

# Using bardposter.sty

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## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Platform</b>	<b>2</b>
<b>3</b>	<b>Document Format</b>	<b>2</b>
<b>4</b>	<b>Paper Size</b>	<b>3</b>
<b>5</b>	<b>Optional Redefinition of Paper Size</b>	<b>3</b>
<b>6</b>	<b>Better Fonts</b>	<b>4</b>
<b>7</b>	<b>Optional Graphics on Either Side of the Title Box</b>	<b>4</b>
<b>8</b>	<b>Top and Bottom of Poster</b>	<b>5</b>
<b>9</b>	<b>Heading</b>	<b>5</b>
<b>10</b>	<b>Text Boxes</b>	<b>6</b>
<b>11</b>	<b>Abstract</b>	<b>6</b>
<b>12</b>	<b>Theorems and the Like</b>	<b>7</b>
<b>13</b>	<b>Figures</b>	<b>7</b>
<b>14</b>	<b>Color for Text</b>	<b>8</b>
<b>15</b>	<b>Color for Shadows of Boxes</b>	<b>9</b>

<b>16 Color in Lists</b>	<b>9</b>
<b>17 Using this Style File in Linux</b>	<b>10</b>

## **1 Introduction**

This manual explains how to use the style file “bardposter.sty.” This style file is designed for posters to be used for the Bard Senior Project Poster Session. It is assumed that you already know the basics of LaTeX, and that you are familiar with the Bard Senior Project Style (bardproj.sty). Only the specifics of formatting a poster are discussed here.

The file “bardposter.sty” can be obtained from Ethan Bloch (bloch@bard.edu), and it can be downloaded from <http://math.bard.edu/bloch/bardtex.htm>.

## **2 Platform**

Although most aspects of TeX are platform independent, a few aspects of this poster style appear to vary from platform to platform.

This poster style has been tested using TeXShop and TeXworks.

Some brief comments on using this style file in Linux are given in Section 17 of this manual.

## **3 Document Format**

The basic form of the document is

```
\documentclass[12pt]{article}
\usepackage{amssymb, amsthm, amsmath, amsfonts}
\usepackage{fancybox, multicol, graphics}
\usepackage{type1cm, color, array}
\usepackage{geometry}
\usepackage{bardposter}

<Your macros, if you have any>

\fontoption{<font choice>}

\shadowcolor{<color>}
```

```

\leftrightlogo{<figure file name>
                {<desired height of figure in inches>}
\leftlogo{<figure file name>
           {<desired height of figure in inches>}
\rightlogo{<figure file name>
           {<desired height of figure in inches>}

\begin{document}
\begin{posterbard}

\postertop {<Senior Project Title>}{<Your name>}{<Program>}
{<Month and year of graduation>}{<Adviser's name>}

\begin{posterbox} [Abstract]
<Text of abstract>
\end{posterbox}

\begin{posterbox} [<Optional heading>]
<Text of this box>
\end{posterbox}

\begin{posterbox} [<Optional heading>]
<Text of this box>
\end{posterbox}

\end{posterbard}
\end{document}

```

## 4 Paper Size

The default paper size produced by this poster style is 42" x 42". That is the size required for the Bard Senior Project Poster Session.

The poster produces a box of fixed size surrounding the text. Make sure the content of your poster does not overflow the box.

## 5 Optional Redefinition of Paper Size

If you are producing the poster that needs a different paper size, you can change the height and width of the paper and the size of each of the four

margins by opening the style file “bardposter.sty” and modifying the command

```
\geometry{paperheight=42 truein, paperwidth=42 truein,  
  tmargin=2 truein, bmargin=2 truein,  
  lmargin=2 truein, rmargin=2 truein}
```

## 6 Better Fonts

The default T<sub>E</sub>X font, called Computer Modern, is very thin, and is hard to read on a poster; it is the font you are reading now. Various alternative font packages for T<sub>E</sub>X are available for free; some of these packages, including the ones used in the font options listed below, are included in many standard T<sub>E</sub>X implementations, including T<sub>E</sub>XShop.

It is recommended that you use an alternative font for your poster that is heavier than Computer Modern. To change the font using two preset options given in this style file, insert the command

```
\fontoption{<font choice>}
```

just before `\begin{document}`. Replace everything inside the `< >` with the name of the font option, as given in the following table. Do not forget to remove the `< >`.

The two preset font options are as follows:

### Bulleted or Enumerated, Heading

Name	Feature	Description
mathptmx	Serif	Times New Roman text, matching math
helveteul	Sans serif	Helvetica text, Euler math

If you do not like either of these options or if they use packages that you cannot obtain, and if you are familiar with using T<sub>E</sub>X font packages, you can insert your own.

## 7 Optional Graphics on Either Side of the Title Box

The default design of the poster style has nothing to the left or right of the title box. If you want to insert a graphic (for example the Bard seal) on both sides of the title box, insert the command

```
\leftrightlogo{<figure file name>}
               {<desired height of figure in inches>}
```

just before `\begin{document}`. Replace everything inside the first instance of `< >` with the name of the graphic file, and inside the second instance with a number that is the desired height of figure in inches. You might need to try different heights until it looks right, though the likely heights will be in the 2–4 inches range. Do not forget to remove the `< >`.

If you want to insert a graphic on only one side of the title box, or different graphics on the two sides of the title box, insert either or both of the commands

```
\leftlogo{<figure file name>}
          {<desired height of figure in inches>}
\rightlogo{<figure file name>}
          {<desired height of figure in inches>}
```

just before `\begin{document}`. For each command, replace everything inside the first instance of `< >` with the name of the graphic file, and inside the second instance with a number that is the desired height of figure in inches. You might need to try different heights until it looks right, though the likely heights will be in the 2–4 inches range. Do not forget to remove the `< >`.

If you want to insert graphics on either or both sides of the title box, you need to supply your own graphics files.

## 8 Top and Bottom of Poster

The first item in the poster file after the `\begin{document}` command is

```
\begin{posterbard}
```

The last item in the poster file before the `\end{document}` command is

```
\end{posterbard}
```

## 9 Heading

After the `\begin{posterbard}` command, insert

```
\postertop {<Senior Project Title>}{<Your name>}{<Program>}
{<Month and year of graduation>}{<Adviser's name>}
```

Replace everything inside `< >` with the appropriate wording, and remove the `< >`.

Where it says “Program,” write one of Biology, Chemistry, Computer Science, Mathematics, or Physics.

## 10 Text Boxes

The text of the poster is contained in text boxes, to make it easy to read. The boxes will be distributed roughly equally between the three columns of the poster. As many boxes as desired can be inserted, as long as the poster fits on one page.

The format for each box is

```
\begin{posterbox} [<Optional heading>]
<Text of this box>
\end{posterbox}
```

Replace everything inside `< >` with the appropriate wording, and remove the `< >`.

The heading in each text box is optional. If used it will be centered, and it will be in a larger font than the text in the box. If you have a box for which you do not want a heading, then omit the `[ ]`.

The poster will be easier to read if you do not make the text in any text box too long (and certainly do not make the text in any text box more than can fit in a single column).

## 11 Abstract

The first text box should contain the abstract for the poster, and should be formatted as

```
\begin{posterbox} [Abstract]
<Text of abstract>
\end{posterbox}
```

Replace everything inside `< >` with the appropriate wording, and remove the `< >`.

## 12 Theorems and the Like

The commands for theorems, lemmas, definitions, and the like are the same as for `bardproj.sty`. However, the numbering for theorems and the like in posters is consecutive, without chapter or section numbers (you should not use chapter or section commands in posters).

## 13 Figures

Inserting a figure into a poster is similar to, though not exactly the same as, inserting a poster into regular text (such as a senior project).

The standard way to insert graphics into LaTeX documents is to use either the `graphics.sty` or the `graphicx.sty` package. The two packages are essentially the same, but use slightly different formats for a few commands; use whichever you prefer. These packages are often bundled with LaTeX implementations. The manual for these two packages, called `grfguide.pdf`, can be found on the web; it is a very useful guide to inserting graphics into LaTeX documents, and to using color.

To use either of these packages, you must first insert

```
\usepackage{graphics}
```

or

```
\usepackage{graphicx}
```

into your file prior to `\begin{document}`.

If you want to import a computer generated figure into the `.tex` file, the figure needs to be in a format that TeX can work with. For most implementations of TeX, the best format to use is EPS (encapsulated postscript, ending in `.eps`). For TeXShop, TeXWorks and any other implementation that uses PDF files instead of DVI files, the correct format for graphics is PDF. It is also possible to use JPEG files in TeXShop, and perhaps other implementations. The method of inserting these different types of files is the same; the format of the graphics file simply has to work with your implementation of TeX.

To insert an `.eps` file (or a `.pdf` file in TeXShop) into a poster, use the format

```
\begin{center}
\includegraphics{<Path+filename>}
\end{center}
```

In Windows, the path+filename has the form

```
c:/mysubdir/mypic.eps
```

Notice that we use / instead of \ in TeX. In a Mac or Unix the path+filename has the form

```
/Users/username/myfolder/mypic.pdf
```

The commands `\begin{figure} . . . \end{figure}` are not used in posters. Hence, there is no automatic numbering of figures and no built-in environment for captions. If you want to add a figure number and/or caption manually, use the format

```
\begin{center}
\includegraphics{<Path+filename>}\
Figure <Number>: <Caption>
\end{center}
```

## 14 Color for Text

To apply color to some text, use the format

```
\textcolor{<colorname>}{<text>}
```

Replace everything inside the first `< >` with the name of the color, and replace everything inside the second `< >` your text. Do not forget to remove the `< >`.

Colors may be used for any text, including text in headings, or text inside the text boxes.

The following chart is a list of names of colors that may be used. You must use upper case letters in the names of the colors exactly as written. (This chart is from `color-package-demo.tex` by Bent Petersen.)

### The 68 Available Colors by Name

Apricot	Aquamarine	Bittersweet	Black
Blue	BlueGreen	BlueViolet	BrickRed
Brown	BurntOrange	CadetBlue	CarnationPink
Cerulean	CornflowerBlue	Cyan	Dandelion
DarkOrchid	Emerald	ForestGreen	Fuchsia
Goldenrod	Gray	Green	GreenYellow
JungleGreen	Lavender	LimeGreen	Magenta
Mahogany	Maroon	Melon	MidnightBlue
Mulberry	NavyBlue	OliveGreen	Orange
OrangeRed	Orchid	Peach	Periwinkle
PineGreen	Plum	ProcessBlue	Purple
RawSienna	Red	RedOrange	RedViolet
Rhodamine	RoyalBlue	RoyalPurple	RubineRed
Salmon	SeaGreen	Sepia	SkyBlue
SpringGreen	Tan	TealBlue	Thistle
Turquoise	Violet	VioletRed	
WildStrawberry	Yellow	YellowGreen	YellowOrange

## 15 Color for Shadows of Boxes

Each text box has a shadow, which in the default setting is black. To change the color of the shadows of the text boxes, insert the command

```
\shadowcolor{<colorname>}
```

just before `\begin{document}`. Replace everything inside the `< >` with your choice of color. Do not forget to remove the `< >`. All text boxes have the same color shadows.

The possible names for colors are given in Section 14 of this manual.

## 16 Color in Lists

Use the following variants on enumerated and itemized lists to have the numbers and bullets in such lists be in color.

```
\begin{enumeratec}{<colorname>}
\item <text>
\item <text>
```

```

\end{enumeratec}

\begin{itemizec}{<colorname>}
\item <text>
\item <text>
\end{itemizec}

```

As always, replace everything inside the `< >` the appropriate items, and remove the `< >`.

The possible names for colors are given in Section 14 of this manual.

## 17 Using this Style File in Linux

If you are used to using emacs, or some other text editor, along with the commands `latex` and `dvips`, you may run into some bumps. First, you may get errors such as

```

LaTeX Font Warning: Font shape 'OT1/cmr/m/n' in size <43.36243> not available
(Font)                size <24.88> substituted on input line 42.

```

This is because

The message tells you that you've chosen a font size that is not in LaTeX's list of "allowed" sizes for this font; LaTeX has chosen the nearest font size it knows is allowed. In fact, you can tell LaTeX to allow any size: the restrictions come from the days when only bitmap fonts were available, and they have never applied to fonts that come in scaleable form in the first place. Nowadays, most of the fonts that were once bitmap-only are also available in scaleable (Adobe Type 1) form. If your installation uses scaleable versions of the Computer Modern or European Computer Modern (EC) fonts, you can tell LaTeX to remove the restrictions; use the `type1cm` or `type1ec` package as appropriate.

To remedy this, use

```
\usepackage{type1cm}
```

When using `dvips`, use

```
dvips -T 42in,42in -o poster.ps poster.dvi
```

If you want a pdf file, you may follow this command with `ps2pdf poster.ps`.