## CIU Columbia International University

# Graphic Design Guidelines for Print Production

The preferred industry standard programs and University Communications graphic design programs.



Adobe InDesign Industry-leading layout and page design software for print media. Used for creating brochures, flyers, magazines, etc.



Adobe Photoshop Go-to application for working with pixel-based images designed for print, web and mobile. Primarily used for photo enhancement and manipulation.



#### **Adobe Illustrator**

Industry standard program for creating vector graphics such as logos, icons, drawings, typography, and complex illustrations for any medium.

- Best practices when designing for print production...
- Set up <u>Document Bleeds</u> (page 2)
- Create final Print Ready PDFs with Printers Marks (page 3)
- Package the final InDesign Project (page 4)
- Provide the Graphic Design Manager with <u>all working and production files</u> (page 5)
- Images set at <u>300 DP</u>I (page 6)
- Images/Graphics set to <u>CMYK Color Mode</u> (page 7)
- Know when to create/use <u>Vector</u> graphics (page 8)
- Create Outlines out of Fonts (page 8)

### **Questions/Assistance?**

University Communications: Graphic Design Manager | seth.berry@ciu.edu

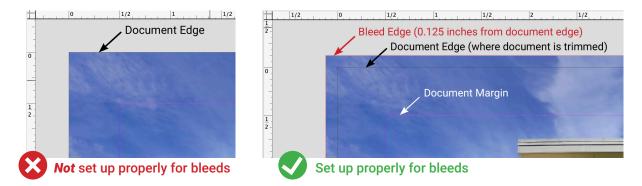
## Adobe InDesign

The preferred industry standard for layout graphic design creations for print production is Adobe InDesign. Using these guidelines to set up, create, and prepare projects for print will ensure minimal issues during the process of print production. Also, it will help in producing the best quality print product as possible.

#### **Bleeds**

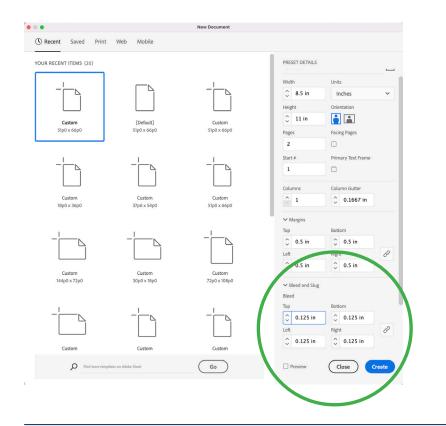
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In printing, bleed is printing that goes beyond th edge of where the sheet will be trimmed. In other words, the "bleed" is the area that will be trimmed off. Typically the industry standard is to have the graphic bleed 0.125 inches from the edge of the document size.



#### **Setting Up Document Bleeds**

In the New Document set up window, after setting the width, height and page count of the document, scroll down to Bleed and Slug and set all four edges of bleed to 0.125 inches to ensure you document is set up for bleeds.



If document bleeds are not set up, then a printer cannot 100% guarantee a project will be trimmed perfectly every time so that the image meets the edge of the sheet.

Creating a Print Ready PDF with Bleeds (next page)

FIGURE 3.

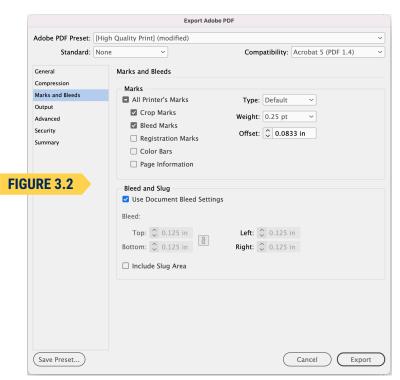
### Adobe InDesign

#### **Creating a Print Ready PDF**

1. Click File

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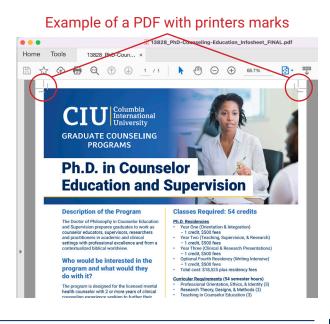
- Scroll to Adobe PDF Presets and select "High Quality Print" (Figure 3.1)
- 3. Choose where to save the PDF
- Label the file name with "\_FINAL" at the end. (Example: CIU-brochure\_FINAL.pdf)
- 5. Go to Marks and Bleeds tab (Figure 3.2)
- 6. Select the following check boxes under Marks\*:
  Crop Marks
  Bleed Marks
- 7. Select the following check boxes under Bleeds and Slug:
  - Use Document Bleed Setting
- 8. Click Export



\*All Printer's Marks can be included, but generally we just select Crop Marks and Bleed Marks.

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When a printer receives a final print PDF without crop marks and bleed marks, they will more than likely always request that we resend them a PDF that has them.

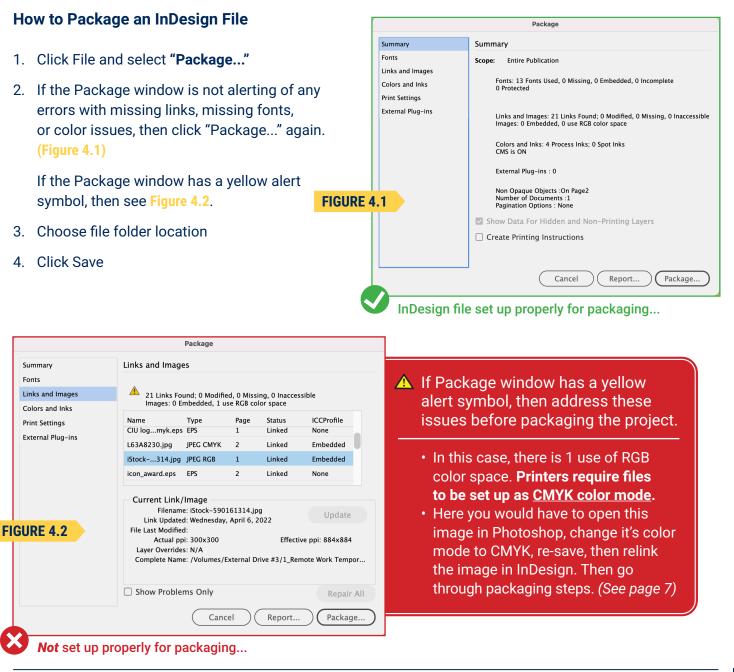


### **d** Adobe InDesign

#### Packaging an InDesign Project

When creating a document using InDesign, the actual InDesign file (.indd) is only one piece of the project. Any images, graphics, Pantone colors or fonts used in the document are linked outside that file. In order for others (such as the printer or the Graphic Design Manager) to open the file correctly by including those external files, you must use InDesign's built in feature called "packaging".

When an InDesign file is packaged, it will create one file folder which houses all of the links, graphics, fonts, PDFs, and the working InDesign file. This folder can then be compressed/zipped to be able to transfer the whole project to a client, printer, or design manager.



**Adobe InDesign** 

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### **Example of a Packaged InDesign Project**

	R/PRINT FILES	Mar 24, 2022 at 2:39 PM
(1) ~ 139	951_Admissions-Online-Brochure-Update2022_FINAL	Today at 4:01 PM
	13951_Admissions-Online-Brure-Update2022_FINAL.idml	Mar 24, 2022 at 1:55 PM
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	13951_Admissions-Online-Brhure-Update2022_FINAL.pdf	Mar 24, 2022 at 2:38 PM
(3) <sup>×</sup> <sup>■</sup>	Document fonts	Mar 24, 2022 at 1:55 PM
	Arial Bold.ttf	Mar 24, 2022 at 1:55 PM
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1	Roboto-Black.ttf	Jun 13, 2014 at 11:46 PM
2	Roboto-BlackItalic.ttf	Jun 13, 2014 at 11:46 PM
1	Roboto-Bold.ttf	Jun 13, 2014 at 11:46 PM
2	Roboto-BoldItalic.ttf	Jun 13, 2014 at 11:46 PM
1	Roboto-Italic.ttf	Jun 13, 2014 at 11:46 PM
2	Roboto-Medium.ttf	Jun 13, 2014 at 11:46 PM
1	Roboto-Regular.ttf	Jun 13, 2014 at 11:46 PM
2	RobotoCondensed-Bold.ttf	Jun 13, 2014 at 11:46 PM
1	RobotoCondensed-Italic.ttf	Jun 13, 2014 at 11:46 PM
	RobotoCondensed-Regular.ttf	Jun 13, 2014 at 11:46 PM
( <b>5)</b> — ~ 🖿 I	Links	Today at 4:01 PM
<b>—</b>	129indicia.eps	Feb 18, 2021 at 10:27 AM
	Blue-background_1.tif	Feb 16, 2021 at 2:00 PM
	CIU logo_cmyk-reverse-yellowline_1.eps	Nov 6, 2019 at 4:14 PM
	CIU logo_cmyk-reverse-yellowline.eps	Nov 6, 2019 at 4:14 PM
	CIU logo_cmyk.eps	Feb 18, 2021 at 10:26 AM
	icon_award.eps	Nov 10, 2021 at 9:07 AM
	icon_books.eps	Nov 10, 2021 at 9:19 AM
	icon_check.eps	Jun 7, 2021 at 10:47 AM
	icon_online.eps	Nov 10, 2021 at 9:16 AM
	icon_tuition.eps	May 7, 2020 at 1:29 PM
2	iStock-590161314.jpg	Today at 4:01 PM
E	L63A8230.jpg	May 13, 2020 at 11:42 AM
	grcode.eps	Aug 10, 2021 at 3:51 PM

After going through the Package steps on page 4, it will create a folder that looks similar to this.

1 The .indd InDesign file will be stored in the main folder

2 An .idml file will be created and stored in the main folder. This is a file format that is able to be opened in any InDesign program version if someone doesn't have the most up-to-date version that the original project was created in.

- (3) A .pdf file will be stored in the main folder. (Make sure this PDF includes document bleeds and printers marks. See page 3)
- 4 Fonts used in the project will be placed in the Document Fonts sub folder
- (5) Graphics, photos, .eps files, .tif files, .psd files, etc. used in the project will be placed in the Links sub folder



#### Compressing/Zipping Packaged Folders or Files

Sometimes "zipped" or "compressed" files take up less storage space and can be transferred to other computers more quickly than uncompressed files.

#### **Zip/Compress on Mac**

- 1. Right click on file or folder that you want to zip.
- 2. Select Compress "File Name". A new zipped folder with the same name is created in the same location.

#### **Zip/Compress on Windows**

- 1. Right click on file or folder that you want to zip.
- 2. Select Send to, and then select Compressed (zipped) folder. A new zipped folder with the same name is created in the same location.



#### Transferring Working Files and Final Print Files

If/when the file size is small enough, emailing final print files can work fine. However, most of the time working files and final print production files can be too large and cumbersome to send in an email. These are University Communications preferred options of file transfers:

Store on the K:drive For on-campus employees who have access: smb://172.19.1.115/ActiveStorage

Upload to University Communications' Dropbox (Contact Graphic Design Manager for access)

> Send through WeTransfer.com Easy to use and free!

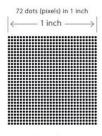
### **PS** Adobe Photoshop

#### **Print Resolution (300 DPI)**

300 DPI is the standard print resolution for high resolution output. Print resolution is measured in dots per inch (or "DPI") which means the number of dots of ink per inch that a printer deposits on a piece of paper. So, 300 DPI means that a printer will output 300 tiny dots of ink to fill every inch of the print.

## How to set your Photoshop file or picture file resolution to 300 DPI for print

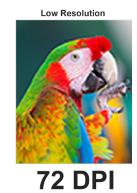
- 1. Open the photo or Photoshop file in Photoshop.
- Click on Image on the top menu bar and select Image Size. (Figure 6.1)
- If the image resolution is set at 72, then uncheck "Resample"\* and then change the resolution to 300. (Figure 6.2)
- 3. Click OK
- 4. Re-save the picture/file



72 dpi 72 dots per-inch

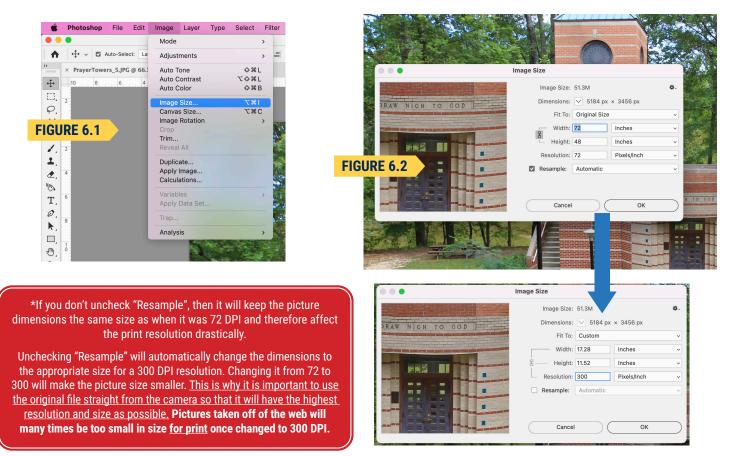


300 dots per-inch





300 DPI



## **PS** Adobe Photoshop

#### Color Mode (CMYK vs RGB)

In order to meet the most accurate colors possible when printing, the files color modes need to be set to CMYK. Monitors and digital media use the RGB color mode. Generally when designing something on the computer, your color mode default will be set to RGB. This color mode may look good on screen but they will need converting to CMYK for printing. CMYK color mode is used when a printer is printing a project as a 4-color process CMYK job.

#### How to set your Photoshop file or picture file color mode to CMYK for print

- 1. Open the photo or Photoshop file in Photoshop.
- Simply click on Image on the top menu bar and select Mode then select CMYK Color. (Figure 7.1)
- 3. Re-save the picture/file

All photo links in an InDesign project will need to be set to CMYK color mode before packaging the project, or you will get the yellow alert icon when packaging.

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#### Pantone (PMS) Colors

In projects where the printer will run a 1-color or 2-color only job, then the colors need to be set up using the Pantone (PMS) colors. Pantone colors can be set up and used in InDesign, Photoshop, and Illustrator. This will guarantee the color will match exactly what color you choose it should be, as the printer will use that specific paint to run the project, rather than printing in CMYK 4-color process. In our case at Columbia International University, <u>our official school colors are the following PMS colors</u>:



## Adobe Illustrator

#### **Understanding the difference between Raster and Vector Graphics**

Digital photos are raster images, which are made up of tiny pixels. When they are scaled larger than their original intended size, they will lose resolution and become pixelated.

Vector graphics are digital art that is rendered by a computer using a mathematical formula, rather than pixels. When you scale a vector image, it will maintain it's smooth, un-pixelated appearance, therefore it can be sized as large or small as you want, and the print resolution will stay the same.

<u>Logos are best created in vector format using Adobe Illustrator.</u> Therefore, Adobe Illustrator is best used for creating logos, icons, drawings, typography, and complex illustrations for any medium. It is the industry standard for creating vector graphics.



This is a JPG file of the Rams Head logo zoomed way in on the eye. You can see that since JPG is a rasterized file format, the logo is made up of tiny pixels, and gets pixelated if blown up larger than it's intended size.



This is a vector EPS file of the Rams Head logo zoomed way in on the eye. Since it is vector, the shapes maintain their intended sharp, un-pixelated look when zoomed in or blown up large.

#### **Creating Outlines out of Fonts**

If sending an Illustrator EPS, AI, or PDF file with fonts in the design, the fonts must be created as outlines. Otherwise, the printer or recipient of that file will not be able to open or print the file of they do not have the fonts used in the design. Creating outlines out of the font will turn the font into vector shapes.

- 1. Select the font or text box in your Illustrator (or InDesign) document
- 2. Go to **Type** in the main menu and select "Create Outlines"
- 3. Re-save\* the file

\*When creating fonts as outlines in Illustrator or InDesign, its best to keep an original file saved with the fonts still active. Then save the version with the fonts as outlines as a separate file. That way if you need to make <u>edits to the font/text</u>, you can go back to the original.



This is a font or customizable text box in Illustrator.



This is that same font in Illustrator, but with it created as outlines.

(\*Once created as outlines, you cannot change the font or text.)