

# Graphic Communications 2070

Emily Wilson

*Spring 2023*

## Final Portfolio

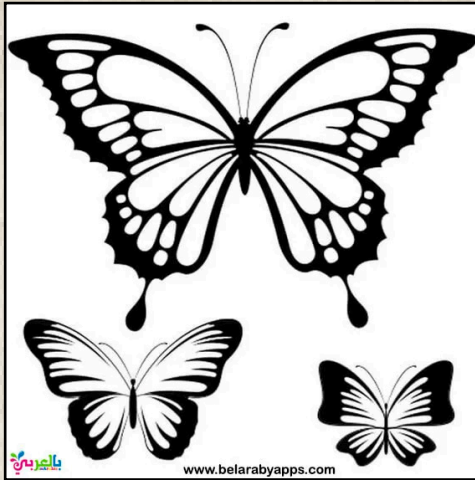


CLEMSON UNIVERSITY

# Refresher Poster

## Description of Preparation & Print Processes

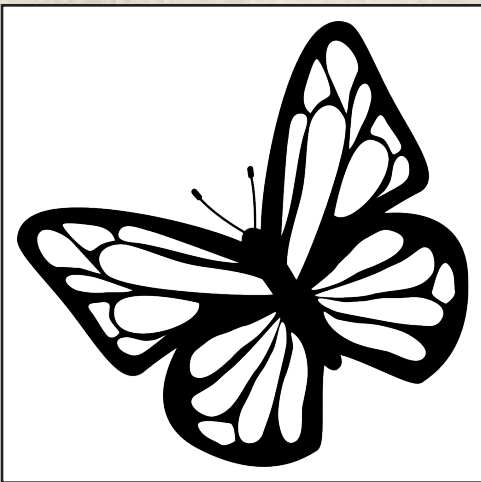
Sketch four designs of an 11x17", three color poster. Once you've picked your favorite sketch, render it in Illustrator on an 11x17" artboard. Create your three spot color poster design with no bleeds, gradients, or tints. Add trapping and overprint strokes wherever two or more colors touch. Print your design, and trim at the registration marks using a paper cutter.



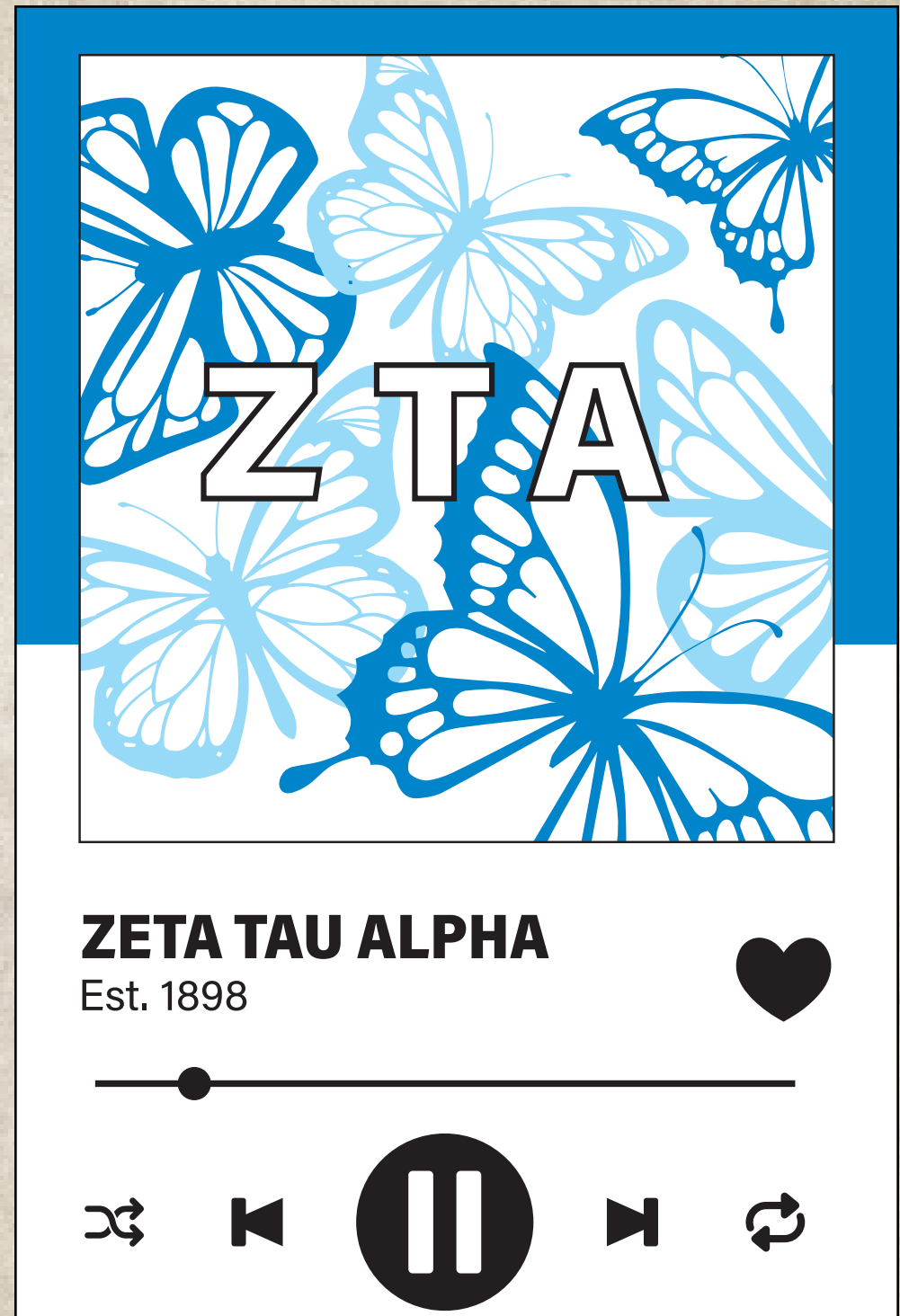
REFERENCE IMAGE 2: "Free Printable Butterfly Templates." Belaraby Apps, BelarabyApps.com, 2019, <https://www.belarabyapps.com/printable-butterfly-templates/>. Accessed 13 Jan. 2023.

## Self-Evaluation

Overall, I think I did a good job with my designing and trapping. On screen, my colors appear lighter than they appeared when I printed. The poster was printed on off-white paper with a yellowish tint. I know that blue and yellow make green, or cyan and yellow when printing with CMYK colors, so I believe that this is what makes the blues in my design appear slightly darker and a little greenish. The black still looks accurate, however it is more of a muted black in print than on screen, which I think can also be attributed to the slight yellow tint of the paper. If I had to print on this substrate again, I'd design with more greens and yellows, so that they would look more accurate when printed.



REFERENCE IMAGE 1: "Butterfly Outline PNG Pic Background." PNG Play, PNG Play, <https://www.pngplay.com/image/371222>. Accessed 13 Jan. 2023.



COLORS USED: PANTONE P 115-4 C, PANTONE P 109-8 C, AND PANTONE P PROCESS BLACK C

## Description of Preparation & Print Processes

Begin by designing and color correct a 5x7" postcard using Adobe Photoshop. Print a proof, then measure the requested values on the Dot Gain Test sheet using the XRITE scanner and record them. Next, create color separations and print them in film positives. Clean and degrease a 355 tpi mesh screen. Using your Cyan film, find the moire angle and mark the edges of the film with a pencil. Apply your emulsion, then place the screen in the dryer. Next, expose and washout, then place the screen back in the dryer. Once it is dry, blockout the edges using packaging tape. Place the screen in the NANO press and attach the squeegee and flood bar. Add your cyan ink. Do a few test runs on a scrap sheet. Adjust the floodbar, squeegee, and distance they go across as needed until you

get a good, even print (until registration mark and image are all clear and even). Remove the scrap paper and tape a clear sheet down. Print on the clear sheet. Place your substrate paper under the clear sheet and align it to the image. Mark the substrate using four pieces of black tape. Remove the clear sheet and print on your substrate. (This first printed sheet is called your master sheet, and it can be used to properly align the rest of the colors.) Once all 80 sheets have been printed with cyan, remove the screen, squeegee, and floodbar from the NANO press and clean up. Repeat these steps with the magenta film and ink, using your master sheet to register. Then, do the same for yellow and black. Lastly, using the XRITE scanner, measure the requested values on the Dot Gain Test sheet Compare these results to the Dot Gain Test performed on your original proof.

# Four Color NANO Screen Printing

greetings from

## Charleston, SC



COLORS USED: CYAN, MAGENTA, YELLOW, AND BLACK INK



## Self-Evaluation

Overall, I think there was lots of room for improvement on this project. Some parts of our screens were overwashed, which allowed for too much of one color in certain areas, and other parts were under washed, making some registration marks more difficult to see than others. Also, our registration could be improved. Our C process went well, and the cyan prints all seemed centered on the page, but when we moved on to yellow the yellow was slightly off. Most of our M and K prints aligned perfectly with our C, but the yellow is off on a lot of them. Next time, I would

triple check that the Y was lining up with the C perfectly so that all 4 colors had better alignment. Another challenge with registration was that not all of the sheets fit perfectly within the four pieces of black tape. To solve this issue, we made a separate stack of these sheets and put it aside until the end. Then, once all of the sheets that did fit were printed on, we realigned using one of the sheets that did not fit as a second master, and printed the rest of the stack. The re-registering was time consuming and took lots of focus and precision, so it was often frustrating at times, but I

do feel as though I have a good grasp of it as a result. Lastly, after using the XRITE scanner to read the CMYK values on our final product to compare to the values on the original proof, we realized that our colors were significantly lighter in print. If I were to do this project again, I would compensate and make these values much darker in design so that they printed accurately.

# Client Project



3-UP IMPOSITION OF CLIENT CARDS WITH TINT BOXES, REGISTRATION MARKS, AND COLOR BARS. COLORS USED: PANTONE P 73-5 C, PANTONE P 4-4 C, AND PANTONE P 24-6 C

## Description of Preparation & Print Processes

Begin by obtaining four sketches from your client. Render two different designs based on your client's favorite sketch. Have your client pick their favorite design and give any changes they want to make. Make these changes and continue to get approval from your client until no more changes need to be made. This will be your final design; place it into InDesign on an 11x17" document. Make your

design 3-up and add registration marks. At the bottom of the page, a sequence of nine black tint boxes, from 10% to 100%. Label them. Then, add three more boxes. Make these boxes the three colors you used in your design and label them with the names of the colors. Add three color bars along the tail edge of your layout: one for each of your colors. These should span the height of your layout. Print this on the Ricoh and have your client sign off on it. Print final copies on the Konika. Use a paper cutter and cut at registration marks. Fold your cards. This is your finished project. Next, use Illustrator to create three logos

for your client: a wordmark, a monogram, and a symbol. Once your client approves these logos, use them to create a 3.5 x 2" business card design. When your client approves your final business card design, place your business card Illustrator file into InDesign and create a 24-up imposition on an 11x17" document. Print this document on the Konika. Use the paper cutter to cut them at the registration marks.

## Self-Evaluation

As the designer, I enjoyed working with a client. It was something I'd never done before, so it was cool to gain new experience with this. The easiest portion of the assignment was communicating with my client about what she wanted changed in my designs. She and I are both good communicators, so we had no difficulty here. The hardest part was printing and cutting my cards. We had several technical difficulties with the printers: incorrect alignment of the documents for the proofs on the Ricoh, the Konica running out of paper, and printing on the wrong kind of paper. We eventually figured this all out, and I do feel like we will be able to better handle this in the future using what we learned here. One thing I liked about working with a client was that I did not have to come up with a design entirely on my own; I just had to render my client's sketch to her liking. This was much easier than relying on my own creativity to come up with an original design.



PRINTED 24-UP IMPOSITION CLIENT BUSINESS CARDS, TRIMMED AND UNTRIMMED. COLORS USED: PANTONE P 73-5 C AND PANTONE PROCESS BLACK



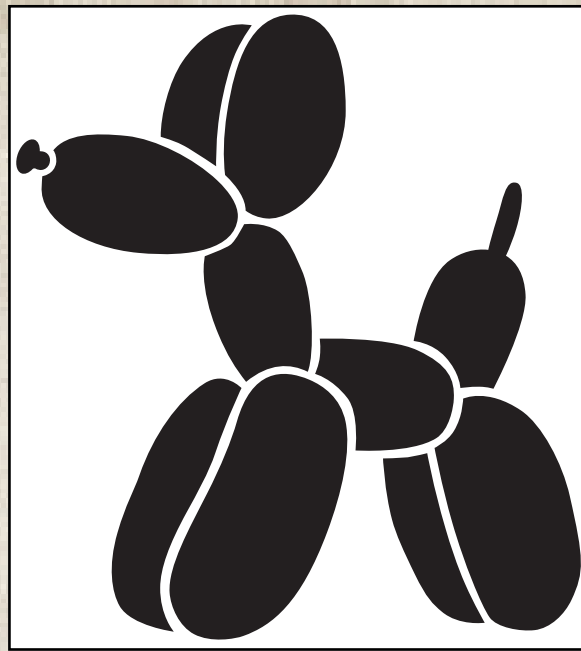
PRINTED AND TRIMMED CLIENT CARD (FRONT AND BACK)

# Cylindrical Design

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FINAL PRINTED CYLINDRICAL DESIGN ON GLASS



INITIAL CYLINDRICAL DESIGN

## Description of Preparation & Print Processes

Begin by sketching 6 3x3 inch graphics that could potentially be printed on a cylindrical glass. Choose your favorite sketch that you think is best suited for printing and render it in Illustrator. Print a proof on the Ricoh. Go back to the Illustrator file and invert the design to make it black and white. Create a TIFF of your black and white design in Photoshop. Upload your TIFF into the Raster Link 6 Plus software and print two layers of the sticky adhesive on the frame, then print one layer of white stencil onto the frame. Use clear masking tape to blockout all of the non image area on the screen. Next, to prepare the ink, place a small plastic cup on the Pantone scale and zero it out. Then, add 0.015 lbs of blue ink and 0.010 lbs of white ink. Once the scale is up to 0.025 lbs of ink total, add 0.005 of catalyst. Stir the two ink colors and the catalyst together very well. Let it sit for 20 minutes, then add a few drops of ink thinner and let it sit

again for about five minutes. In the meantime, prepare the LC-PA400E machine by mounting the screen, the squeegee, and the flood bar. Place your cylindrical glass into the machine and adjust until the glass is perfectly flat and secure. Place ink mixture onto the screen on the left of the image area. Do test runs with paper covering the glass until the image is clear and ready to be printed on the glass. Once the image is clear, remove the paper and print onto the glass. Remove excess ink from the screen and clean it. Leave the glass to dry for 3 days to let the ink cure.

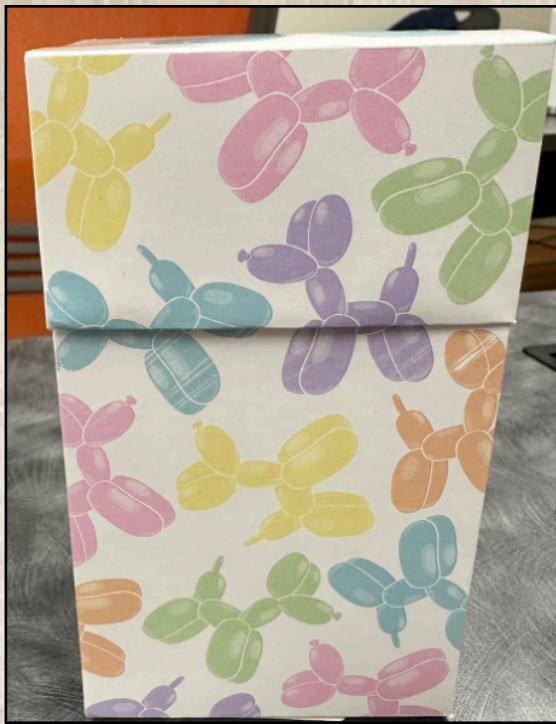
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## Self-Evaluation

Overall, I feel as though my project was a success. My sketch was modified on Illustrator to make it more applicable to the printing process, as the spaces between solid blocks of color were too small in my initial sketch and would not have printed properly. My first press run printed my design with streaks in between, so I used some ink degradant and a paper towel and wiped the ink off before it dried on the glass so I could reuse the glass. Then, I put the glass back on the machine and adjusted it so that it was slightly flatter to try to get the ink to print more evenly and cover the entire design. I was successful in my second run, as the design printed flawlessly. I printed two more glasses, left them to dry for a week, and I had my finished products. If I were to do this project again, I would print my design higher up on my cup. The design itself looks good, but I don't love the placement on the glass. I would also make the ink a lighter blue color to match my packaging piece better.

## Description of Preparation & Print Processes

Begin by sketching three package designs, both top and bottom, that go with your cylindrical design and would look good once cut and folded. Choose your favorite sketches that you think are best suited for printing, cutting out, and folding, and use them to create your package in Illustrator using the package templates provided on Canvas. Download your designs as PDFs, upload them to the server, and print a proof of both the top and the bottom on the Ricoh. Cut and fold these proofs by hand. Use double sided tape to assemble them. Make sure that your top and bottom align correctly. If they do not, correct your design, print more proofs, and repeat this process until they are aligned correctly. Once your proofs are correct, upload your PDF files to the server and print them on the Konica Minolta printer. Take your top and bottom package pieces to the Mimaki plotter to be cut and creased. Assemble your package top and bottom using double sided sticky tape. Be sure to fold the creases forwards first so that the ink doesn't "tear" at the crease.



ASSEMBLED FINAL PACKAGE

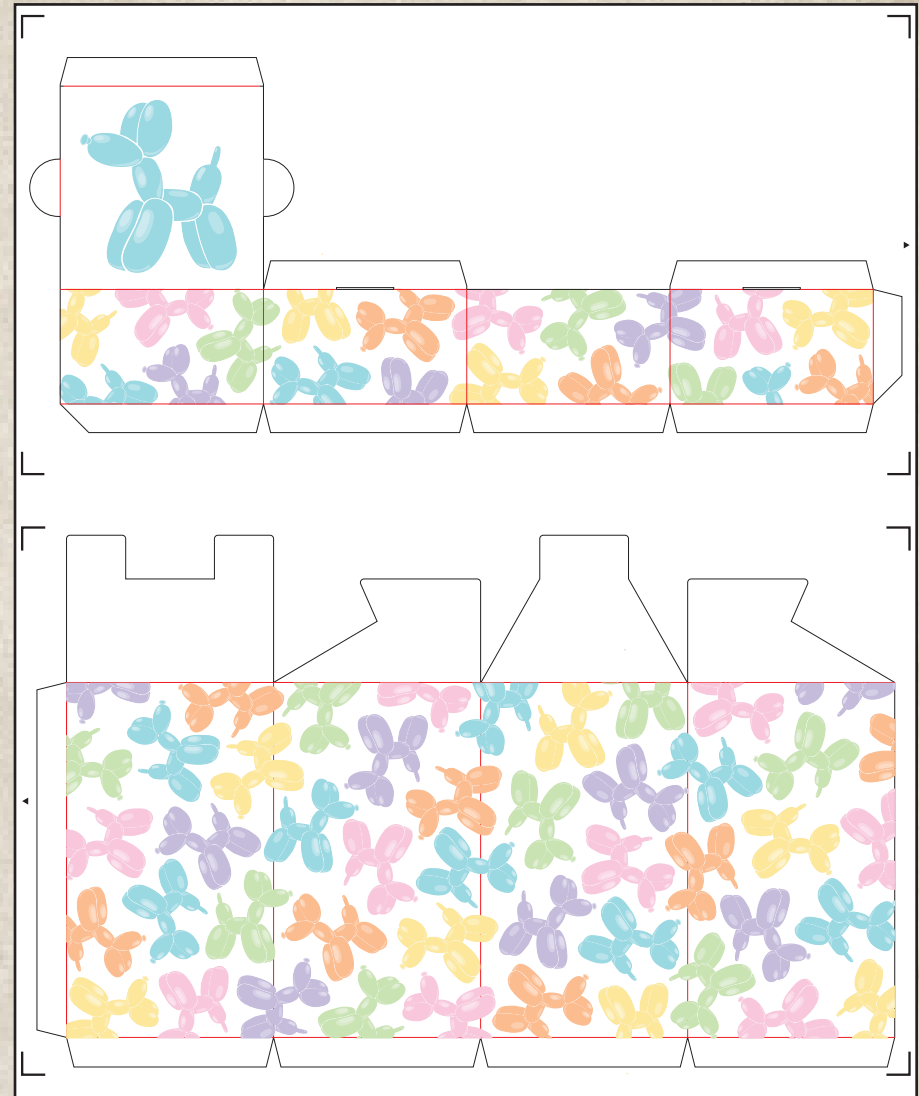
## Self-Evaluation

Overall, this project was successful. Making my design in Illustrator was a bit of a challenge, as I had to create a pattern and then trim it to fit within the package design outline. I also had to determine how to align the top and bottom so that the pattern would look continuous on the folded package whether it had the top on or off. Printing the package was easy as well, as we printed using the Konica rather than using a manual process, such as offset or flexography. However, there was a part broken in the Konica printer that made the ink look scratchy, but this was not due to human error. If I were to do this project again, this particular piece in the printer would be fixed and my design would print perfectly.



FINAL PRINTED, TRIMMED, AND ASSEMBLED PACKAGE TOP AND BOTTOM

# Package Design



INITIAL TOP AND BOTTOM PACKAGING DESIGNS

## Colors Used

*Green:* C:22, M:0, Y:37.25, K:0. *Pink:* C:0, M:27.45, Y:0, K:0.  
*Orange:* C:0, M:30.59, Y:43.14, K:0. *Purple:* C:20.78, M:24.31, Y:0, K:0. *Yellow:* C:1.18, M:7.06, Y:47.06, K:0. *Blue:* C:37.25, M:0, Y:10.59, K:0

# Reflection

Throughout this semester, I feel as though I have grown most in my technical skills. I have learned how to trap and why it is important, effective methods of registration for printing, imposition, and the difference in spot and process colors and how they are used. All of these skills, along with many others, lead me to believe I got what I was supposed to out of this course.

Looking forward, I would like to further develop some other skills I learned in this class, such as using various digital printers and machines, designing with the final print process in mind, and many others.

As far as improvements for the course, I think some of the instructions on Canvas could be made more clear. I also think that having a brief lecture at the start of each new project on expectations, methods, etc, would help with this clarity. Most of the problems I ran into

throughout the semester were because of the lack of detail or information on the instructions, so I think giving a lecture on this out loud would fix a lot of these issues. Other than that, I think the course overall is highly organized, and the projects are effective in teaching what they are meant to.

**Thank You For  
Viewing My Portfolio!**

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