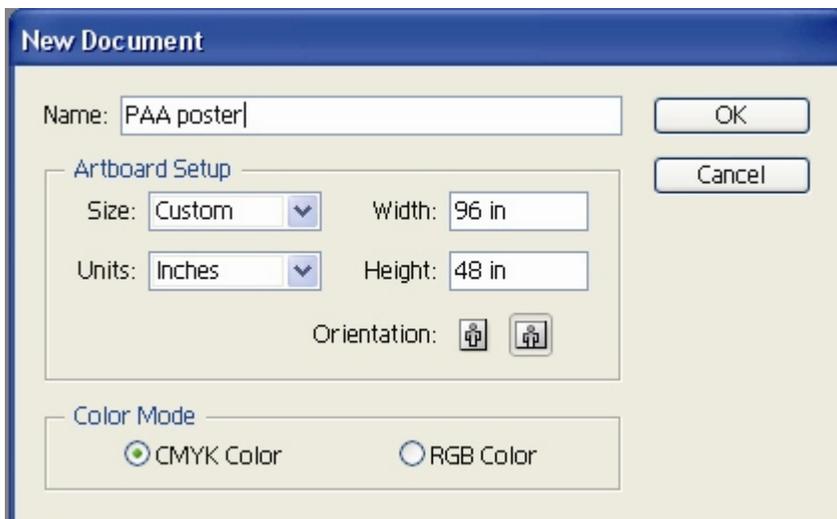
3. Name the file.
4. Type in the dimensions of the poster.
5. Select CMYK in the Color Mode.

6. Press OK.

5. Using Adobe Illustrator Tools

Selection Tool ——— Direct Selection Tool

Type Tool

Line Tool ——— Rectangle Tool
(more shapes hidden underneath. Click mouse
and hold to reveal more tools.)

Rotate Tool ——— Scale Tool

Free Transform Tool (scaling, rotating, skewing)

Eyedropper Tool

Hand Tool ——— Zoom Tool

Color Picker
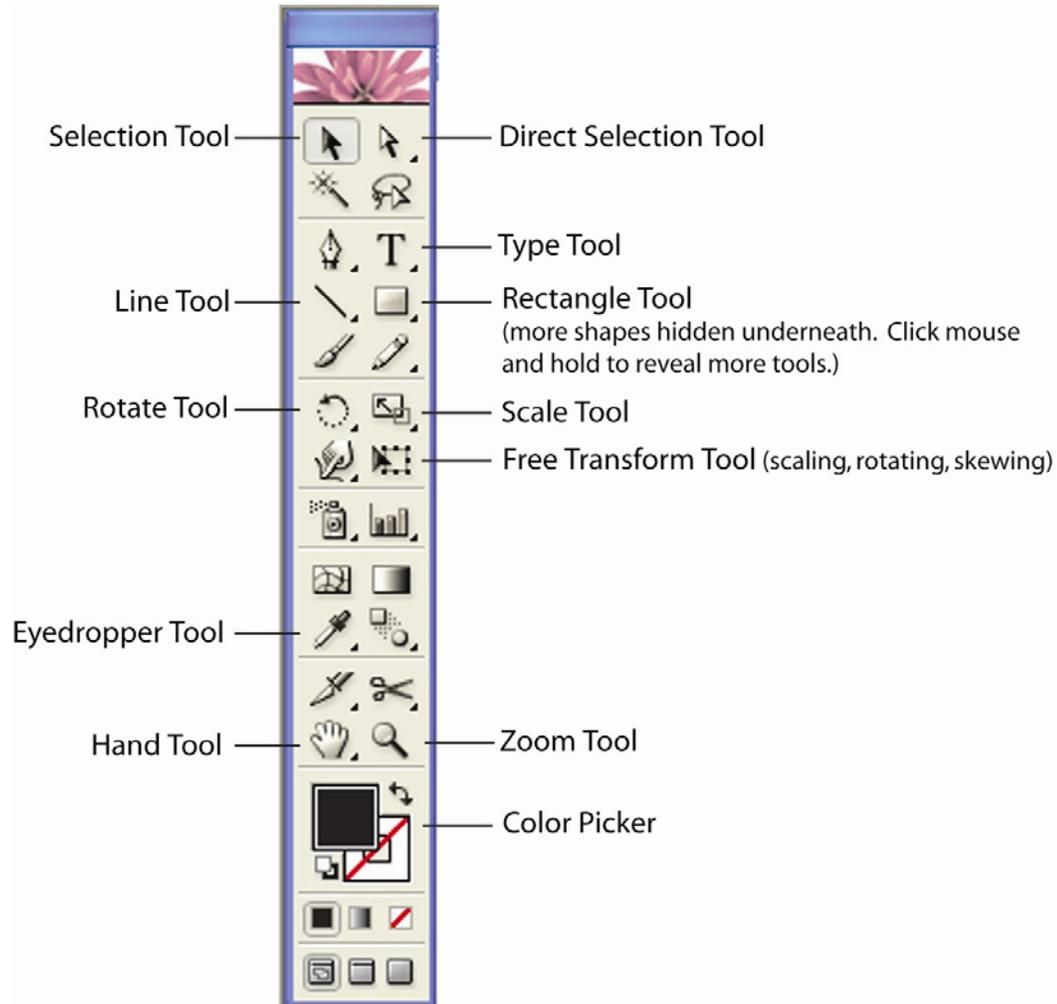
About the toolbar:

Shown above are some of the more common tools that you are most likely to use when
working in Illustrator. For more detailed information about any of the tools, go to the
Help menu > Tutorials > Using Tools and Commands.

(Some tools in the toolbar have a small triangle in the lower right corner. This indicates
that more similar tools are hidden underneath. To reveal these hidden tools, click on the
icon and hold until another option bar appears.)

Selection tool selects the entire object. You will probably use this tool more than any other tool. Before any other command, you will most likely have to select the object first. Selection tool is also used to move an object around within the document
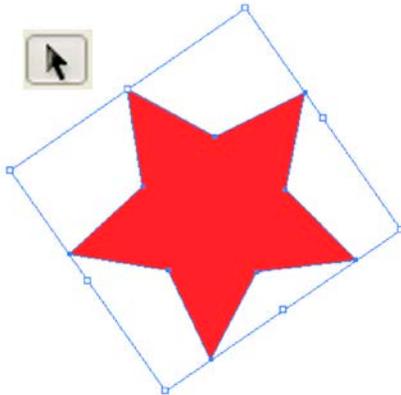

Type tool.

Draw a text box. Type directly into the textbox, or copy/paste text from another document (such as a Word document.) Use the **selection tool** to adjust the size of the textbox at any time. It will not affect the text inside. However, if the text cannot fit inside the text box, the text will be cut off.
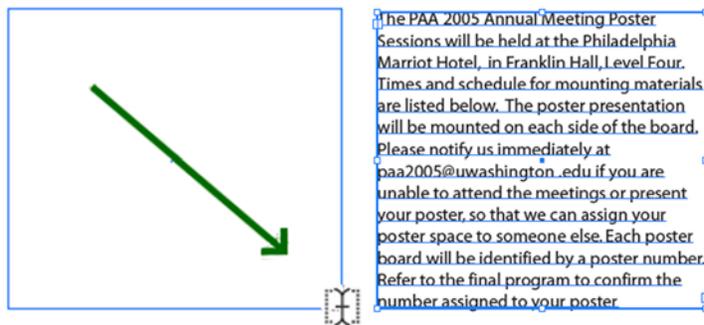
Rectangle Tool (and other shape tools hidden underneath.) These tools are used to draw shapes. These shapes can be modified using the **direct selection tool.** Surrounding each shape is a border called the stroke.
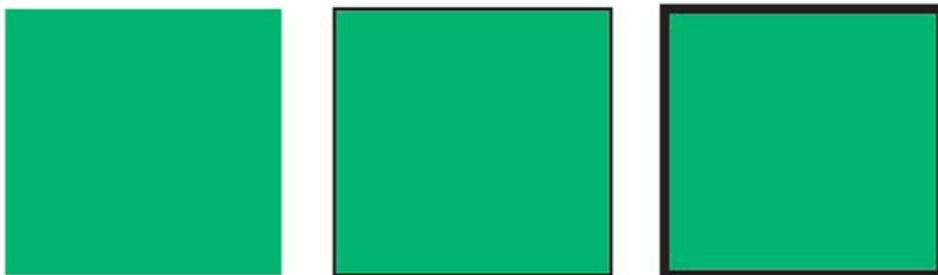
Adjust the thickness of the stroke (border) by changing the **weight** in the stroke palette.
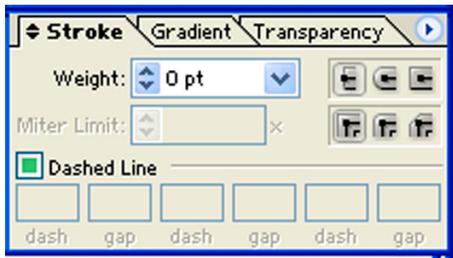
Color Picker: Changes the color of any object or text that is selected. A red line through the box indicates that no color is selected. The box in the top left is the main color (used for the object, text, etc.) The color in the bottom right is for the stroke (or border) of an object.

To change the color (in either the main object or in the stroke) double click the box and choose a new color from the color picker. Press OK.
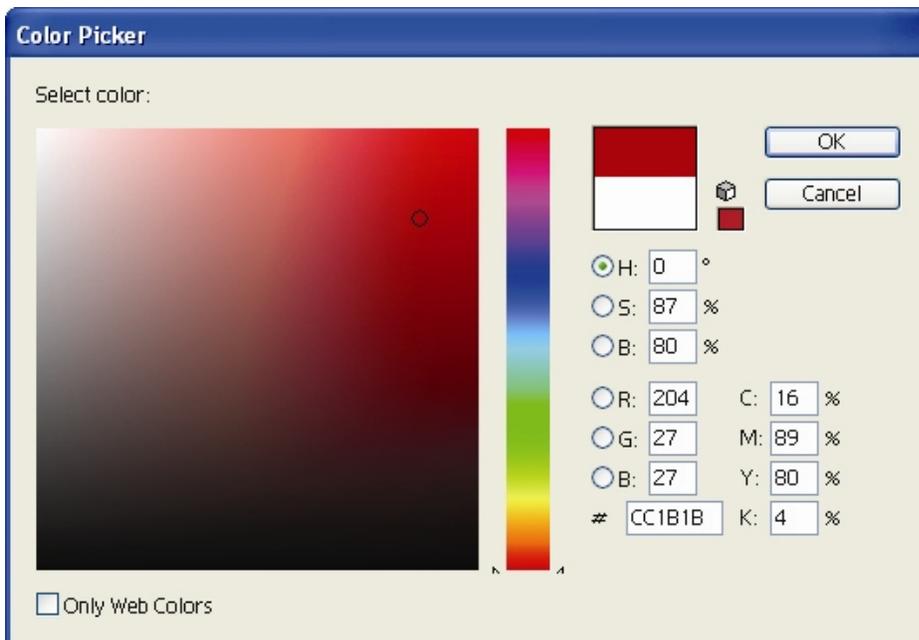
6. Inserting and Editing Files from Other Applications

Inserting an Excel Chart
1. Open spreadsheet containing the chart you wish to import into your poster.
2. Select the chart.
3. **Edit > Copy**.
4. Open poster in Illustrator.
5. **File > Paste**.

Inserting a Word Document
1. Open poster in Illustrator
2. **File** > **Place** > choose Word Document you wish to insert. (Another additional dialog box will appear. Keep all boxes checked and select OK.)

(Text can also be brought into Illustrator by copying and pasting from a Word document or by typing directly into a text box. See Using Adobe Illustrator Tools for information about the type tool.)
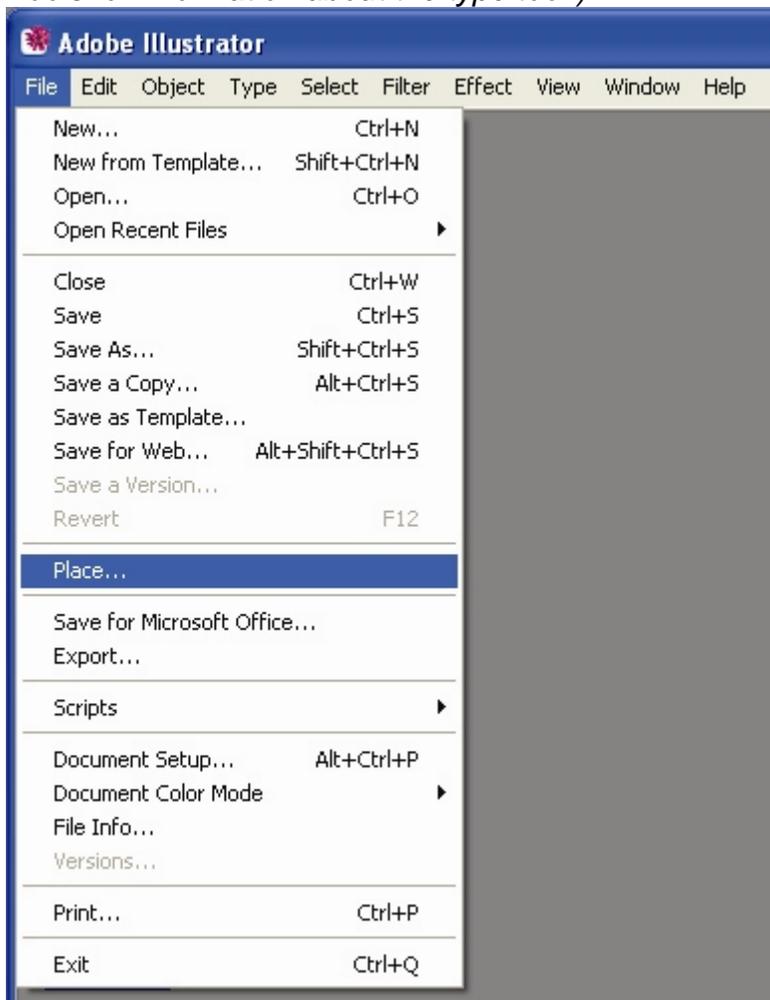
Inserting a JPEG or other image file

1. Open poster in Illustrator
2. **File** > **Place** > choose image files you wish to insert.

Be sure that any image file you insert has a resolution of at least **300 dots per inch (dpi).** This is the minimum resolution for printing. Images meant for screen viewing typically have a resolution of 72 dpi because this is the maximum resolution of a computer screen. Images pulled off the web will not print well because the resolution is too low.

It is *very* important to understand that just because an image looks good on the screen, it may not look that way when printed.

Editing objects inserted from other applications

Editing an Excel chart

When an Excel chart is imported into Illustrator, it is appears as one single object. However, it is actually a collection of very small objects ***grouped*** together. For the most part, you want to keep everything in the chart grouped together as one object. It is easier to move it around the poster if you do not have to select each individual component separately.

If you need to edit any part of the chart after it has been inserted, it will need to be ***ungrouped.*** The chart has several layers of groupings based on what areas you might want to be separated at one time. You may have to ungroup several times before every component is completely separated from each other.

1. **Select** the chart.
2. Choose **Object** (in the top main menu) and scroll down to **Ungroup**.

If the component is still grouped with something else, it will need to be separated again.

3. **Select** the parts of the chart that needs to be separated.
4. Right click and scroll down to **Release Clipping Mask.**

Everything should be separated. Now you can make the desired changes (change the colors, edit the text, etc.)

At this point, it is safest to ***re-group*** all of the pieces back together again so that nothing is accidentally moved out of place. It will also make it easier if you choose to move the chart around the poster.

1. Using the **Selection Tool**, draw a selection box around the entire chart (including each individual component).
2. Choose **Object** (in the top main menu) and scroll down to **Group**. Each of the smaller components are now grouped back as one single object again.

Editing a Word Document

Once a Word Document is inserted into Illustrator, it becomes an Illustrator text box. The text can be edited and formatted as you could with any other text box created in Illustrator. Use the "Type Window" to change the font, the size, and paragraph options. *(See "Using Adobe Illustrator Tools—Text".)*
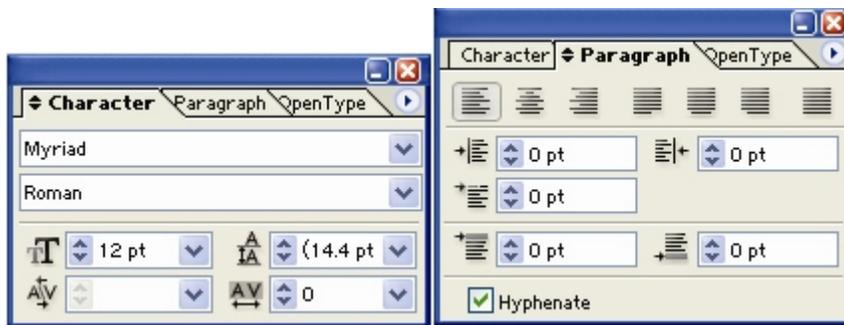
Scaling an object (making it bigger or smaller)

1. **Select** the object using the Selection Tool. There will be small white boxes on each of the corners of the selection box.
2. Roll your cursor over one of the boxes until your cursor turns into a double-sided arrow.
3. **Press down with the mouse + hold the Shift key down**.
4. While holding both the mouse and the shift key down, drag the corner to the desired size. (Holding the shift key down while dragging the corner will constrain the proportions.)

Rotating an object

1. **Select** the object using the Selection Tool.
2. **Right click** and scroll down to **Transform** > **Rotate**
3. A new dialog box will appear. Insert how many degrees you would like to rotate the object, and press OK.

Arranging the order of objects

As objects are brought into an Illustrator file, they are layered in the same order as they were brought in. The object imported most recently will appear as though layered on top of something brought in before it. You change this by *arranging the order of the object*.

1. **Select** the object.
2. **Right click** and scroll down to **Arrange** > choose from **Bring to Front**,
 Bring Forward, **Send Backward**, or **Send to Back.**

7. Saving and Exporting your file as a PDF.

1. **File** > **Save As**
2. Select **Adobe PDF** as the File Type in the drop-down menu.
3. Press **Save**.
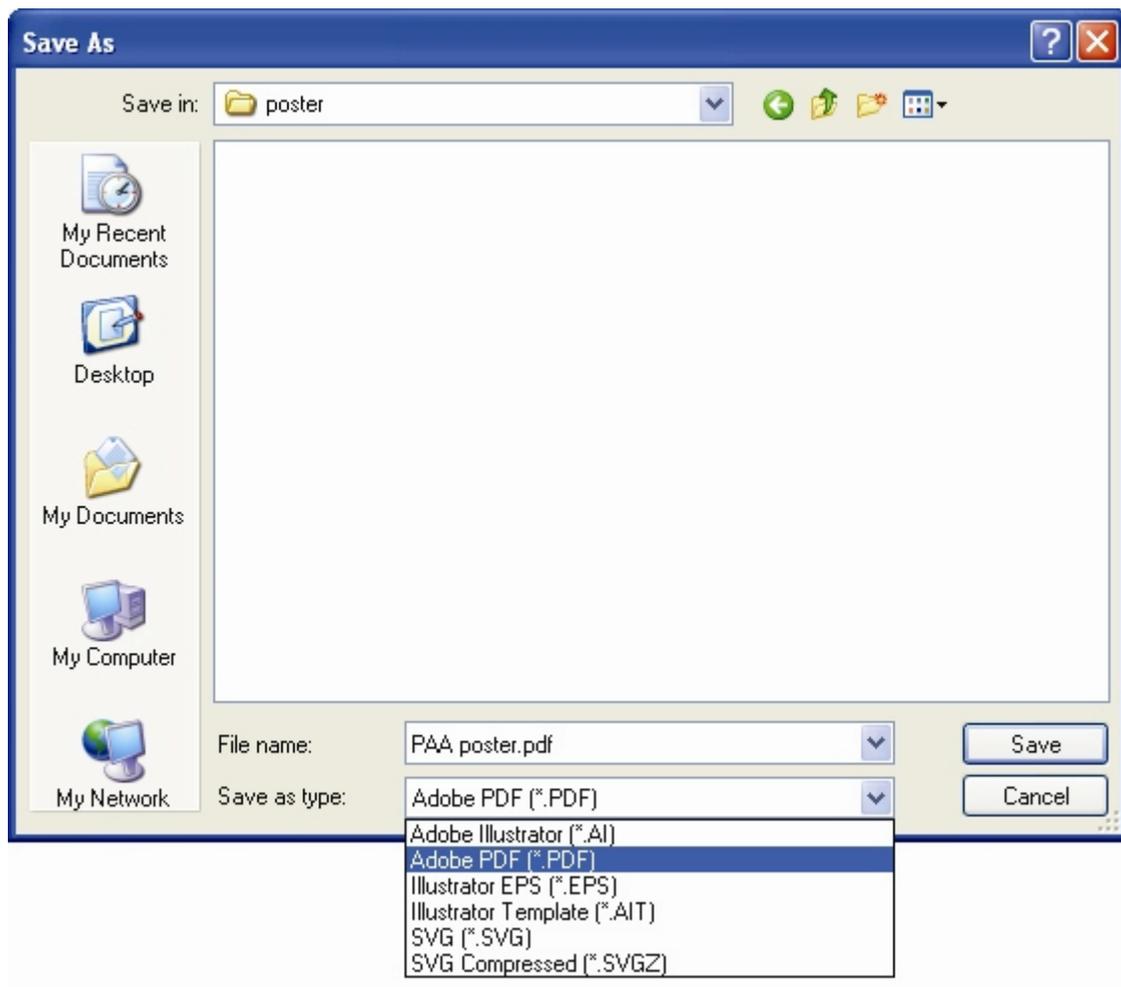
4. Another dialog box will appear. Keep the **Illustrator Default settings.**

5. Press **Save PDF**.
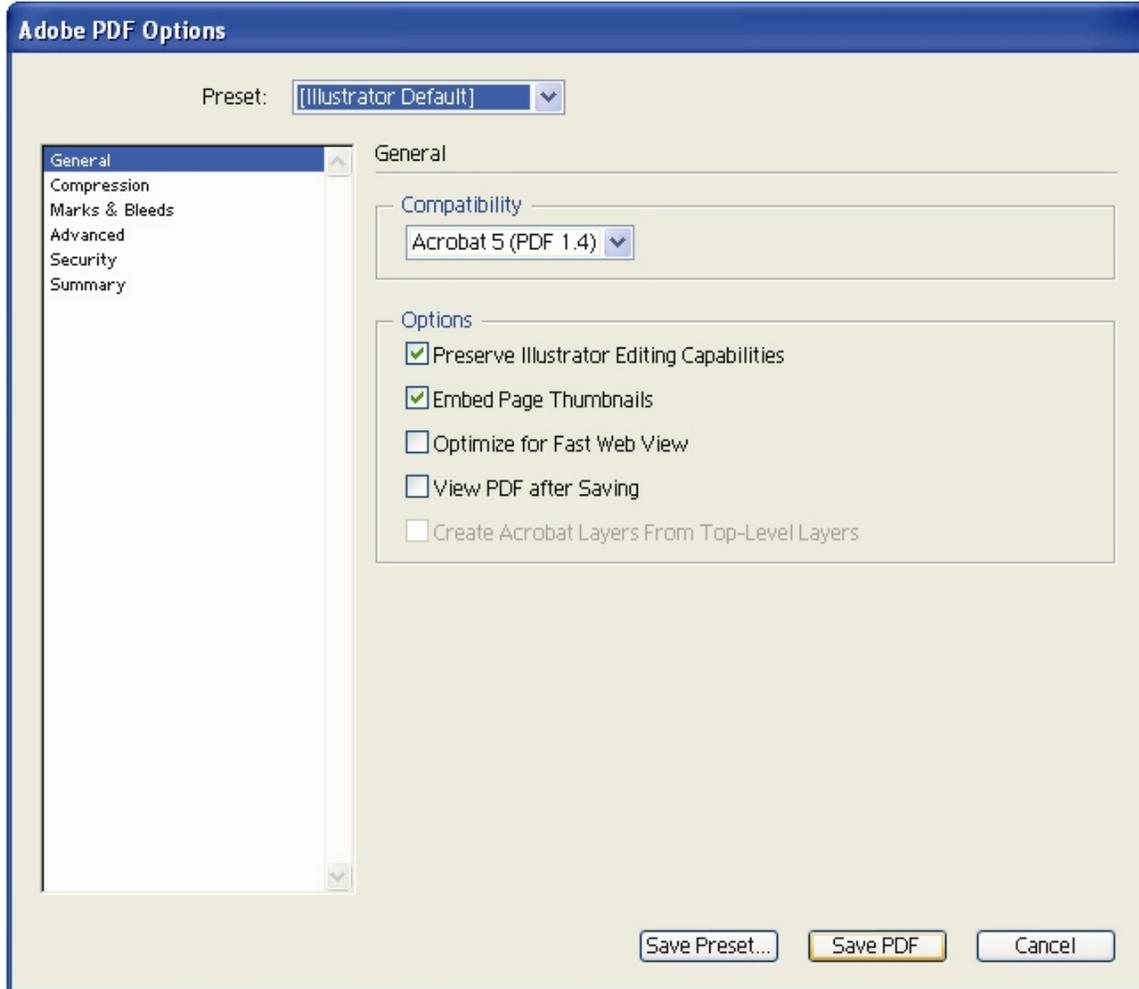
8. Printing a Preview of your Poster

On one sheet of paper
Print out your poster on a single sheet of paper to get a good sense of how the elements in your poster are spaced out and sized.
1. Open your PDF file
2. Go to File > Print
3. Select the Printer \\seadog\PSCLAB_Color
4. Make sure the paper Scaling is set to "Fit to paper"
5. Click OK
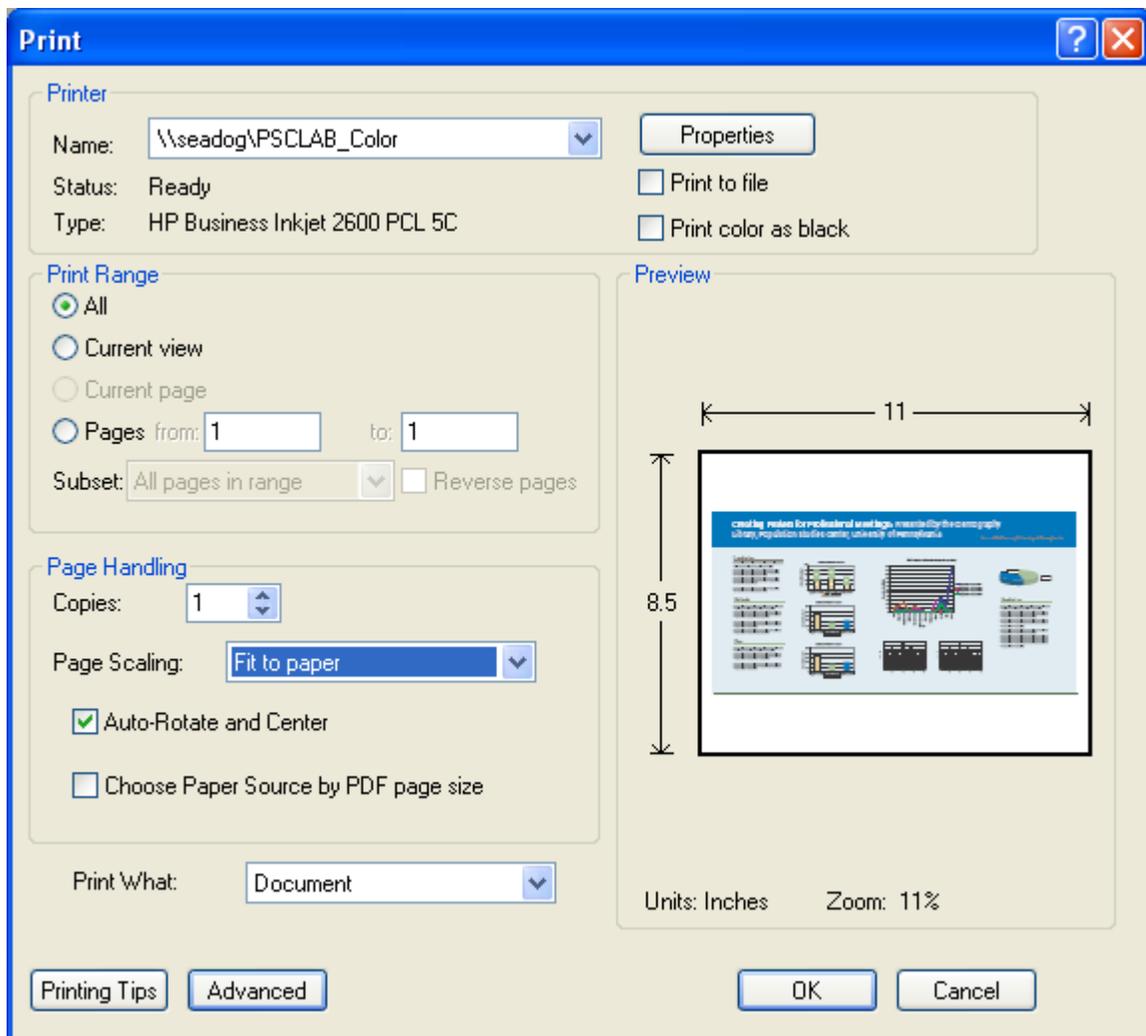
On multiple sheets of paper
To get a good sense of what your final product will more or less look like print out a full size color copy on multiple sheets. This will give you an opportunity to make changes and corrections, etc. to problematic areas of your posters that you may not have noticed on screen.

1. Open your PDF file
2. Go to File > Print
3. Select the Printer \\seadog\PSCLAB_Color
4. Make sure the paper Scaling is set to "Tile large pages"
5. Click OK

(The printer will automatically print your poster out at the appropriate size and will determine the number of sheets it will need to be printed on. Since the printer does not allow printing to the edge of the paper there will be a whit border around your poster. The poster was designed to be 96 x 48 inches wide – it will print out on 65 sheets of paper. The 65 sheets measure 110.5 x 55 inches although the

actual printed image of your poster should measure 96 x 48 on those printed sheets.)
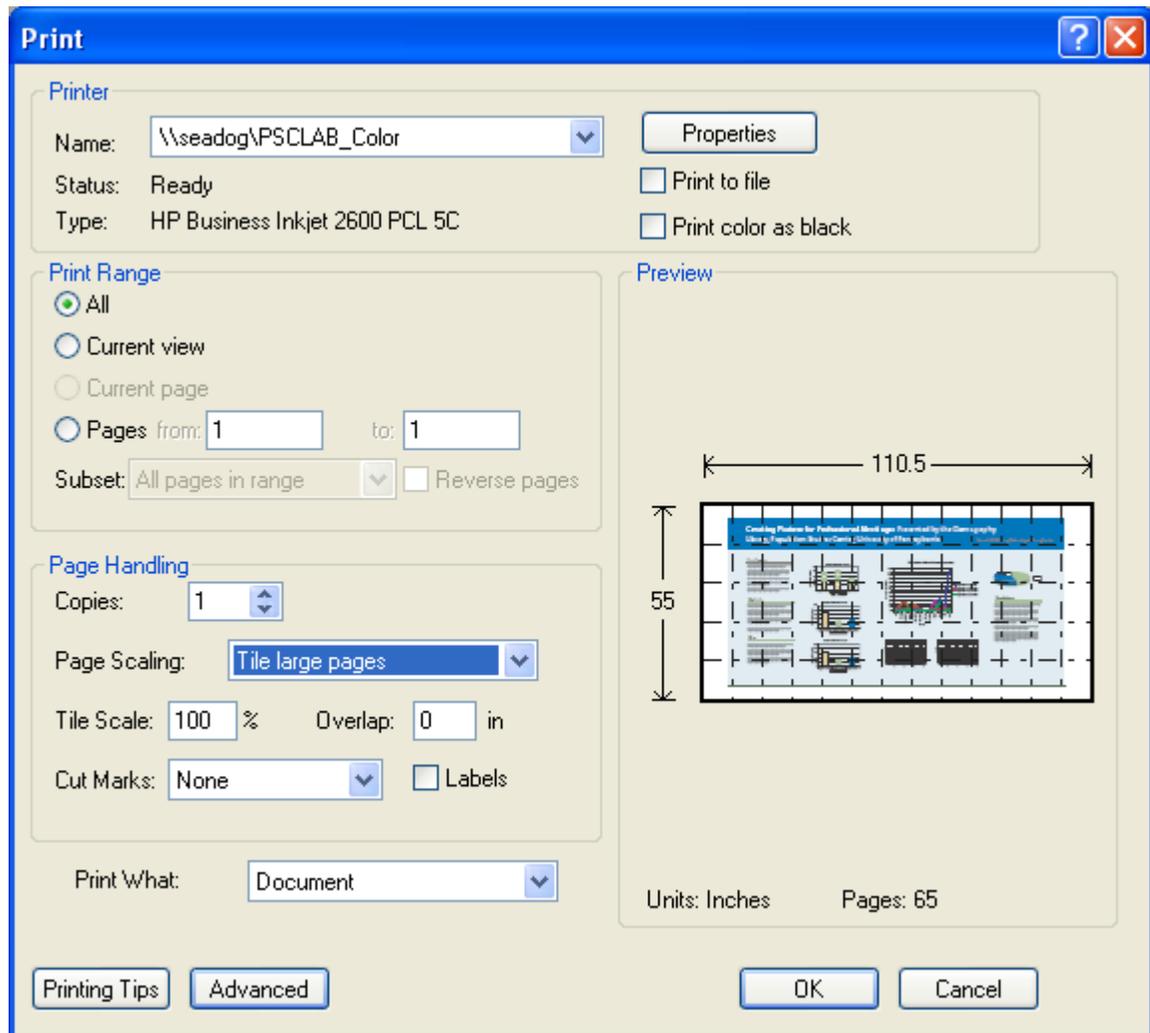
9. Preparing your Poster for Professional Printing

Cost of Printing Posters

Funding
GGD students should ask Tanya Yang for funds to print posters, in 2014 the GGD has set aside funding for supporting poster printing. If you are in Sociology or Economics please consult your Graduate Chair or Faculty member you are working with for information on whether there are funds available for printing posters for professional meetings.

Poster printing prices usually vary depending on the size of the poster, paper stock selected, and where you get your poster printed.

PSC Folks have printed posters at all of these location with success, so pick whichever is most convenient to you.

Poster Printing at the Weigle Information Commons at Van Pelt (40" is the max. height) http://wic.library.upenn.edu/wicfacilities/posterprinter.html
You must reserve a time to print your poster at the website above. No more than 7 posters will be printed in a day. They charge $0.025 per square inch. So if your poster is 24 inches by 36 inches, the charge would be $0.025 x 24x 36 = $21.60. Some standard sizes and costs:

Poster Size	Cost
40" x 60"	$60.00
30" x 40"	$30.00
24" x 36"	$21.60
18" x 24"	$10.80
40" x 80"	$80.00

SlideMakers http://www.slidemakers.com/
(Local Business; Free on campus delivery; Will ship elsewhere as needed; Offers a foldable fabric poster option; Will match or beat competitor pricing; If using university or grant funds, they are an approved vendor in BEN; They will also hand deliver if necessary)

PosterSession http://postersession.com/ (Has poster templates for download)

Campus Copy Center http://www.campuscopycenter.com/
(Local Business: Will deliver on campus as needed)

Illustrator TEMPLATES:
J:\Templates\PAA poster templates
http://clark-it.stanford.edu/poster.htm#templates

PowerPoint TEMPLATES:
http://www.postersession.com/templates.php
http://www.makesigns.com/SciPosters_Templates.aspx
http://www.genigraphics.com/templates/default.asp
http://www.posterpresentations.com/html/free_poster_templates.html

10. Online Guidelines, Tips and Instructions for Preparing Posters

Population Association of America Poster Session Winners:
http://www.populationassociation.org/sidebar/annual-meeting/poster-winners/

UNC has instructions online on how to prepare Posters and PDFs of posters at:
http://gradschool.unc.edu/student/postertips.html#software

PAA Posters by PSC folks: http://www.pop.upenn.edu/publications/posters

11. A few recent books added to the Demography Library collection on generating graphics with statistical data

Data analysis and graphics using R: an example-based approach. By John Maindonald and John Braun. Cambridge; New York: Cambridge University Press, 2003.
BK QA276.4 .M245 2003

R graphics. By Paul Murrell. Boca Raton, FL: Chapman & Hall/CRC, 2006.
BK T385 .M9 2006

Statistical analysis and data display: an intermediate course with examples in S-plus, R, and SAS : with 200 figures. By Richard M. Heiberger and Burt Holland. New York: Springer, 2004. SR QA276.4 .H45 2004

Using SPSS for Windows: data analysis and graphics, 2nd edition. By Susan B. Gerber and Kristin Voelkl Finn. New York: Springer, 2005.

The visual display of quantitative information, 2nd edition. By Edward R. Tufte. Cheshire, CT: Graphics Press, 2001. BK QA276.3 .T83 2001

A visual guide to Stata graphics. By Michael N. Mitchell. College Station, TX: StataCorp LP, 2005. SR QA276.4 .M58 2004

Visual statistics: seeing data with dynamic interactive graphics. By Forrest W. Young, Pedro M. Valero-Mora, and Michael Friendly. Hoboken, NJ: John Wiley & Sons, Inc., 2006. BK QA276.3 .Y68 2006

Please feel free to ask Demography Library staff for assistance. We are more than happy to meet individually. psc_library@mailman.ssc.upenn.edu

**Get started early!
Plan ahead!
Good Luck!**

(This guide was originally created by Laura J. McNamara on February 6, 2006 and was last revised on April 11, 2014 by Nykia M. Perez Kibler.)