

Role

Instructor | Virginia Tech
PhD Candidate | Iowa State University

Specialized in

Sustainable Apparel Design
Functional Soft-goods Product Development

Contact

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Web | www.haeunchae.com

About

Fashion design educator and researcher specializing in sustainable and functional soft-goods product development.

Portfolio

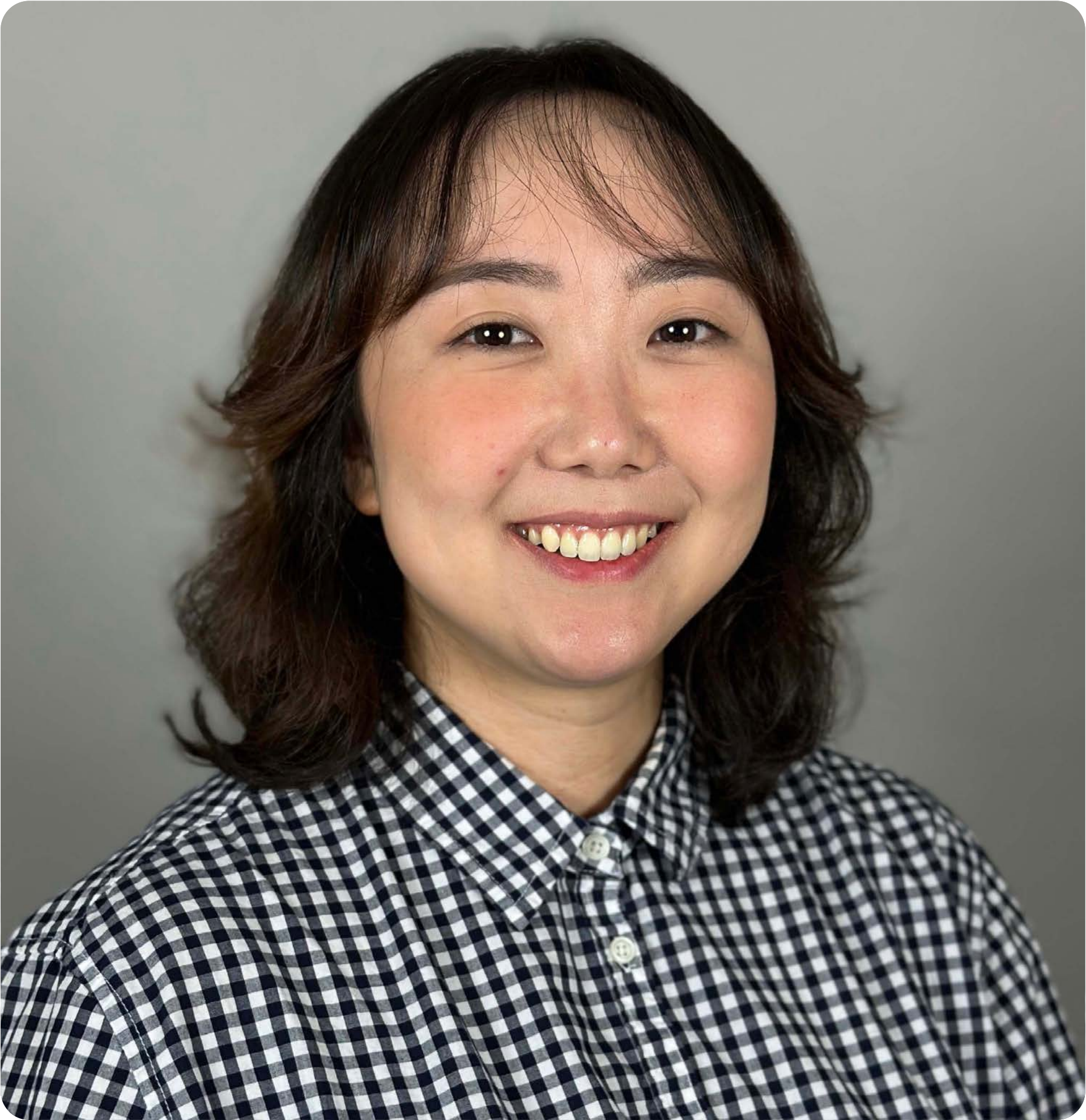
HaEun Chae

I'm a Creative Designer
and *Human Scientist*

- 04** About Me
- 05** Design Exhibitions
- 12** Design Projects
- 17** Student Works
- 35** Contact

HaEun Chae

Instructor | PhD Candidate



About

I am currently a PhD Candidate at Iowa State University, specializing in sustainable apparel design and functional soft-goods product development. My research explores optimal design solutions that enhance human well-being and environmental sustainability. Alongside my research, I serve as a teaching faculty member in the Fashion Merchandising and Design program at Virginia Tech, where I integrate technology, sustainability, and experiential learning into the classroom.

Experience

Instructor (Full-time)		Virginia Tech	2025 - Present
Research Assistant		Iowa State University	2023 - Present
Graduate Instructor		Iowa State University	2021 - 2024
Teaching Assistant		Iowa State University	2023 - 2024
Intern		Korea Fashion Industry Association	2019
Assistant Administrator		Yonsei University	2018 - 2020
Teaching Assistant		Yonsei University	2019 - 2020

- 01** Minimal to Zero
- 02** Kaleidoscope
- 03** New Moon, New Phase
- 04** Hidden Treasure
- 05** Journey to Kinetic Art
- 06** Toxophilite

Minimal to Zero

Presented at the 2022 Annual International Textile and Apparel Association (ITAA) Conference.

University of Fashion - Sustainability Award Recipient

Skills & Software

sustainable design

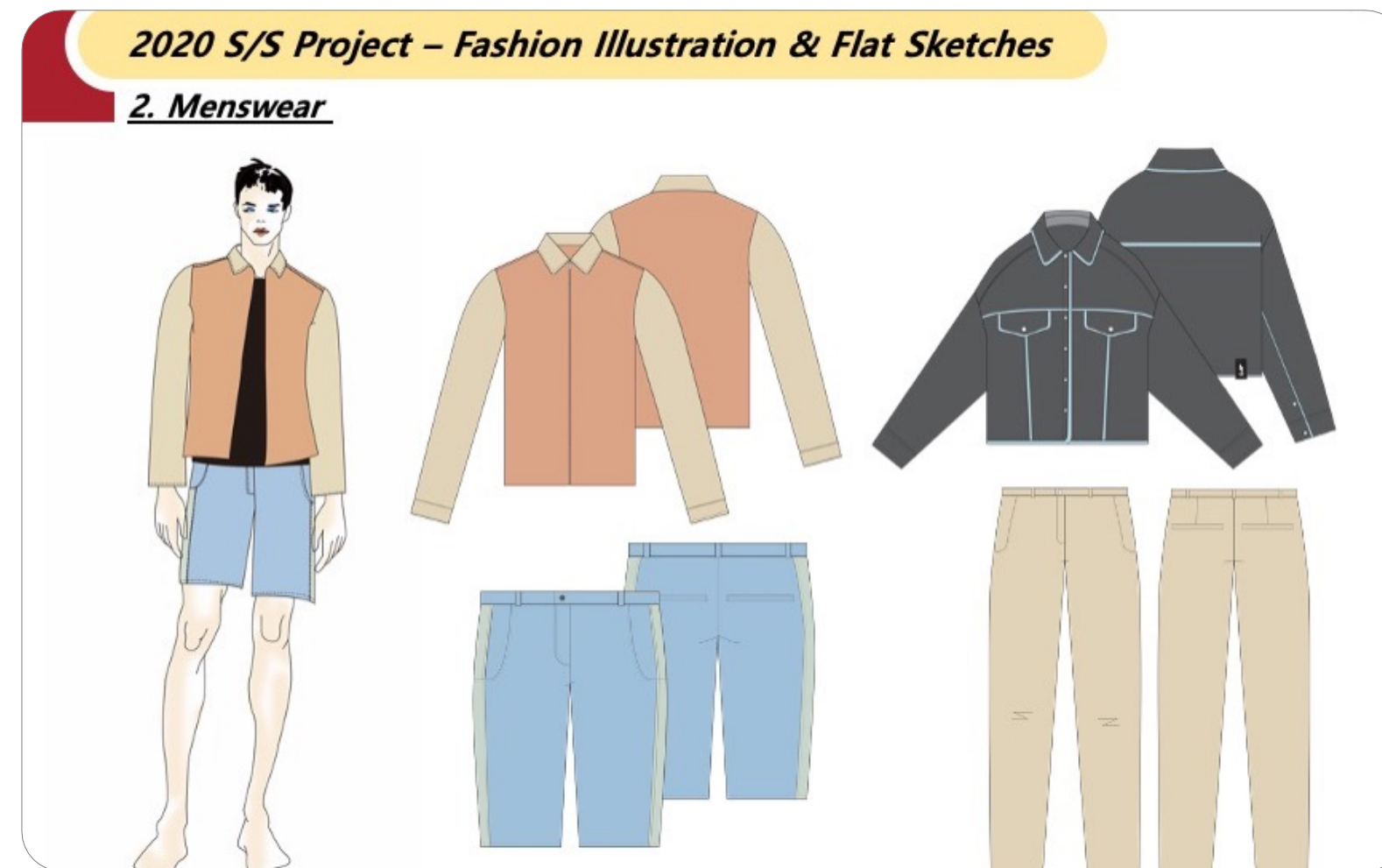
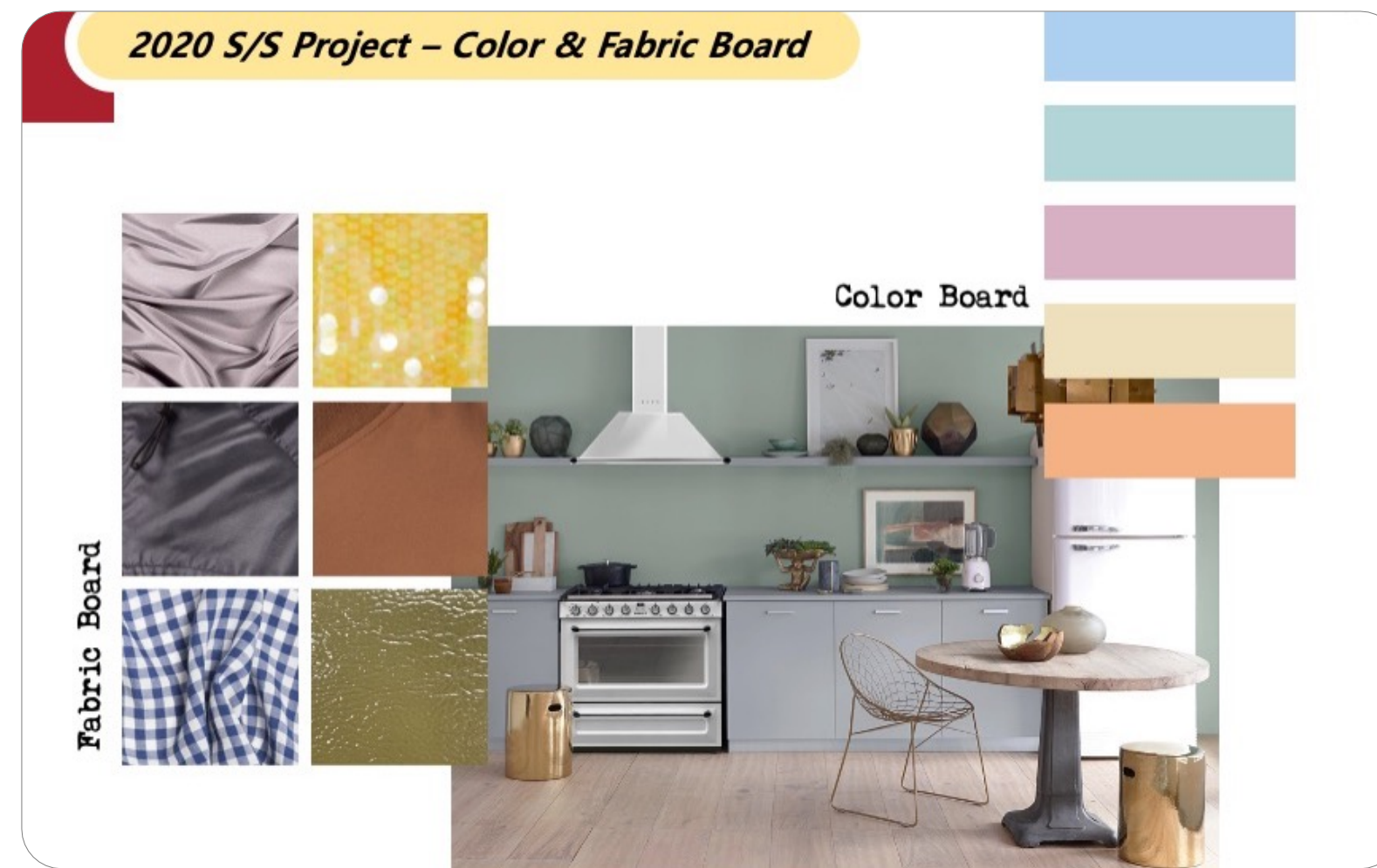
zero-waste patternmaking

draping

print engineering

digital textile printing





Kaleidoscope

Presented at the 2019 Annual Fall Conference of the
Korean Society for Clothing and Textiles.
Fashion Product Design Contest Award Recipient

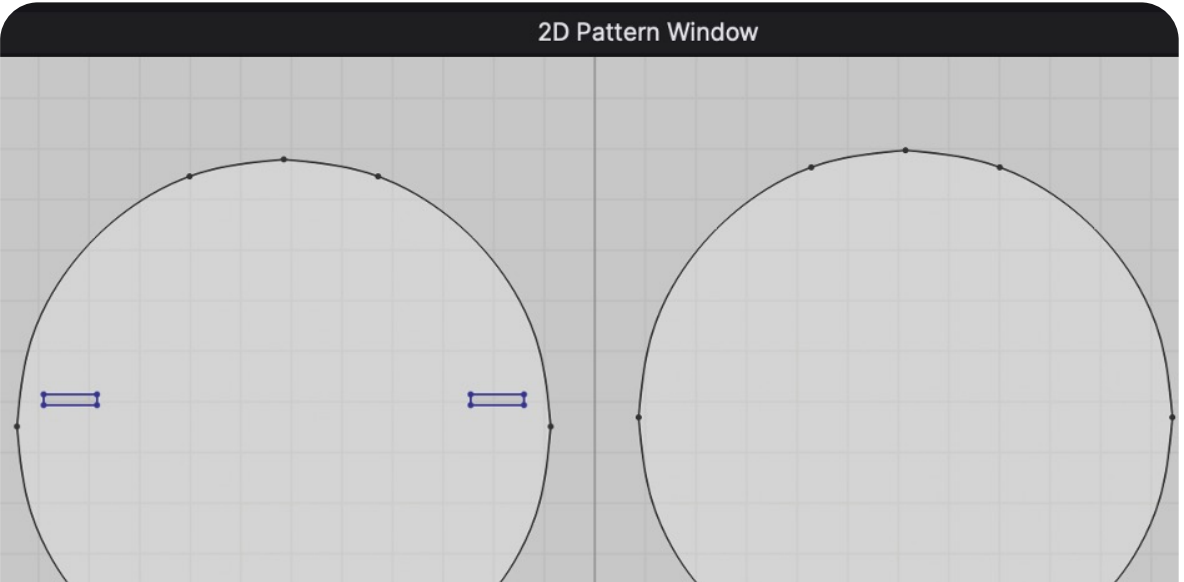
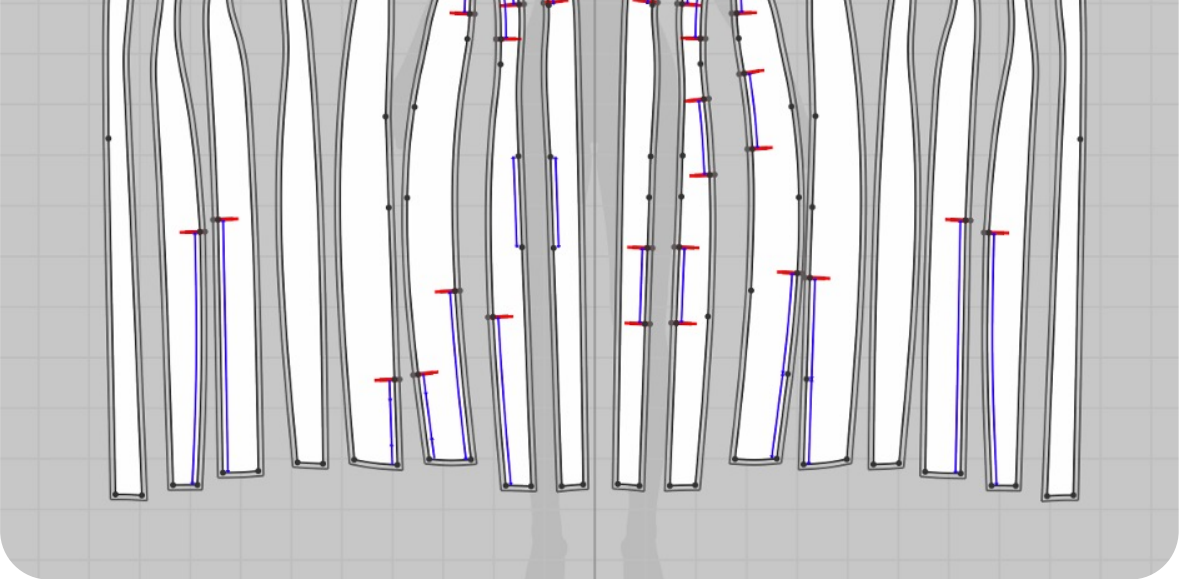
Skills & Software

fashion illustration
fashion product development
branding & merchandising
adobe illustrator

New Moon, New Phase

Presented at the 2024 Annual International Textile and Apparel Association (ITAA) Conference.

Skills & Software
sustainable design
zero-waste patternmaking
3D patternmaking
wearable art
cultural design
CLO 3D



Hidden Treasure

Presented at the XXV World Congress of the International Federation for Home Economics (IFHE).



Skills & Software
sustainable design
zero-waste patternmaking
repurposing
size-adjustable design

Journey to Kinetic Art

Presented at the XXV World Congress of the International Federation for Home Economics (IFHE).



Skills & Software
creative design
draping
surface print design
digital textile printing
adobe photoshop
adobe illustrator

Toxophilite

Presented at the 2022 Annual International Textile and Apparel Association (ITAA) Conference.

Skills & Software

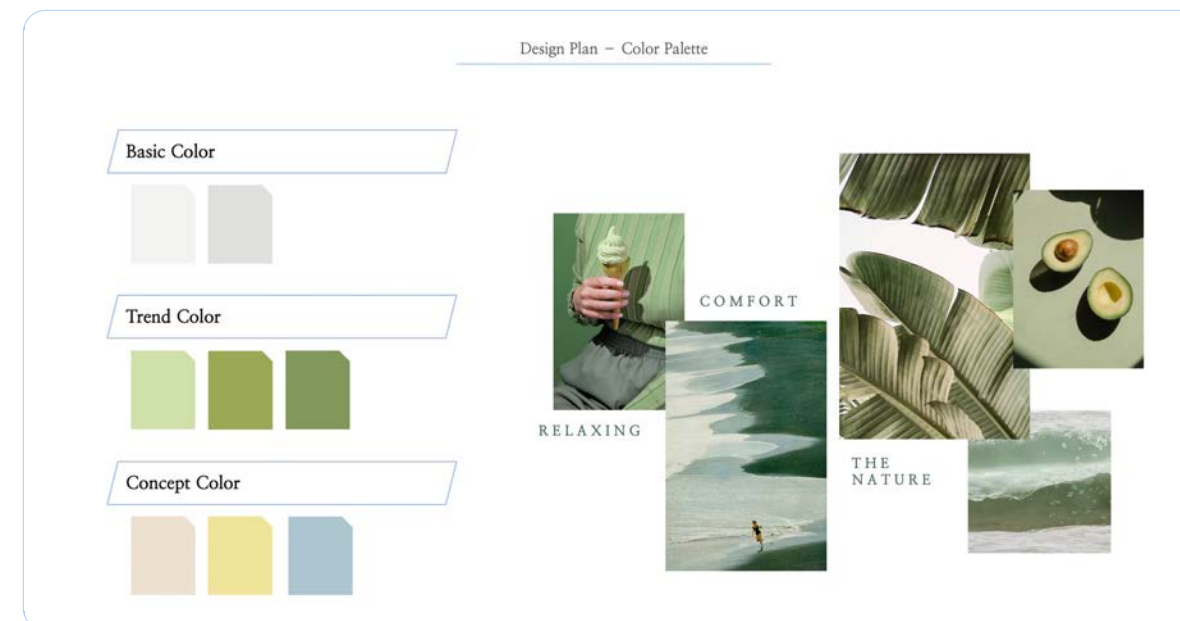
functional soft-goods product development
body-powered prosthesis
user-centered design
FEA consumer needs model
adaptive clothing



- 01** Elderly Gait Monitoring
- 02** Remind & Rewind
- 03** Reinterpretation of Chanel
- 04** Mod Look Redesign

Design Project for 'Design and Planning of Smart Clothing'

smart clothing design
functional apparel design
technical flat drawing
adobe illustrator



Remind & Rewind

Graduation Fashion Show at Kyung Hee University

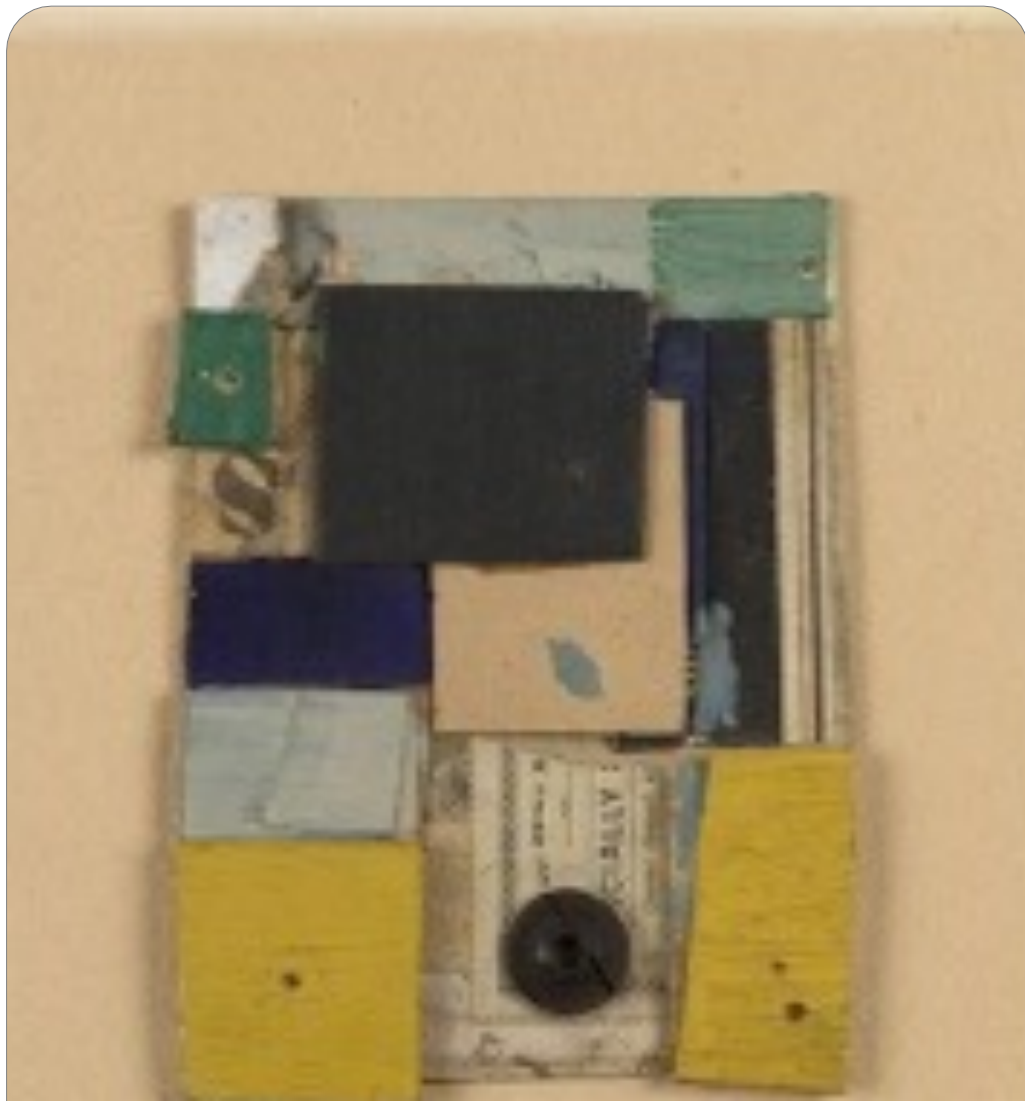
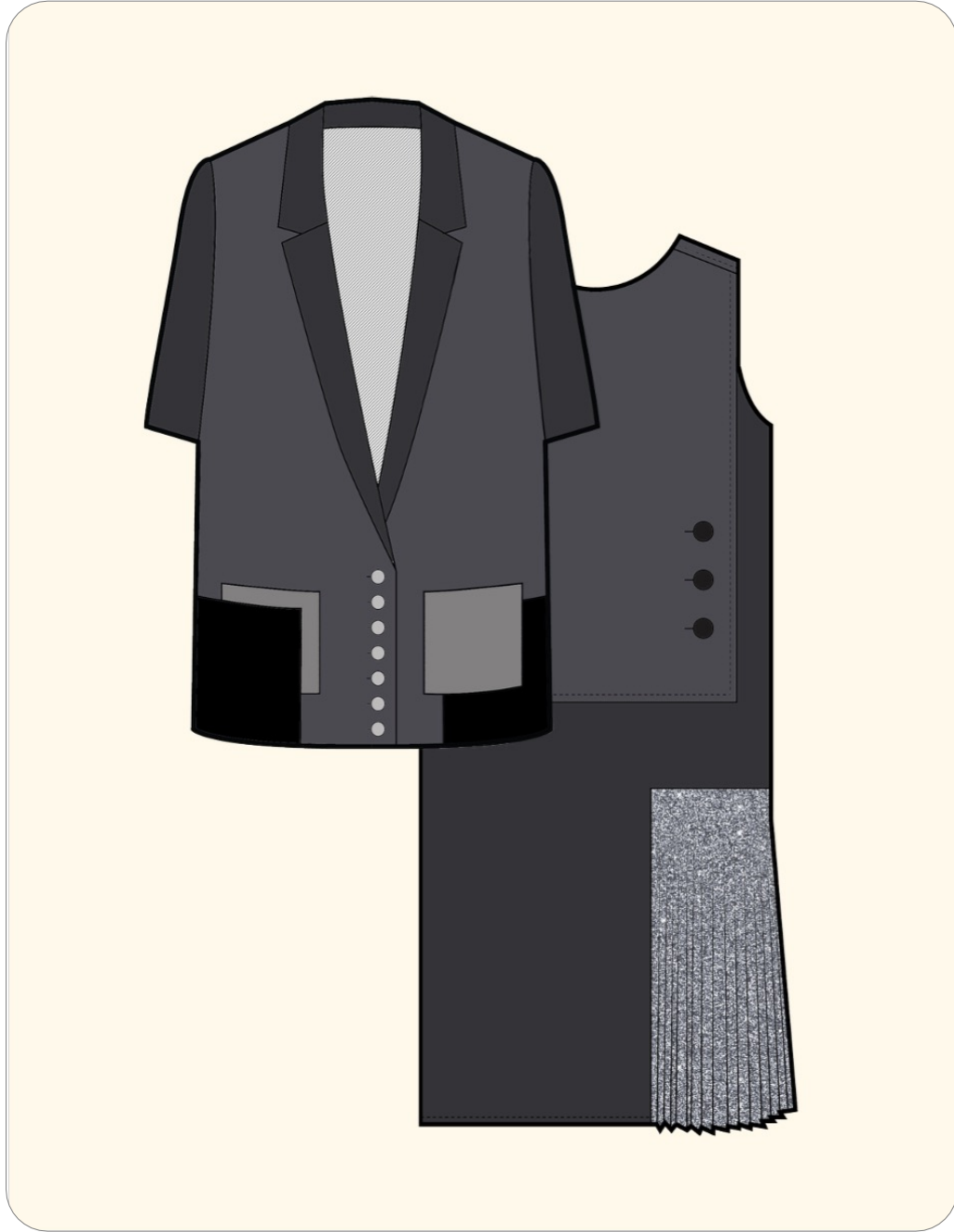
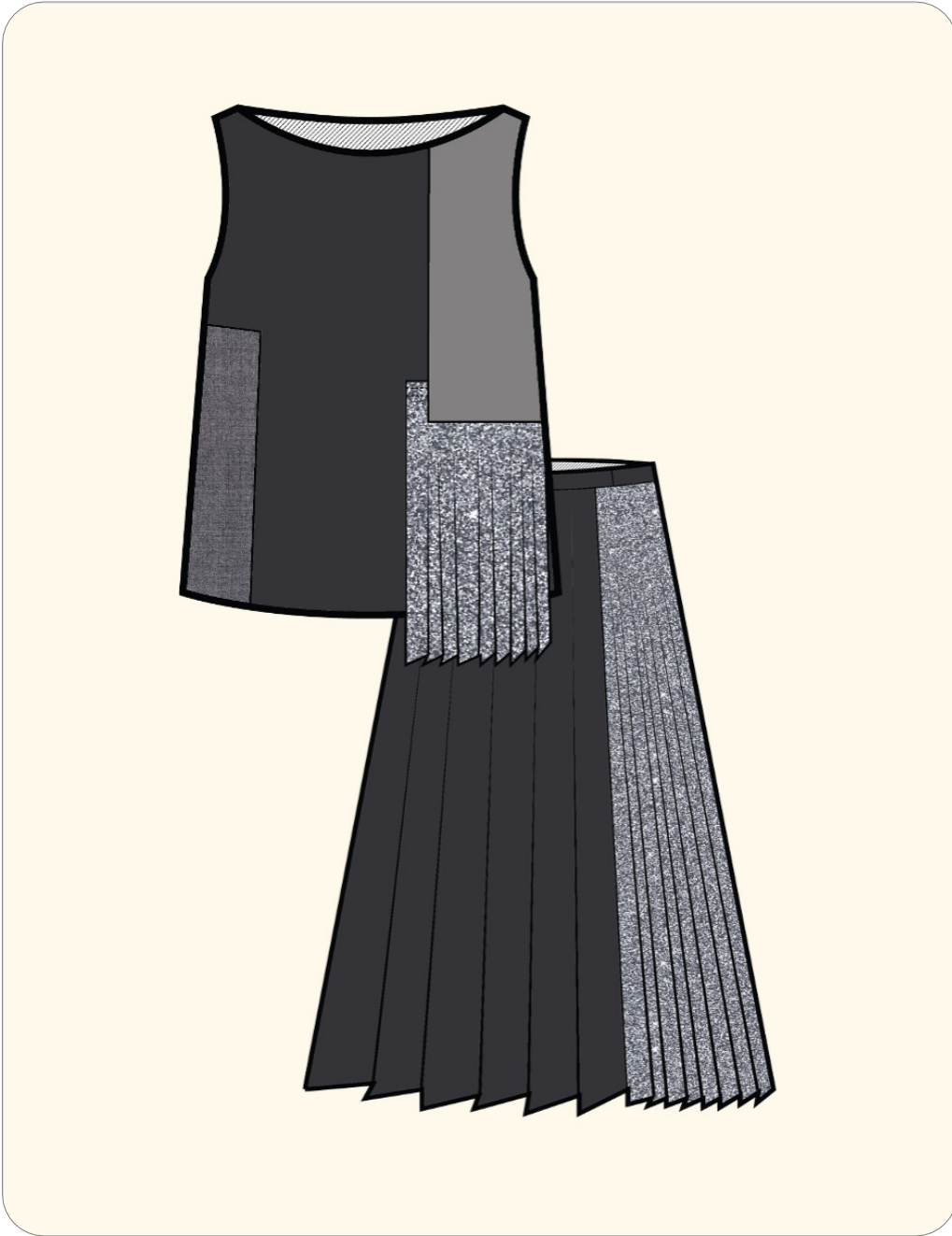
Skills & Software

- creative design
- draping
- flat patternmaking
- fashion collection development



Reinterpretation of Chanel

Design Project for ‘Modern Culture,
Art and Apparel Design’



Skills & Software
fashion collection development
technical flat drawing
adobe illustrator

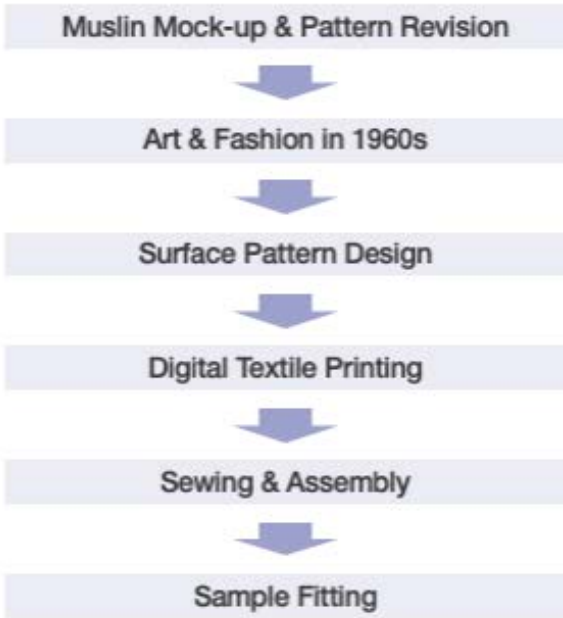
Mod Look Redesign

Design Project for 'Apparel Construction Capstone Design'

Skills & Software

- draping
- surface print design
- digital textile printing
- adobe photoshop

Apparel Design Process



Color Palette & Inspiration Images



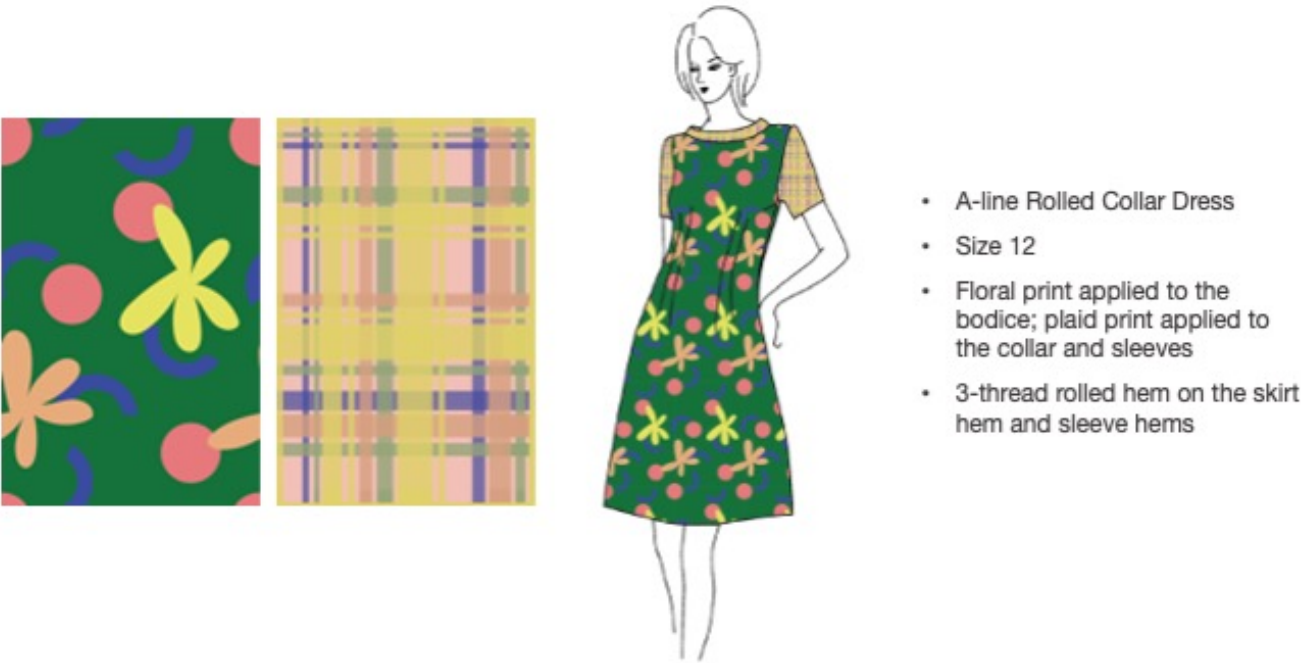
Muslin Sample Fitting & Analysis 1



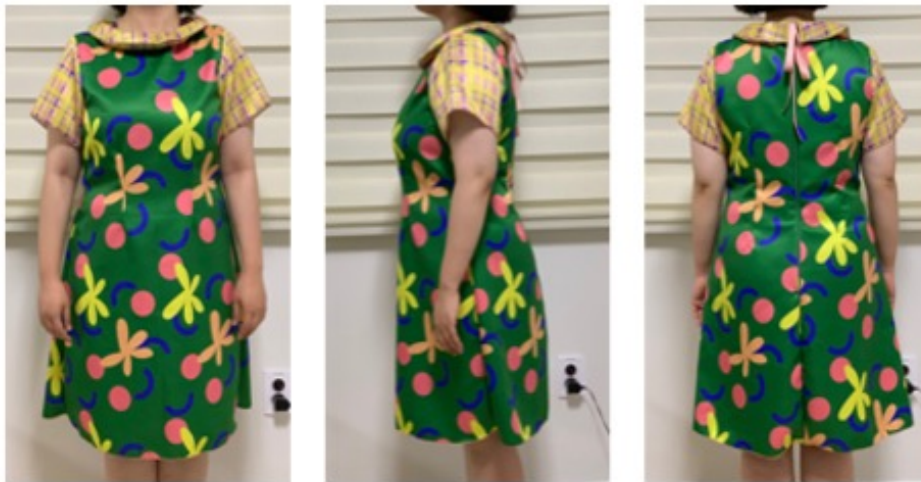
Muslin Sample Fitting & Analysis 2



Surface Print Design Development



Final Fitting



- 01** Fashion Presentation Techniques
- 02** Fashion Analysis & Communication
- 03** Apparel Assembly
- 04** Aesthetics of Consumer Experience
- 05** Computer Applications in Digital Design
- 06** Digital Production in Event Management

Fashion Presentation Techniques

Virginia Tech

Software

adobe photoshop

adobe illustrator

Skills / Competencies

fashion illustration (hand & digital)

technical flat drawing

fabric & surface print design

visual communication for fashion design

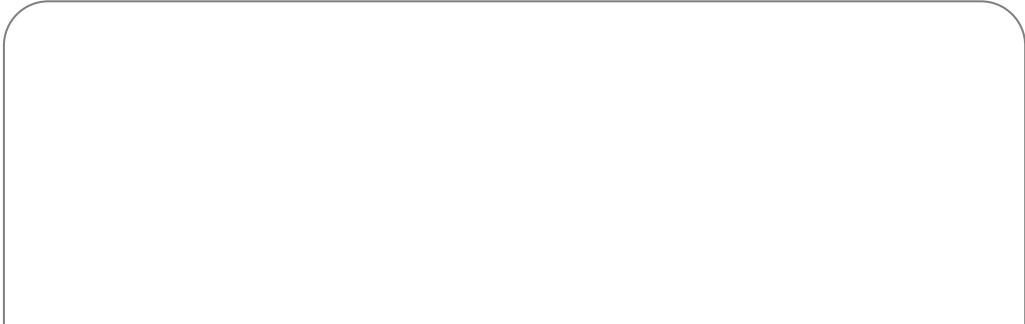
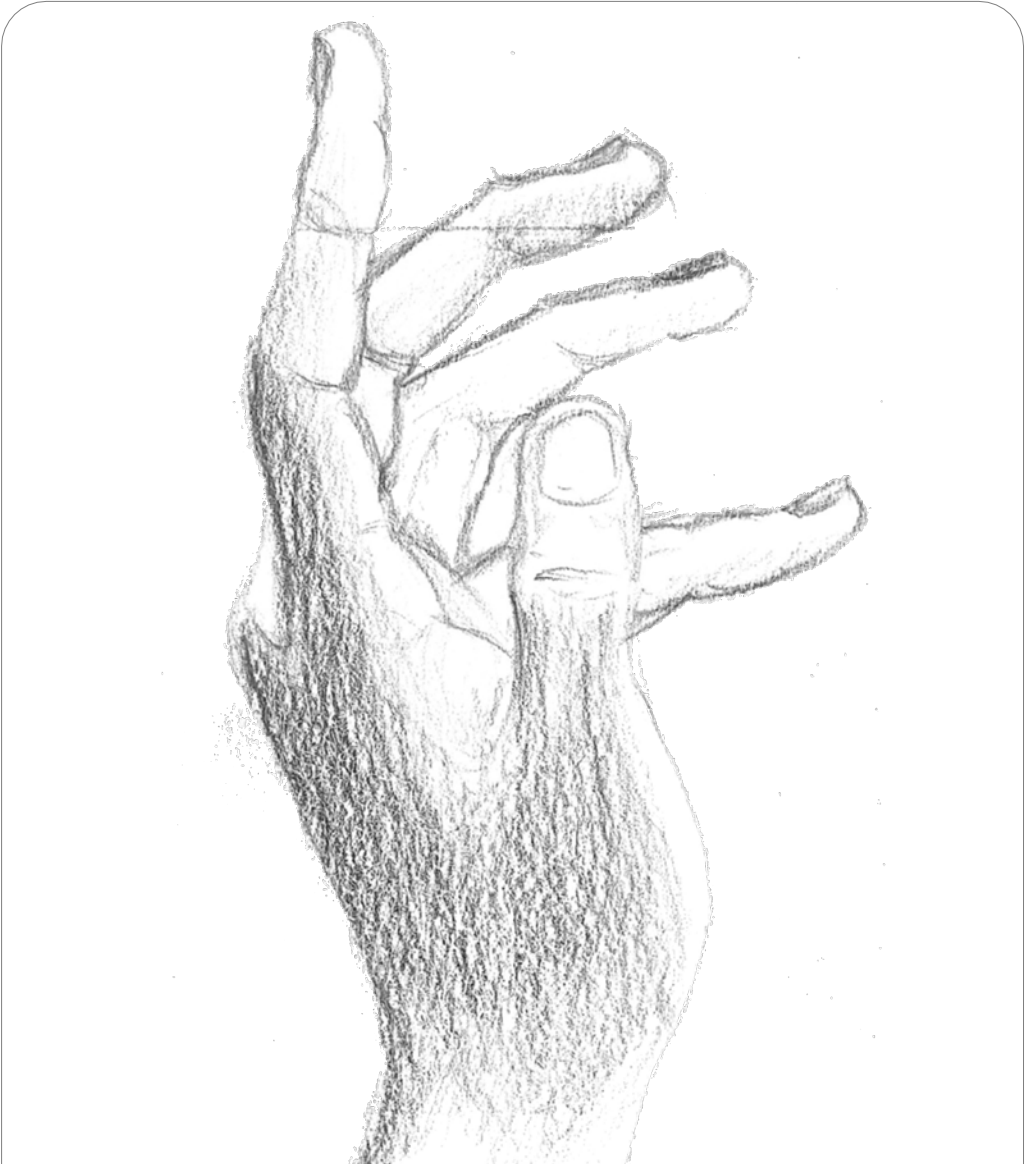
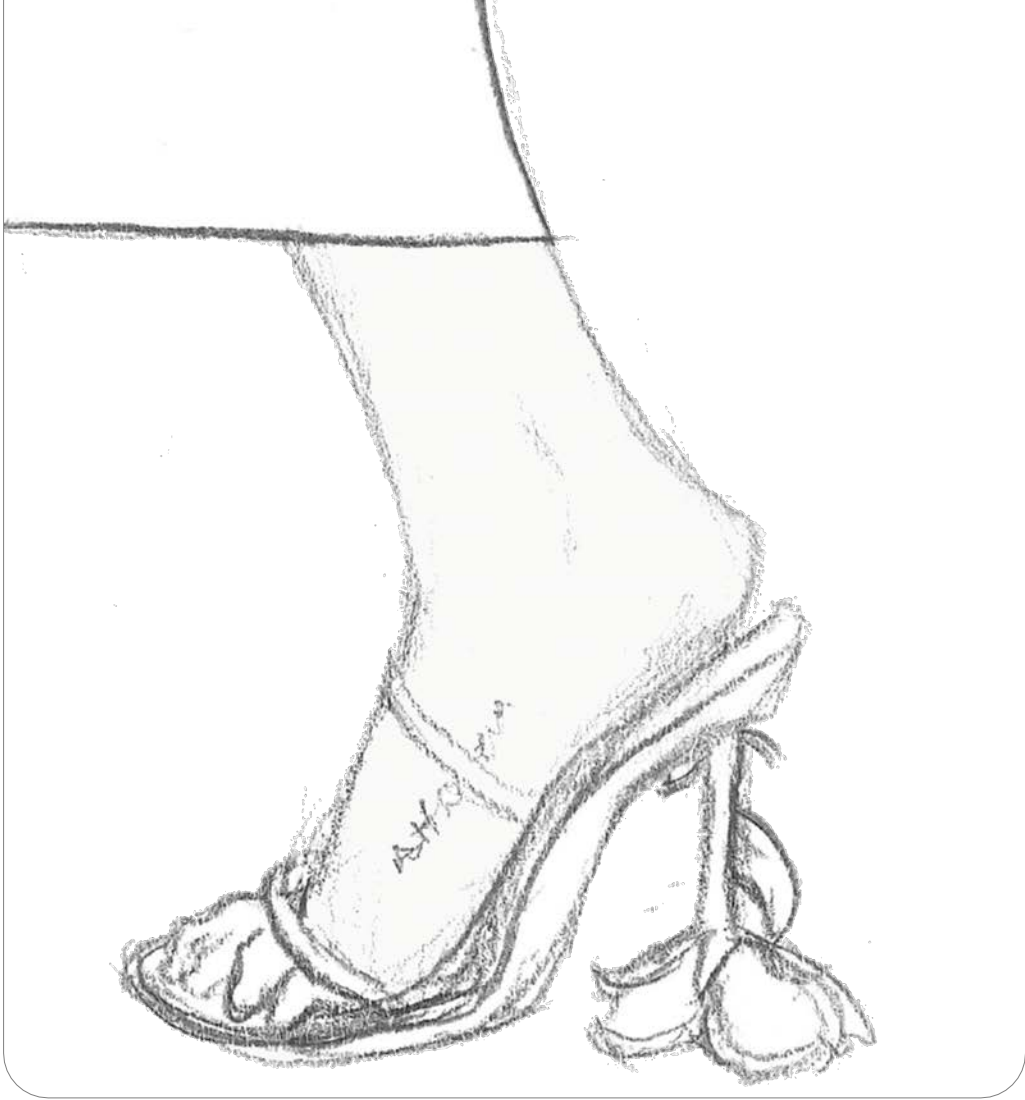
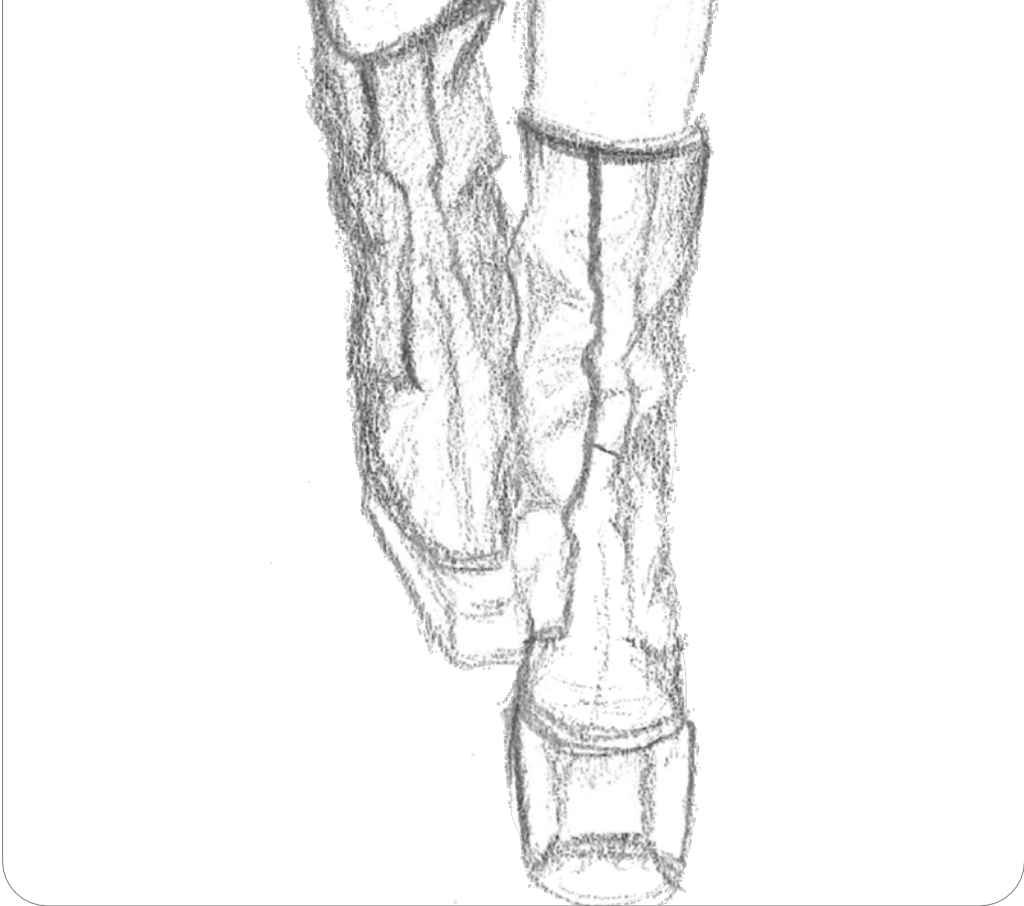
sustainable design concepts

Course Description

Explores the principles and methods of fashion illustration, focusing on proportions, design details, and fabric renderings. Students develop skills in both manual and digital techniques, applying industry terminology to create technical flat drawings. The course emphasizes creative communication using diverse media.

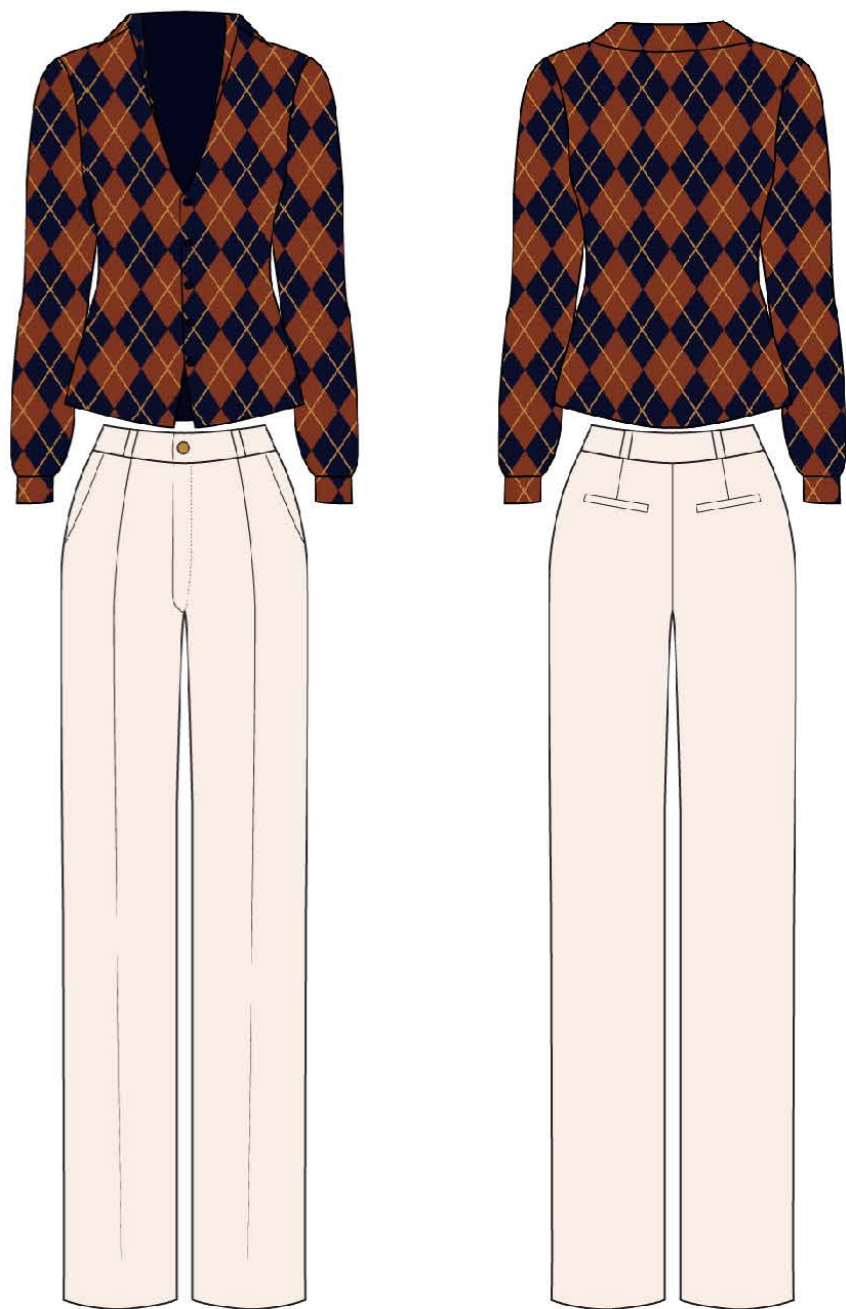
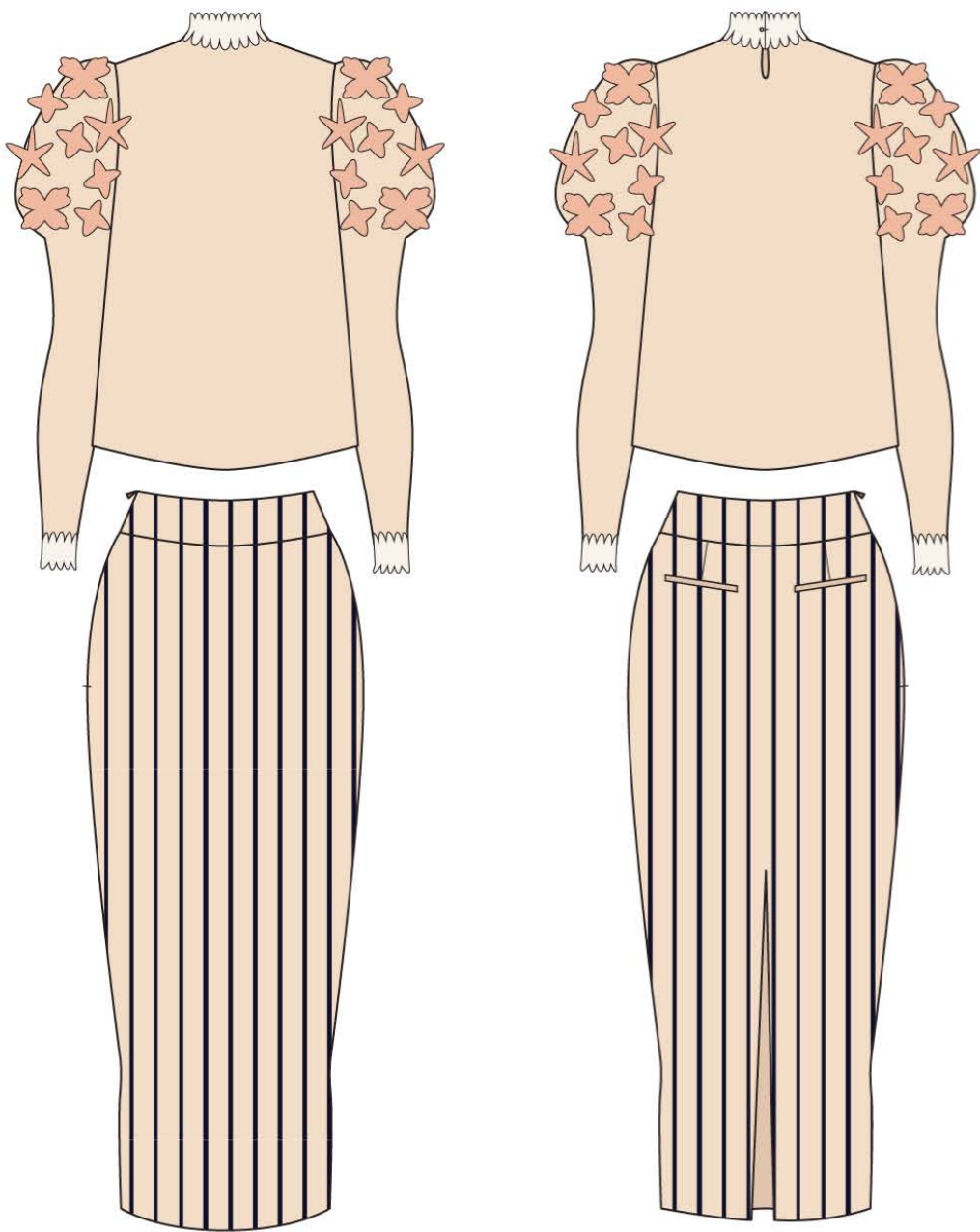
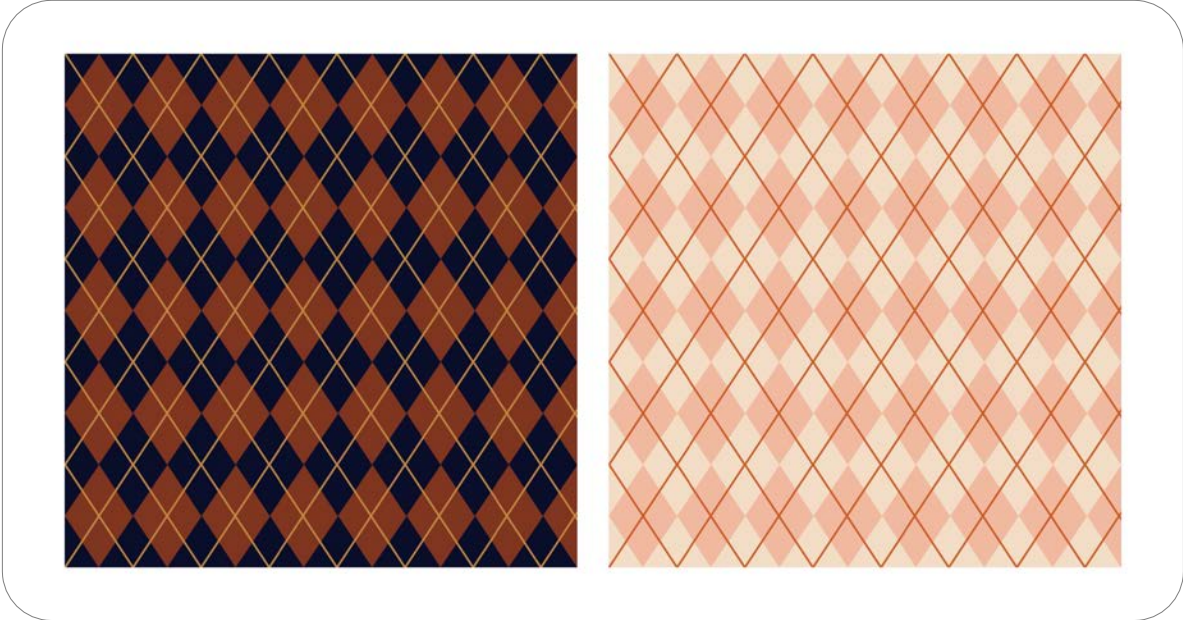
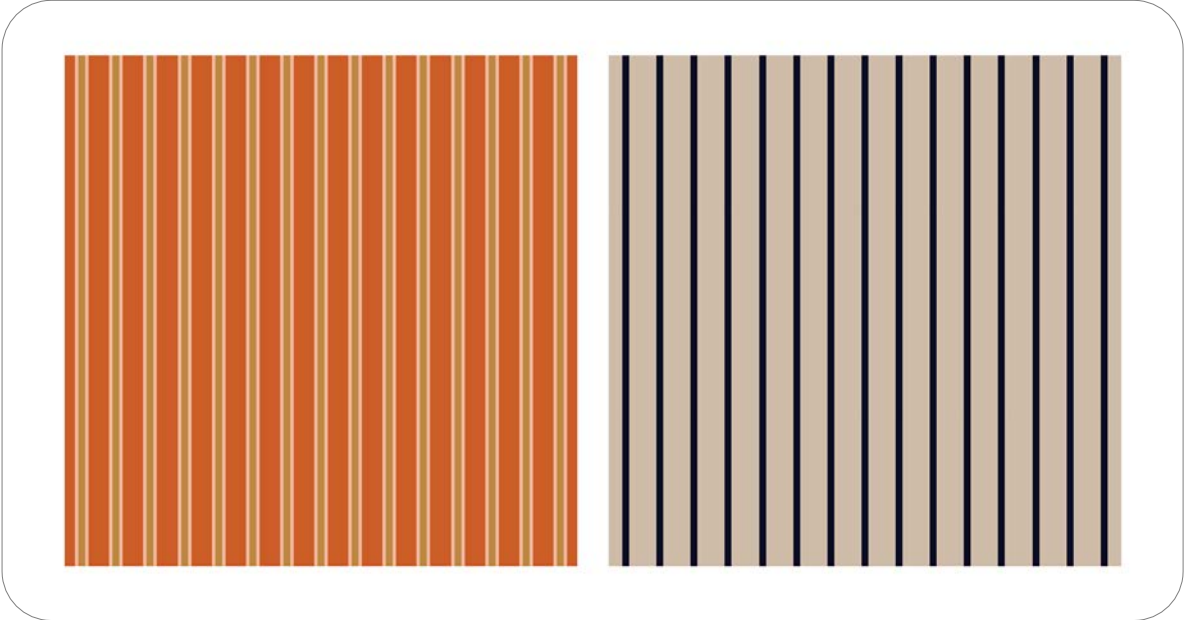
Fashion Presentation Techniques

Virginia Tech



Fashion Presentation Techniques

Virginia Tech



Theme Statement

Title: Hypnotic
Season: Fall 2025
The Hypnotic collection was inspired by the Australian mystery film "Picnic at Hanging Rock". It explores the loss of innocence as the collection descends into darkness, moving from the light and airy lace designs into heavier denim and leather. The collection also calls back to the dream like nature of the film with the long flowing elements present in the designs.

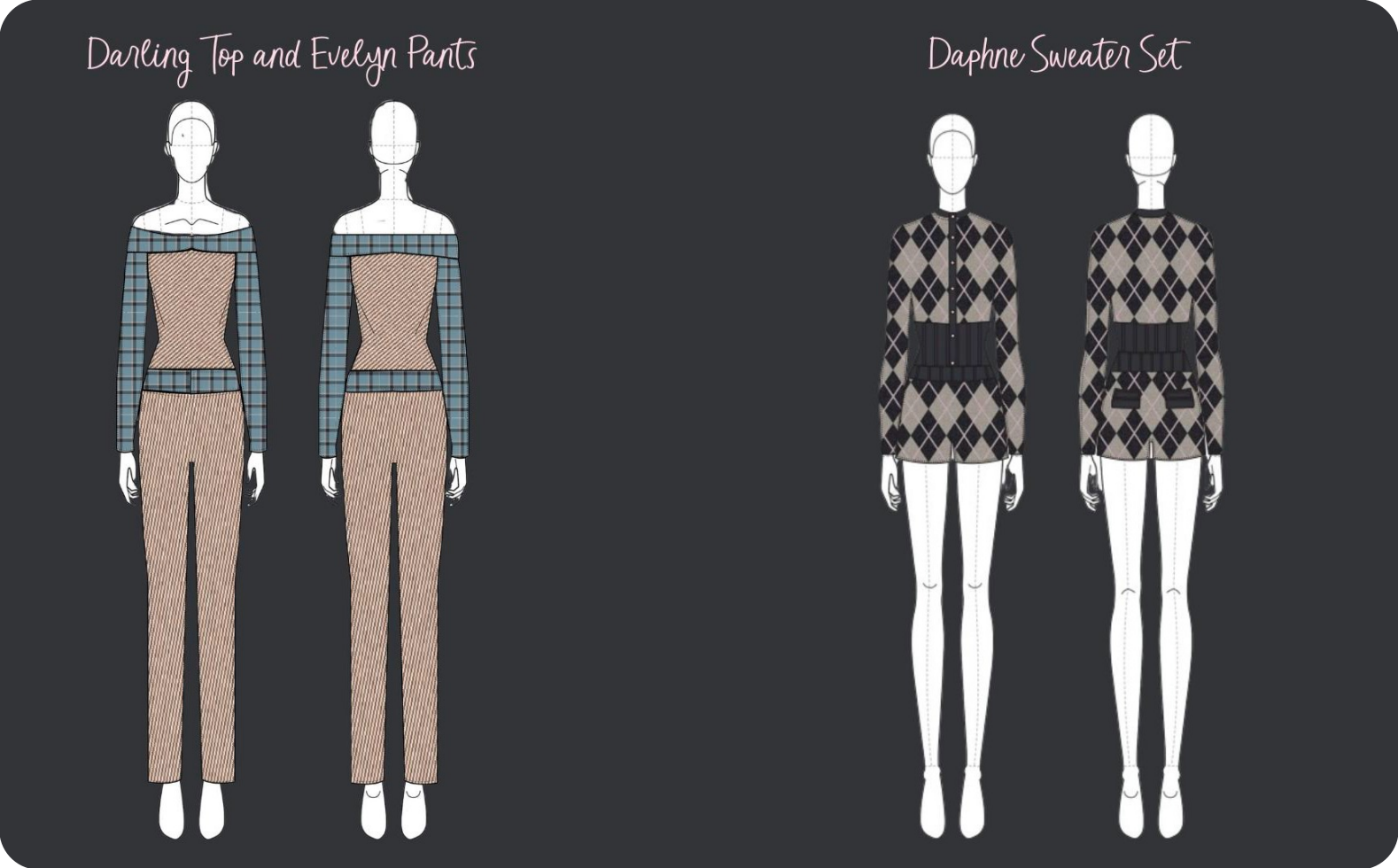
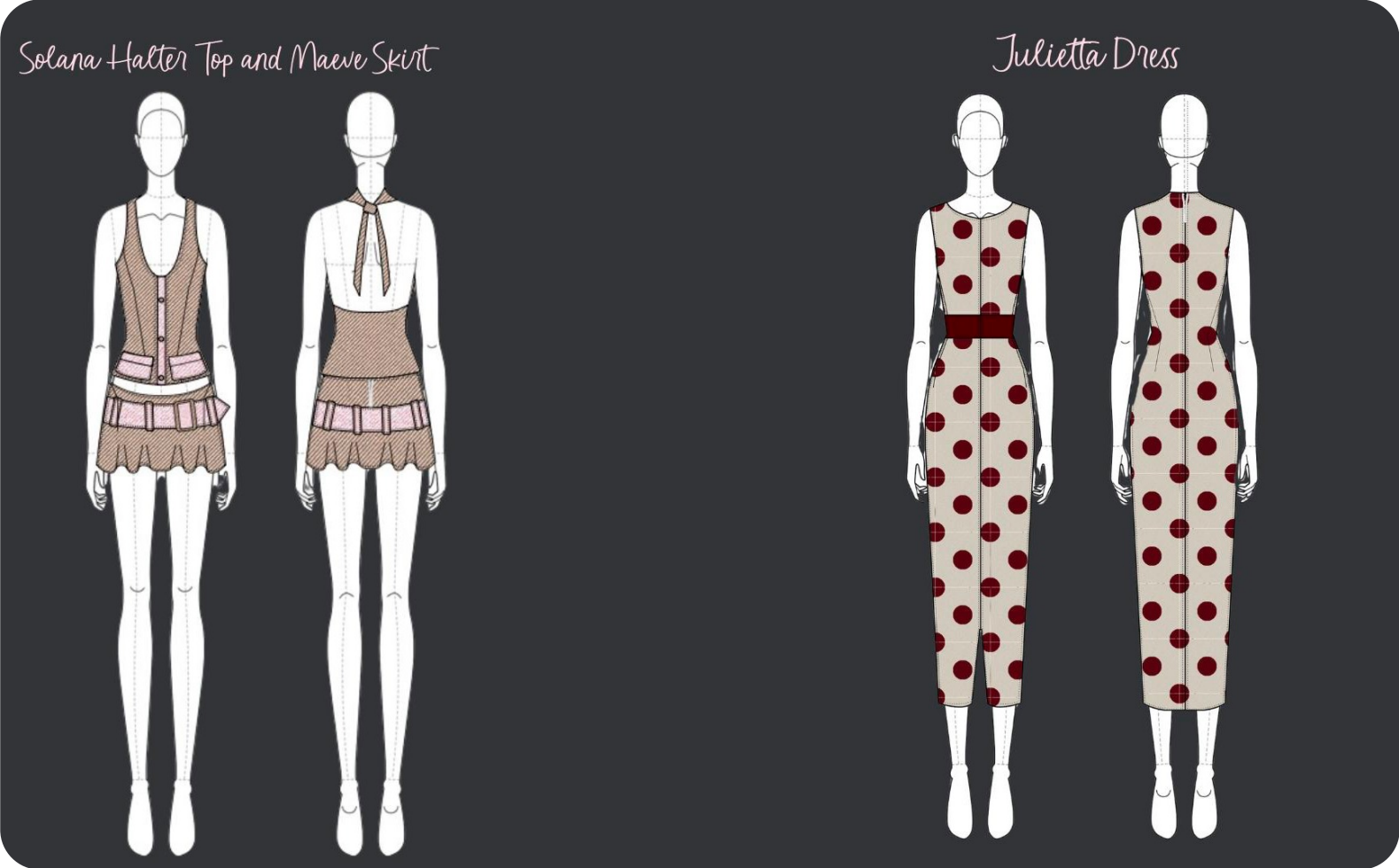
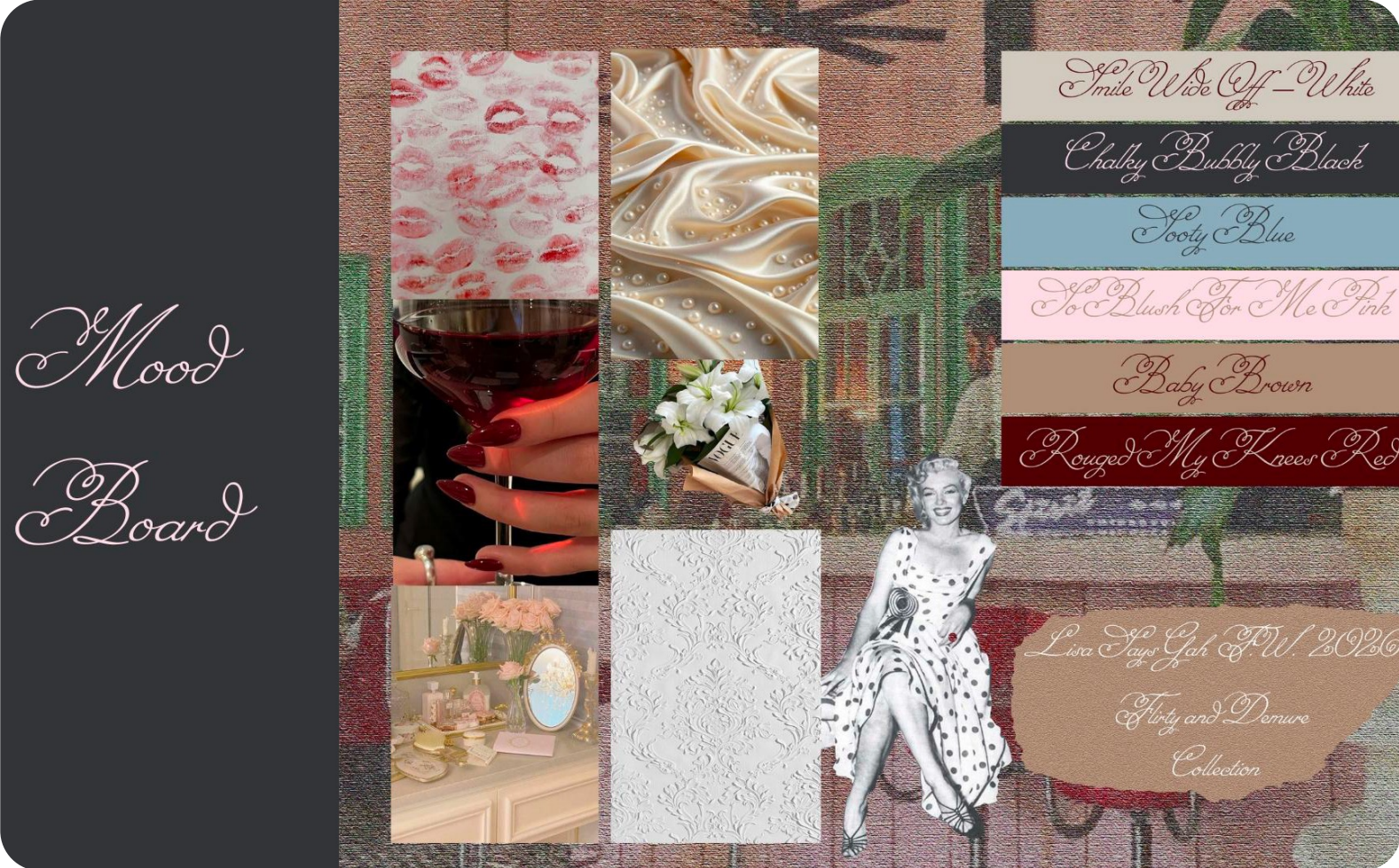


Sustainable Fashion

Sustainable fashion is a design philosophy that focuses on creating clothing that is kind to people and kind to the environment. This is accomplished by minimizing the waste created in the manufacturing process, using ethical labor, and producing long-lasting garments that don't end up in a landfill after a year or two of wear.

Fashion Presentation Techniques

Virginia Tech



Fashion Analysis and Communication

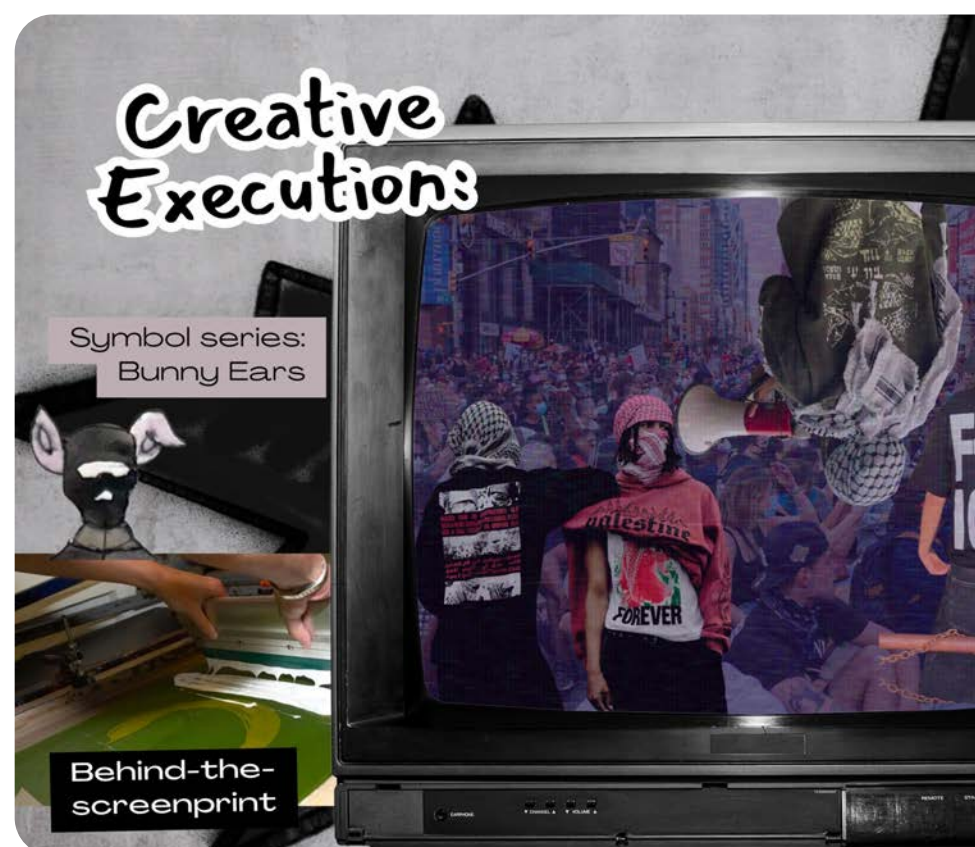
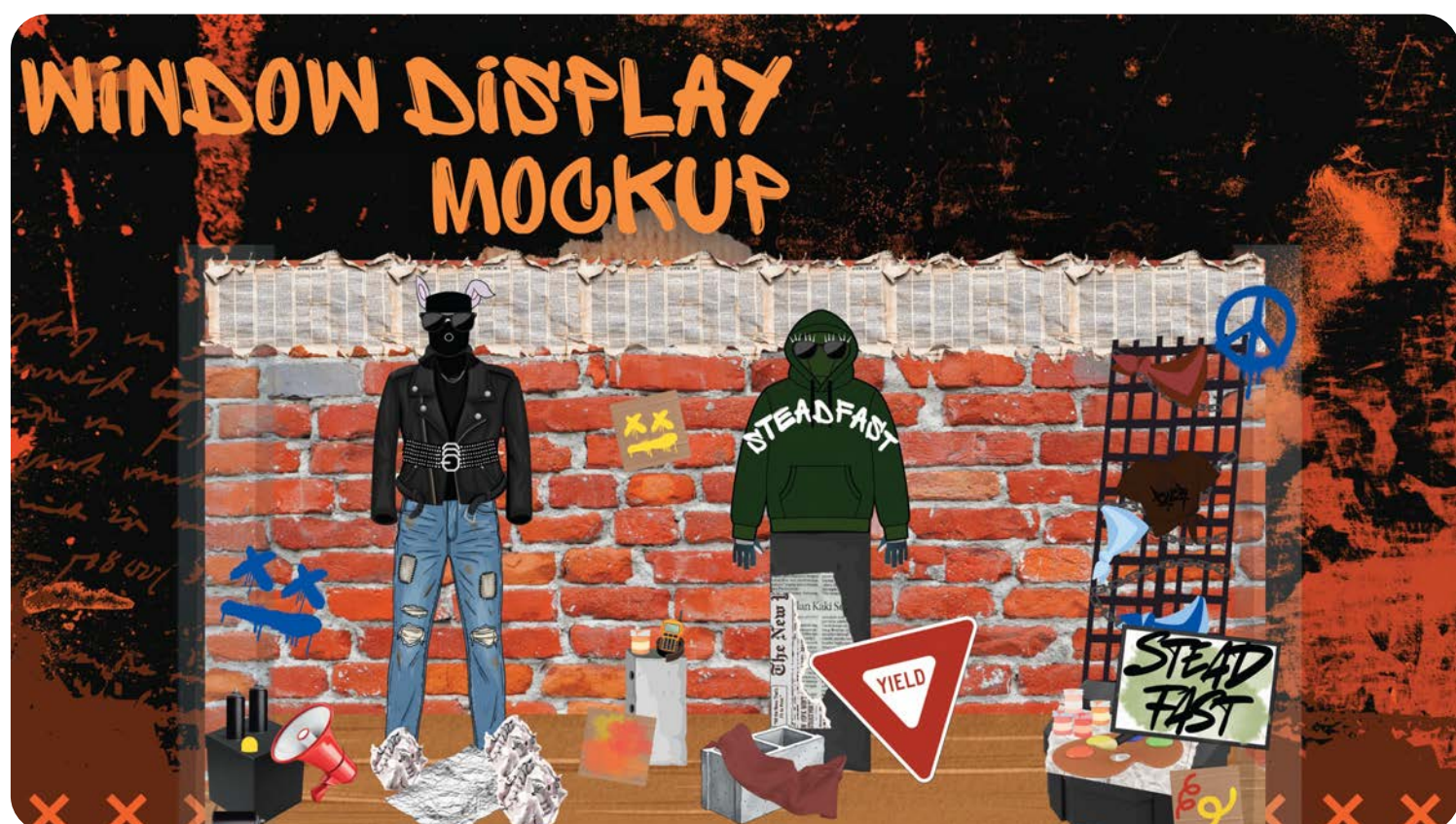
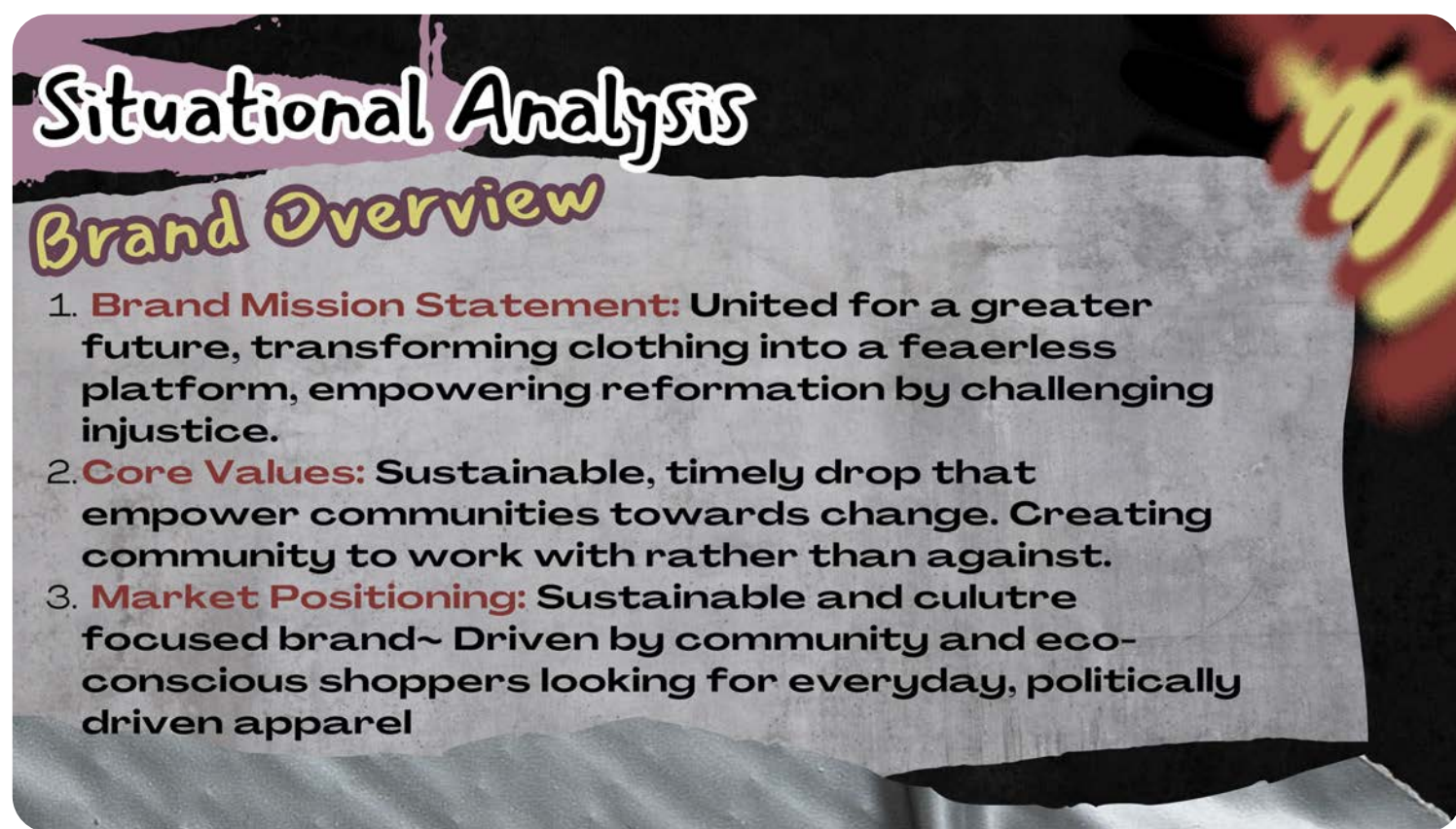
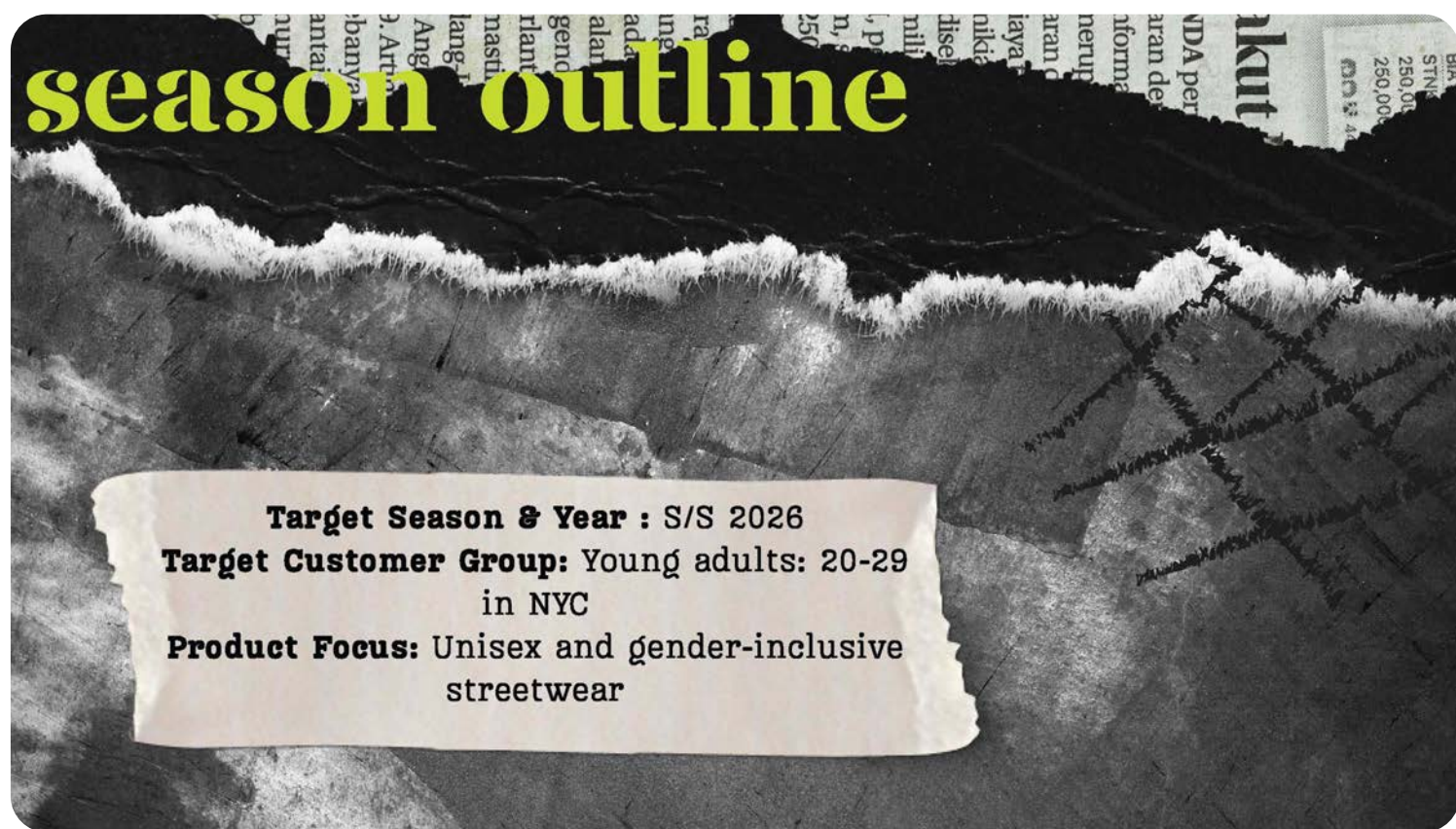
Virginia Tech

Skills / Competencies

- branding & brand strategy
- fashion trend forecasting
- consumer & market research
- fashion collection development
- promotional planning
- visual merchandising
- visual communication for fashion promotion

Course Description

Examines branding, fashion forecasting, fashion collection development, and promotional strategies within the fashion industry. Conducts thorough research on consumers, markets, and trends to develop effective promotional plans, including visual merchandising strategies.





“Life Styled Simply”

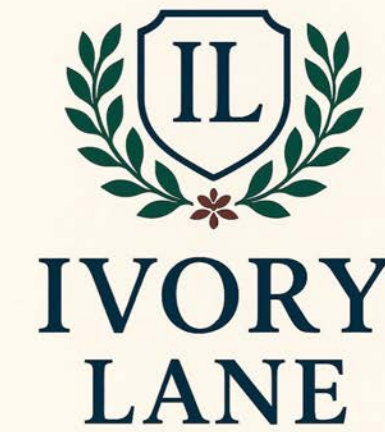
FMD 4224
Group 3

Brand Identity

Ivory Lane is dedicated to curating a collection of high quality and original pieces, blending timeless style with fresh ideas, in order to create endless effortless options for your closet.

Ivory Lane is the middle child in between fashion’s older sister J Crew, and younger sister Brandy Melville.

Being 100% made in the United States, we believe in fair wages for every worker in our company and production line. Ivory Lane is passionate about our Ethical Manufacturing Pledge and we will always promote and fight for the right of every person to have wage protection and safe working conditions.



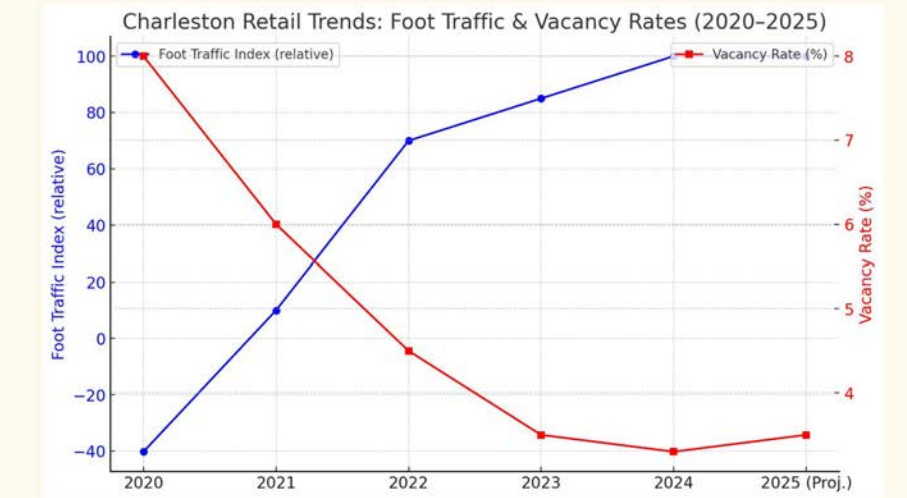
Retailer Trends

Types of retailers:

- Local boutiques
- Antique stores
- High-end luxury
- Home decor

Typical promotion:

- Event based promotion
- In-store experiences
- Social media
- Local collaborations
- Pop-up shops



Campaign Objectives

SMART GOAL:

By May 2026, our brand will establish a strong local presence in Charleston by partnering with three local boutiques, hosting two seasonal pop-up events, and growing our customer base by 30% through curated fall/winter collections that blends Southern charm with timeless preppy style.

- Measurable through partnerships with local businesses
- Highlights local strategy
- Tied to our aesthetic



Major Selling Idea and Message Strategy

Positioning and Brand Image

- Middle sister of Brandy Melville and J.Crew
- Preppy and classy
- High quality, timeless pieces

Unique Selling Proposition:

- High quality pieces and emphasis on sustainability.
- Opportunity to embroider denim that is bought from our store.
- Unique positioning with production 100% in the US.

Media Visual Samples



Instagram Story



Print Flyer



Caption: “sip.stitch.support”
Instagram Post

Window Display Mock-Up



Final Creative Execution



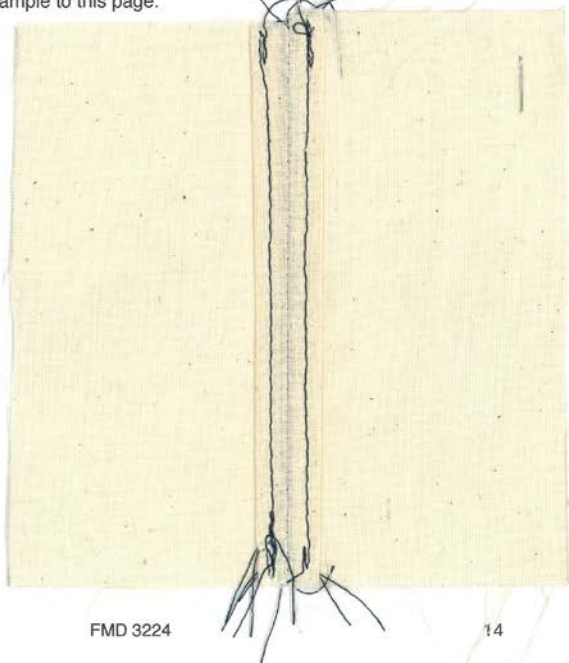
Course Description

Introduces apparel assembly processes and garment construction techniques from simple to complex applications. Emphasizes stitch and seam types, pattern markings, and cost-effective production measures. Students build core competencies through hands-on projects, including the creation of a technical sample book and the construction of complete garments such as a skirt, shirt, and shorts.



Plain Seam with Clean-edge Finish

1. Cut two pieces of muslin, each 3" x 5".
2. Label the right side and wrong side on each piece of muslin.
3. Draw a line 1/2 inch from the longer edge for both muslin pieces' wrong side. 1/2 inch width rectangular will be the seam allowance edges.
4. Working with just one seam allowance edge, place the right side of the seam allowance flat on the sewing table.
5. Fold over the edge of the seam allowance 1/4 inch, so that the wrong sides of the fabric are together.
6. Stitch close to the folded edge, clip threads.
7. Repeat with other seam allowance.
8. Place the fabric pieces right sides together and align the stitchline. Pin if necessary.
9. Sew a plain seam along the stitchline. Use a straight stitch with backstitch. Look at the instructions on plain seam if needed.
10. Press the seam open.
11. Staple your finished sample to this page.



Fall 2025

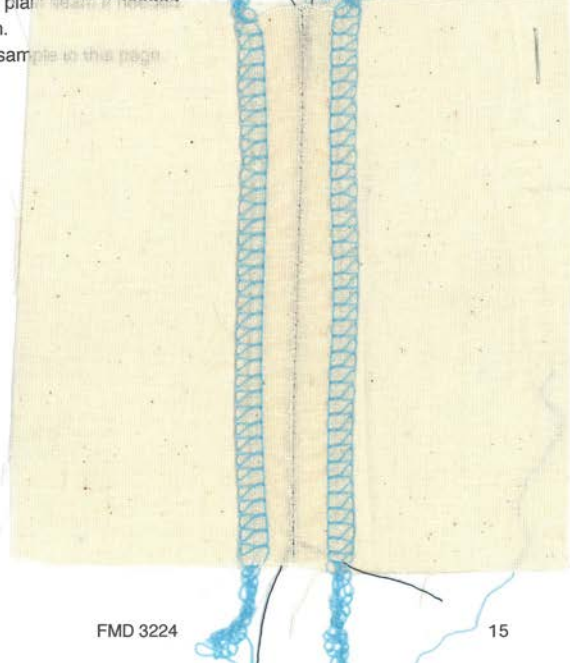
FMD 3224

14



Plain Seam with Overlock Finish

1. Cut two pieces of muslin, each 3" x 5".
2. Label the right side and wrong side on each piece of muslin.
3. Draw a line 1/2 inch from the longer edge for both muslin pieces' wrong side. 1/2 inch width rectangular will be the seam allowance edges.
4. Working with just one seam allowance edge, line the edge of the fabric so that the cutting blade barely cuts off any of the fabric edge.
5. Keeping the fabric straight, and using the seam allowance guide on the throat plate, sew carefully to keep all other fabric out of the sewing area, or it will be trimmed as well.
6. Be sure to continue sewing 6" past the fabric edge.
7. Complete on both seam allowance edges of the muslin pieces.
8. Clip threads close to the fabric.
9. Place the fabric pieces right sides together and align the stitchline. Pin if necessary.
10. Sew a plain seam along the stitchline. Use a straight stitch with backstitch. Look at the instructions on plain seam if needed.
11. Press the seam open.
12. Staple your finished sample to this page.



Fall 2025

FMD 3224

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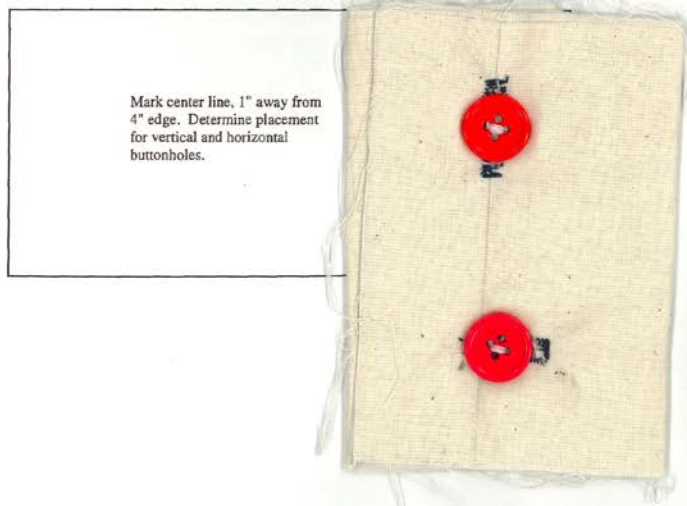


Buttonhole and Placement

Buttonholes are placed on the right-hand side of the garment opening of women's clothing, and on the left-hand side of men's clothing. Buttonholes are usually placed in a horizontal direction, except on shirt plackets, when they are placed vertically.

Horizontal Buttonholes are place 1/8 inch beyond the center line of the garment and extend the length of the button into the garment (not towards the extension).
Vertical Buttonholes are placed on the center line of the garment or placket.

1. Use 3 layers of 4" x 8" fabric, wrong sides together, so that you have the right side of the fabric showing on both sides of your fabric sandwich.
2. Place a center line on your fabric that is 1" away and parallel to a 4" edge. The line can be machine-basted, hand-basted, or placed with a permanent marker. (Normally, you wouldn't use a permanent marker, but for this exercise, it is necessary to see the markings forever.)
3. Determine the length of your buttonhole (button diameter + half the height of the button).
4. Using your invisible marker, mark button placement for one vertical and one horizontal button, using the guidelines above.
5. Using the buttonhole attachment on your machine, sew the two buttonholes.



Fall 2025

FMD 3224

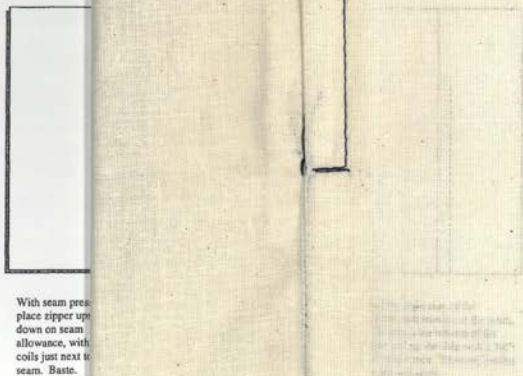
41



Lapped Zipper

Lapped zipper application conceals the zipper stitching visible. The lap will work with a 5/8".

1. Working from the left side, you extend the right side of the fabric over the zipper.
2. Leaving the zipper in place, extend the right side of the fabric over the zipper.
3. Machine baste in place.
4. Change the stitch to a topstitch.
5. Turn the zipper face the other way.
6. Stitch the fold to the fabric.
7. With the right side of the fabric facing out, don't worry about the zipper.
8. From the outside of the fabric, place a 1/2" tape over the zipper.
9. Place 1/2" tape over the zipper.
10. To topstitch zipper.
11. Bring thread ends to the surface.
12. Remove basting stitches.



Fall 2025



Aesthetics of Consumer Experience

Iowa State University

Skills / Competencies

visual communication for
consumer experiences
application of design principles
consumer experience design
visual merchandising as
experience strategy
branding through aesthetic
expression

Course Description

Focusing on design principles and aesthetic concepts, this course explores their application in planning creative consumer experiences, particularly within hospitality, event, and retail environments. This course examines how individual differences and cultural influences shape aesthetic preferences.



the explanation behind our cultural tradition

Montessori education and philosophy

In the mid 1900s, the Montessori method of education was developed by Italian physician and educator

Maria Montessori.

(Christle, 2023)

She primarily focused on sensory-rich environments and purposeful activities self-directed by the children, encouraging and embracing curiosity (Montessori Northwest, n.d.).

In challenging the traditional educational experience, Montessori opened the door to – **system of movement and choice** – for young children (Christle, 2023). We chose to represent her research by reaching a broader audience through the restaurant industry. To begin conveying her philosophy, we intend to implement it.



(Iran, 2014)

Play Kitchen Set

Restaurant

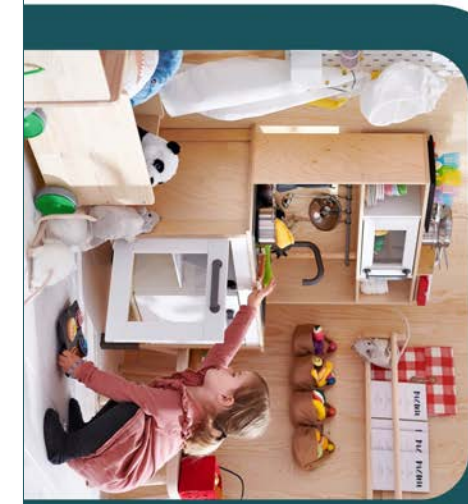


Image courtesy of Ikea

- Inspiration for this restaurant is the idea of a Kitchen Set for children
- These kitchen sets allow for children to explore a situation that they see mocked in their real life (Hip Kids)
- These kitchens also allow kids to enhance their motor skills, social skills, and language (Resources, L).
- All of these thing sparked our inspiration to take this restaurant into a real world “play kitchen”



Team #4

(in alphabetical order)

Most kids under 12
prefer using touch
screens

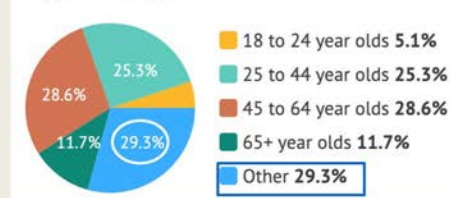
The target market is
kids ages 3-12

Target Market

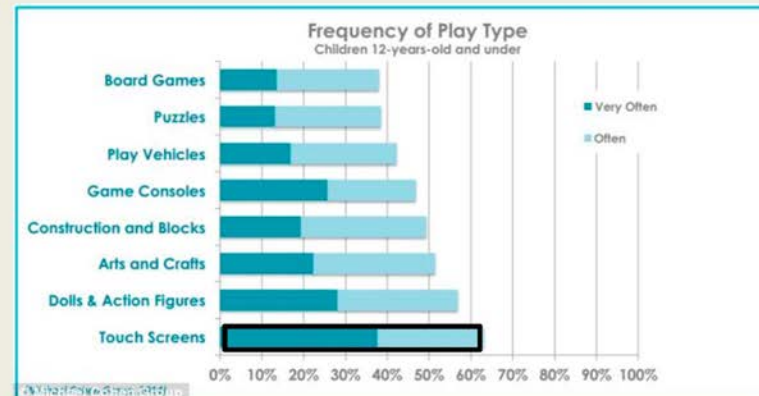
Sam Rengert

Largest age group
is under 18 years
old

Age Groups



<https://dwellies.com/ohio/community-in-dublin>



<https://www.dailymail.co.uk/sciencetech/article-2565061/How-iPad-replaced-toy-chest-Researchers-children-play-touchscreens-traditional-toys.html>

Experience Economy: 4Es |

Carnycia Royce

graphic courtesy of Carnycia Royce

EDUCATIONAL



ESCAPIST



Multi-Sensory Design |

Carnycia Royce

graphic courtesy of Carnycia Royce

hearing

Our goal is to emphasize a variety of auditory experiences per age group. Our youngest consumers would initially hear **background music** from their assigned guide (McIlroy, 2023).

The older they are, the more freedom they have to queue their preferred songs, providing the aesthetic appeal of complete choice.

touch



smell



sight



taste

A lighter taste palate that transitions to heavier palate as the customer's age increases.



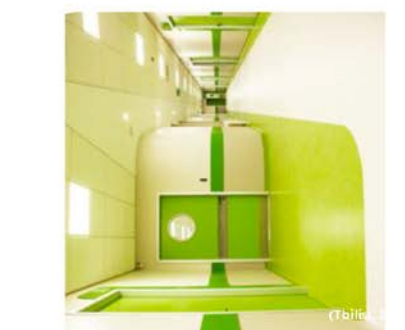
waiting area & check-in



lighting

remote-controlled lighting to
adjust the ambient lighting
throughout the day, mimicking
natural light in the evening

different lighting for each
experience, tailored to the
customer for best versatility

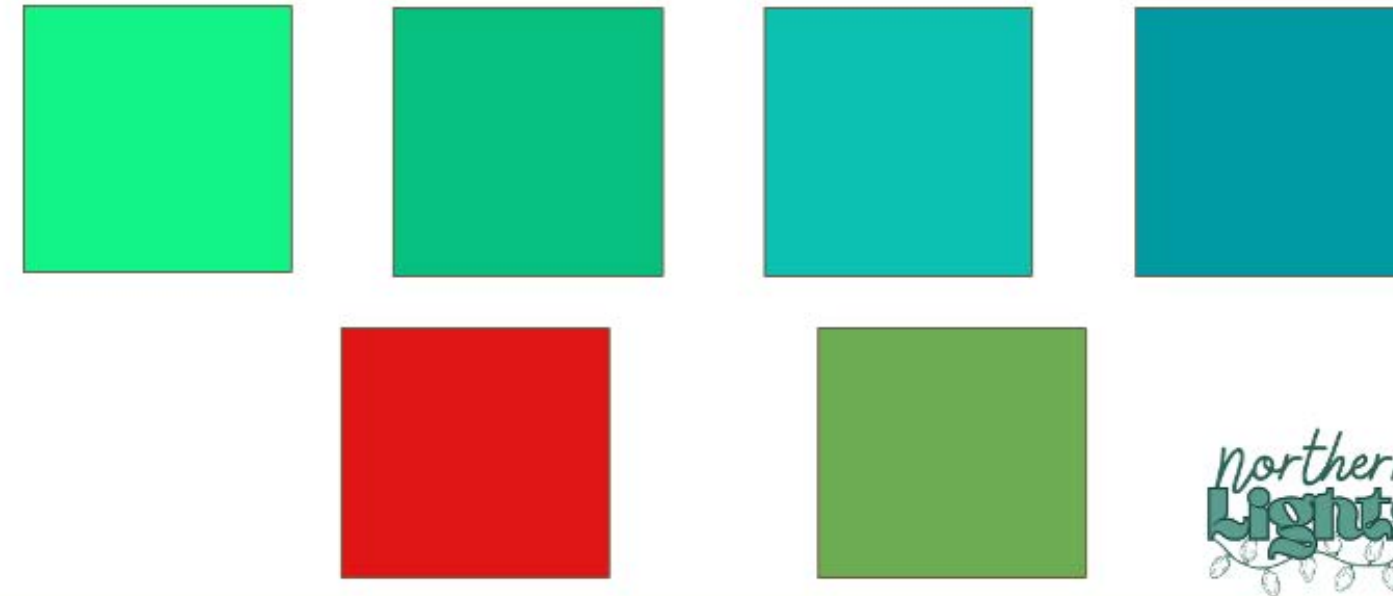


Business Name & Logo



Graphics courtesy of Holly Schmitt.

Color Scheme



Experience Economy

- ❖ Educational
 - Designs including histories
- ❖ Entertainment
 - Local performers
- ❖ Esthetic
 - Christmas light displays
 - Scent & sound



Multi-Sensory Design

- Smell: Butter, light spice of nutmeg or cardamom, pine cones. Pine spruce, nostalgic.
- Light: inside the cafe, dim lights, string Christmas colored lights, and lamps.
- Sound: Jazz/old Christmas music, relaxing musical instruments.
- Taste: Buttery crisp, light spice, soft texture with a crunch.
- Temperature: warm, comforting, inviting.



Interior Design



Lounge seating area around fireplace



Cozy decor designs



Table design
Wood for bar/tables/chairs



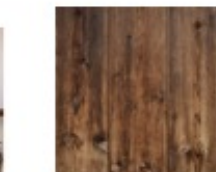
Separate room for bar



Artificial lighting



Coffee bar design



Dress and Appearance

- Warm and cozy outfits
- Jeans and nice shirts or company shirt
- Flannels, monochromatic colors
- Greens, blues, reds



Tablescape

- Rustic wooden table
- White & blue traditional Norwegian plates
- Silverware
- White paper napkins
- Christmas tree centerpieces



Scent



Music and Sound

- Instrumental
- Soft & calm music
- <https://open.spotify.com/playlist/2U5T5Lf1hSZracgViCajl>



Computer Applications in Digital Design

Iowa State University

Software

adobe photoshop

adobe illustrator

adobe indesign

sketchup

Skills / Competencies

technical flat drawing

fabric & surface print design

fashion collection development

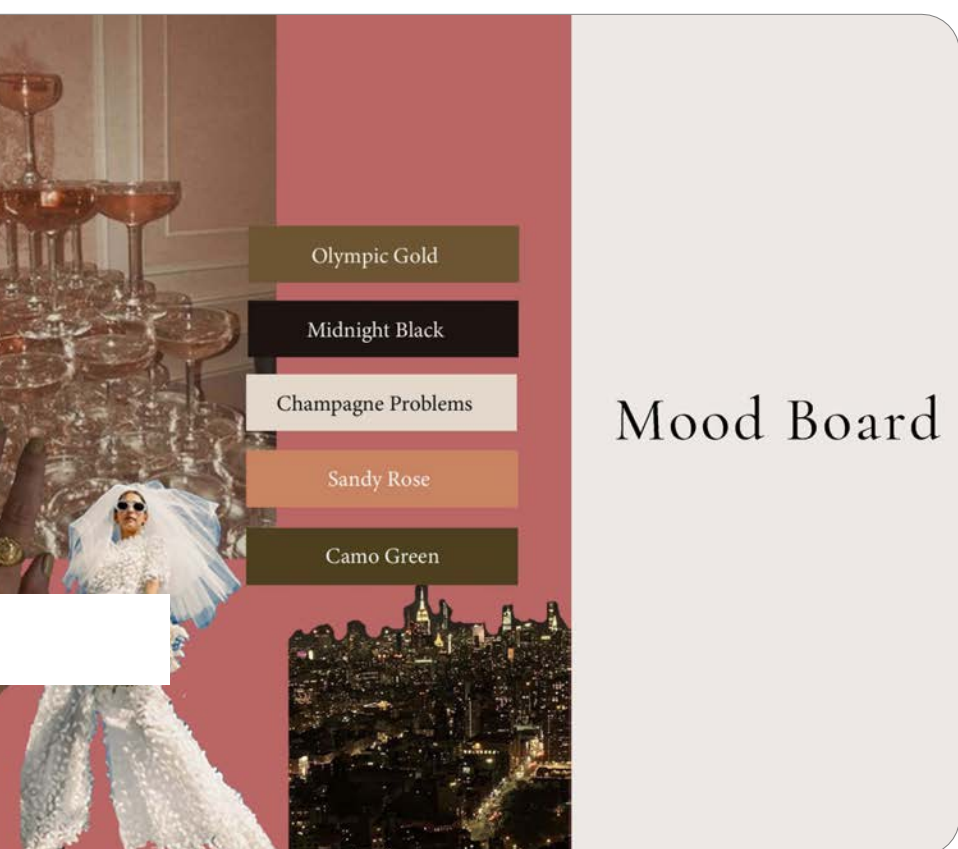
visual merchandising

visual communication for fashion design

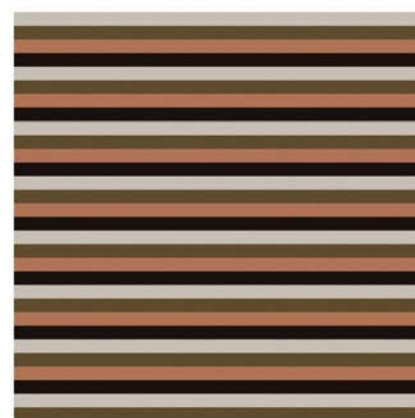
digital portfolio development

Course Description

Focuses on fundamental skills in Adobe Photoshop, Illustrator, InDesign, SketchUp, Excel, and website development, with a focus on digital apparel product development and fashion collection line development. Introduces design elements and principles, alongside digital portfolio creation for fashion design and merchandising. The course features in-class demonstrations and activities to facilitate hands-on learning.



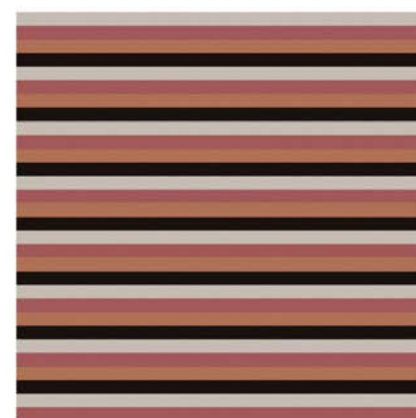
Stripes



Autumn

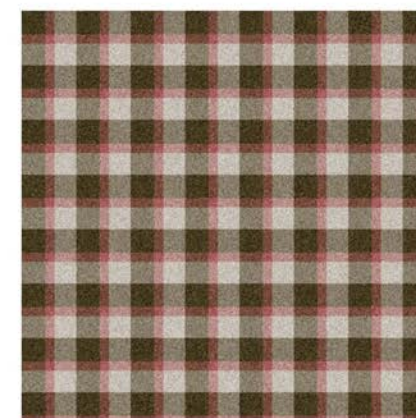


Winter



Summer

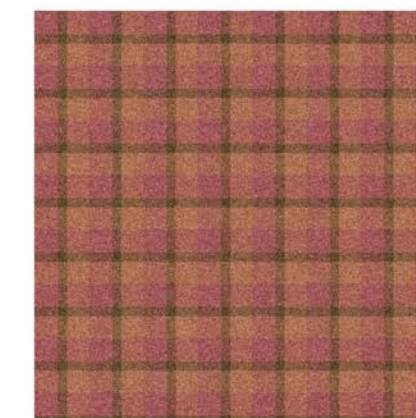
Plaids



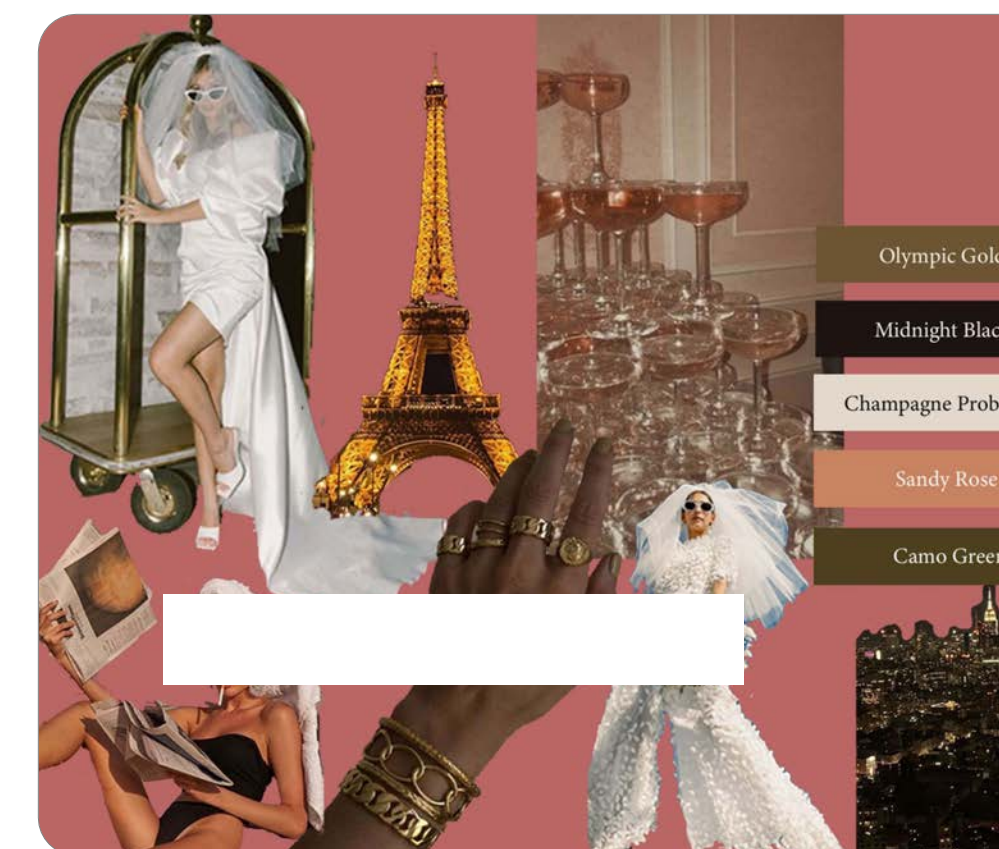
A pop of pink plaid



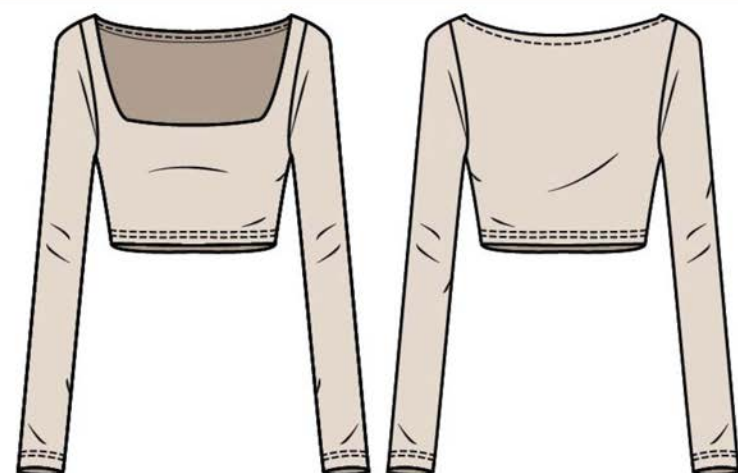
Not your
grandfather's plaid



The New age of plaid



Fabricated Technical Sketch 1



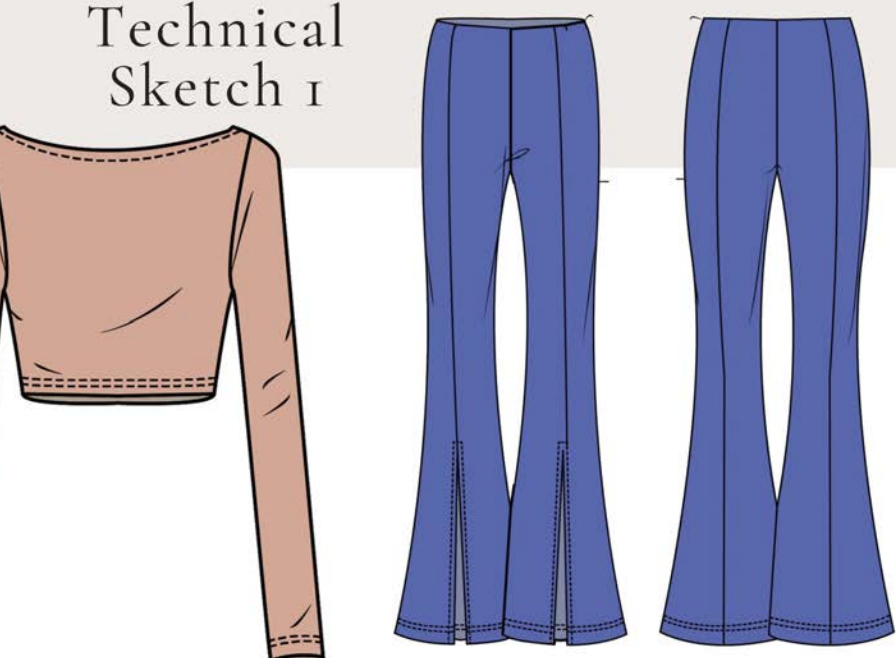
Fabricated Technical Sketch 3



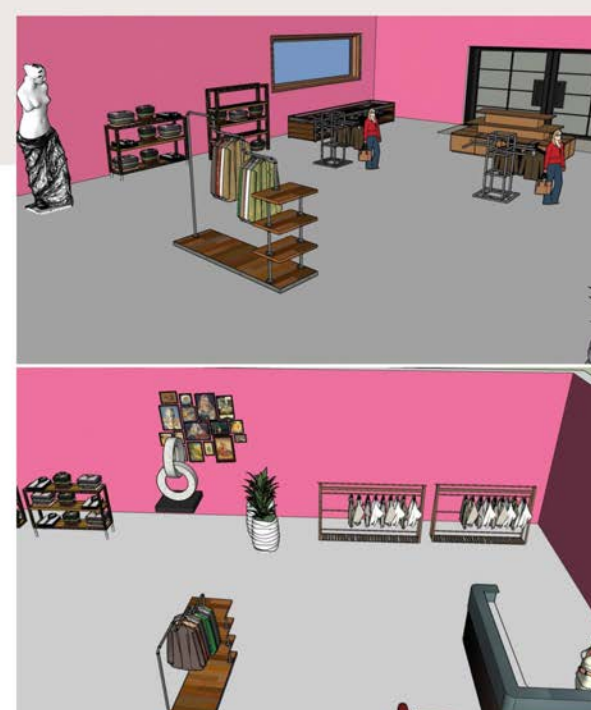
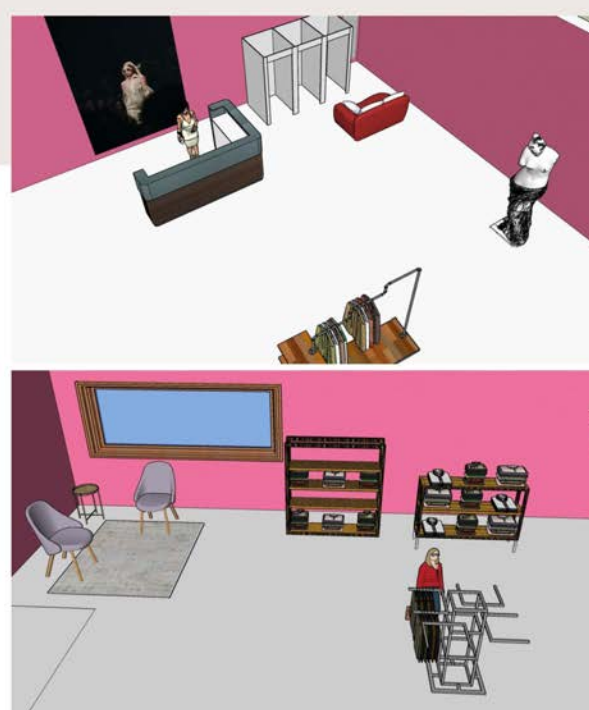
Fabricated Technical Sketch 3



Fabricated
Technical
Sketch 1



3D Retail Space

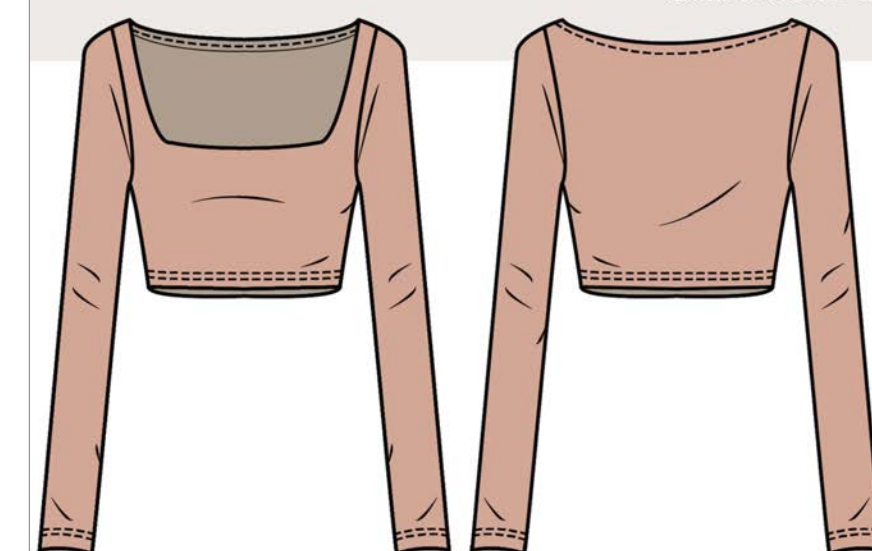


Conclusion

My target market is for the fashion forward woman ages 25-40 years old that are engaged to be married. They are all about the city lifestyle and live in major cities within the US, specifically NYC. The collection is inspired by NYC and the bold, chic fashion that can be found there. It's for someone willing to stand out from the crowd and take risks. Materials used include mainly recycled cotton and hemp to remain sustainable. The expected cost is anywhere from \$20-50 to produce and the retail costs vary from \$30-100. To celebrate the launch of the brand, there will be an urban essence fashion show hosted this spring at The Glasshouse in NYC.

At the show, you can expect to see the latest and greatest styles!

Fabricated Technical Sketch I



Color Palette



Sleeveless Bow Top (front)



Sleeveless Bow Top (back)



Double Bow Mini Skirt (front)



Double Bow Mini Skirt (back)



Front View



Detail View



Digital Production in Event Management

Iowa State University

Software

adobe photoshop

adobe illustrator

adobe indesign

sketchup

Skills / Competencies

digital graphic design

digital publishing for marketing materials

visual communication for events

promotional material design

3d modeling

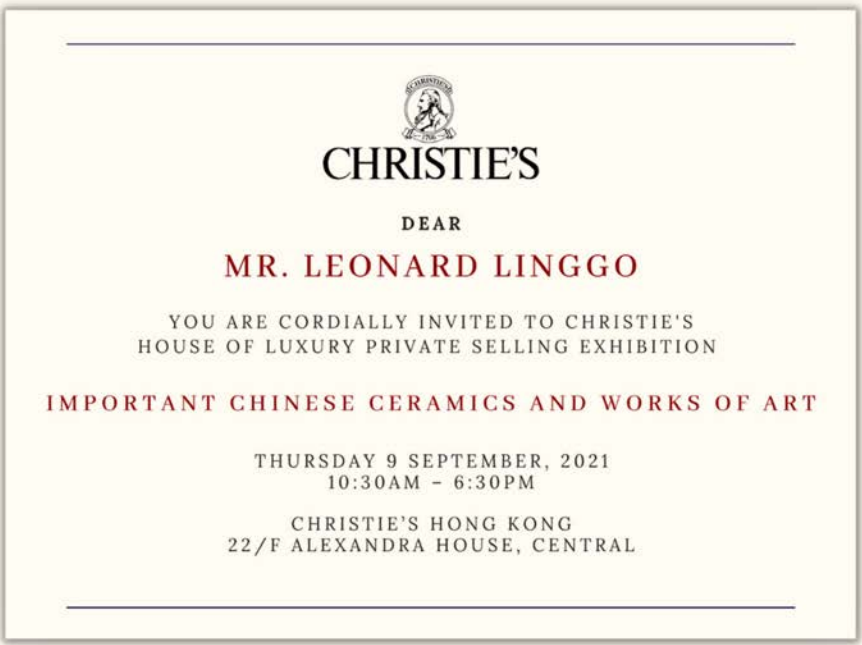
portfolio development

Course Description

Features applications of skills in Adobe Photoshop, Illustrator, InDesign, and SketchUp. Introduces design elements and principles used within the event management industry, with a focus on digital publishing of marketing and promotional materials.



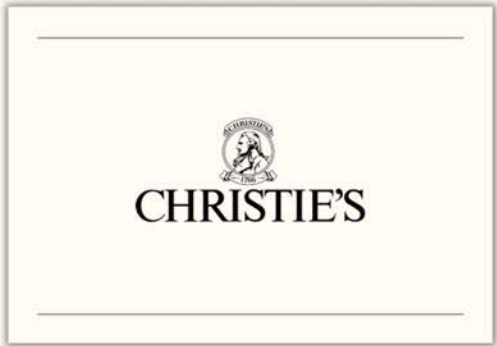
CHRISTIE'S



FRONT

PRIVATE INVITATION

BACK

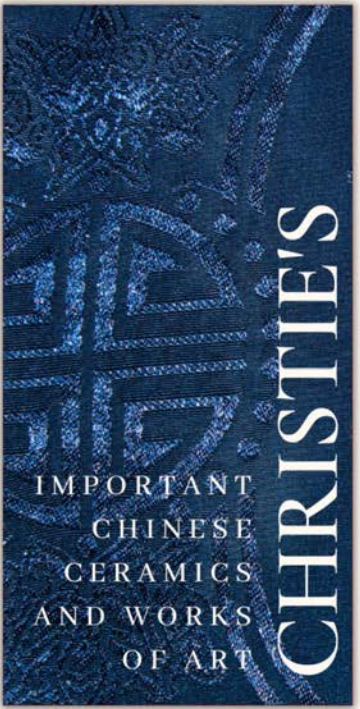


CHRISTIE'S

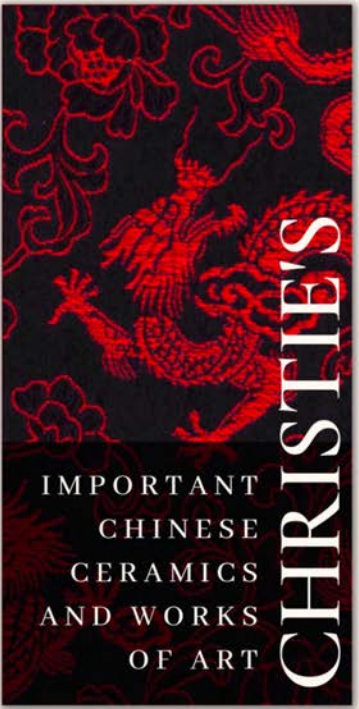
PORTFOLIO

VERTICAL BANNER

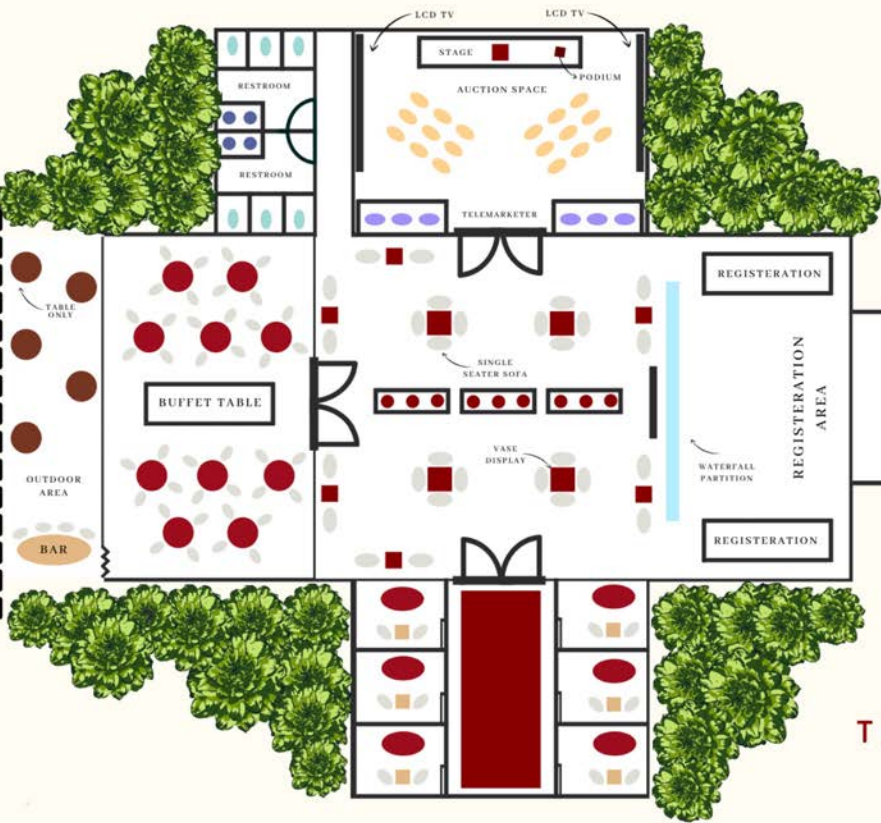
Size: 36" x 96"



Vertical Banner 1

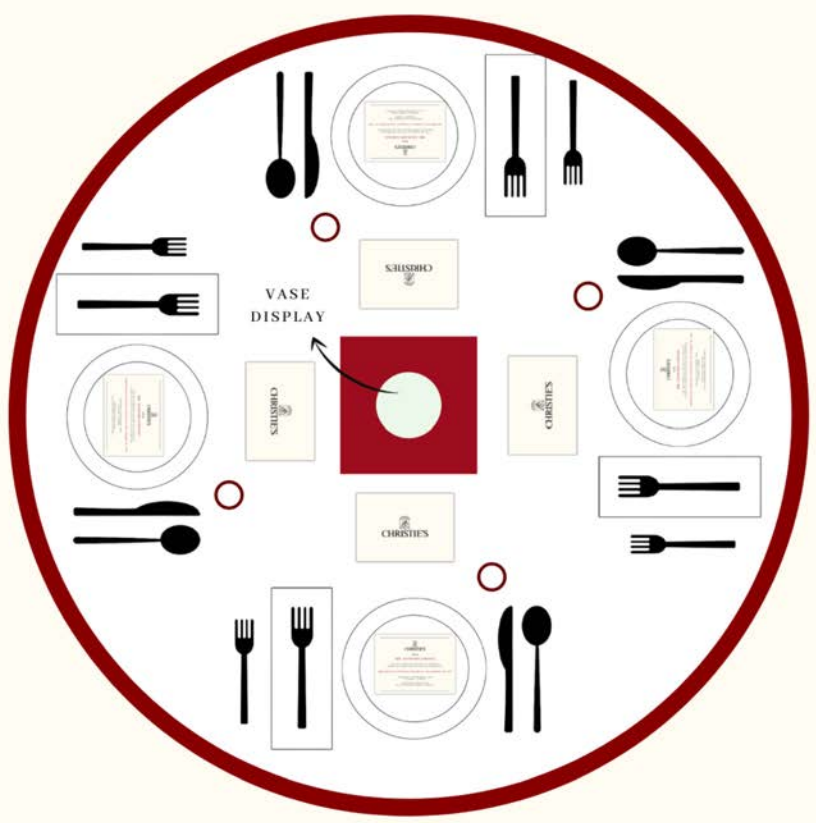


Vertical Banner 2



CHRISTIE'S

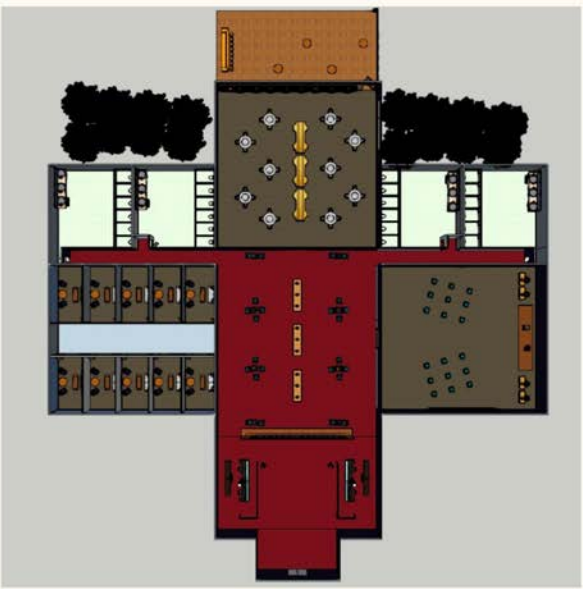
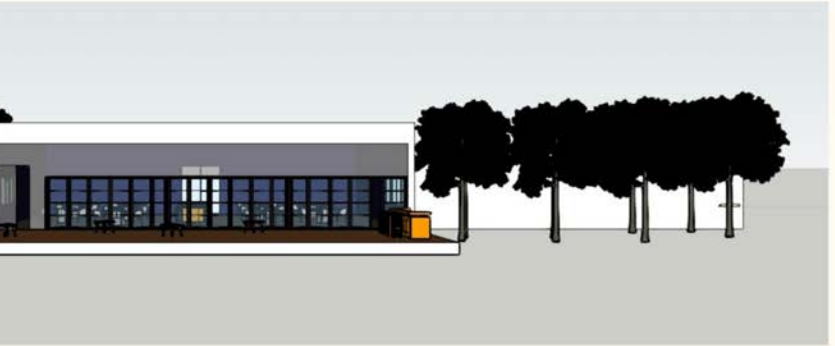
TOP VIEW OF THE BOARDROOM



CHRISTIE'S

TOP VIEW OF THE TABLE

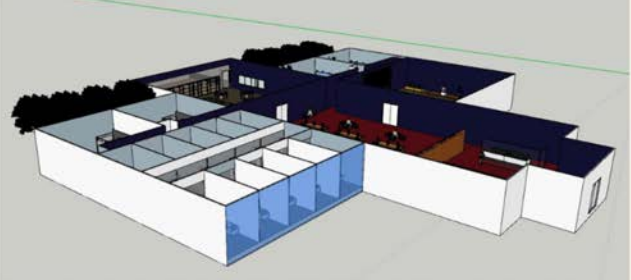
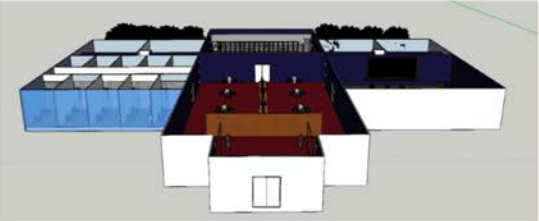
FRONT VIEW



TOP VIEW



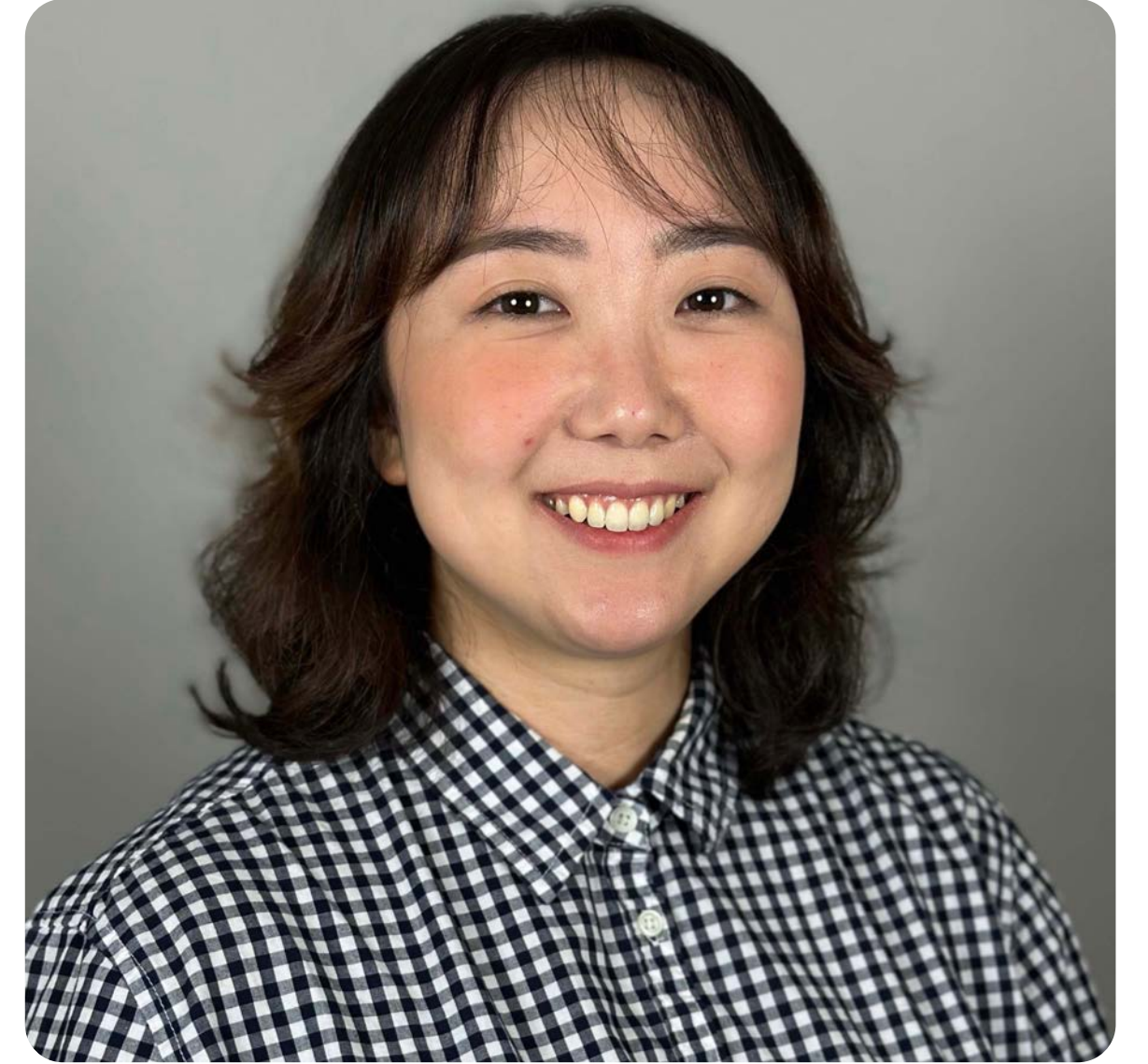
DETAIL VIEW



FRONT VIEW



Contact



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www.haeunchae.com

Thank you!