

Advanced 3D Shaping

—
MUO-E1061

Teacher: Julia Valle Noronha
Periods: III-IV 2023

A”

Aalto University
School of Arts, Design
and Architecture



**Welcome,
and make yourself comfortable**

Basic Information

| | |
|---------------------------|--|
| Credits: | 6 |
| Schedule: | 19.01.2023 – 21.04.2023 |
| Teacher in charge: | Julia Valle Noronha (julia.valle@aalto.fi) |
| Teaching Team: | Sasu Kauppi, Jane Palmu, Anna Ervamaa |
| Language: | English |

Workload

Overall workload 6 cr = 162 h.

80% attendance in contact teaching is required.

Contact teaching 60 h

Independent work 70 h

Personal reflection 31 h

Course evaluation 1 h

Housekeeping

Please, feel free to ask questions. Outside the sessions, feel free to post questions to MyCourses forum or contact the teachers with questions you may have.

**We are here together, learning from each other. We work through inclusion, kindness and respect:
respect different viewpoints, identities and backgrounds.
Let's make this a safe shared space for the process of learning & unlearning.**

Housekeeping

MyCourses page is the main information and communication platform in the course.

Learning Outcomes

After successful completion of the course, you should be able to:

- Identify their **own aesthetic approach and strategy** in 3-dimensional shaping and strengthen your own creative voice in fashion design
- Integrate advanced tools** of 3D design into your creative process
- Develop patterns for garments parallel in **physical & digital space by using Clo3D** software and other applications.

Climate Collapsing, then what?

- a. Reflect on the environmental impact of your design choices and how experimental pattern cutting can affect sustainable transitions.
- b. Response-ability (or the ability to respond) is a concept that reflects on both designers and wearers abilities to respond to the fashion system and act for sustainable futures. It is expected that all students respond to this goal through their projects.
- c. Fashion directly addresses gender and gender performativity. Though not required from students, the course supports them in rethinking their design concepts for more inclusivity beyond the problematic notion of gender binaries.

Understand and be critical on the transformative role of your work

Schedule

| Date | Time | Room | Content | Assignment |
|--------|-----------------|----------------|--|--|
| 19.Jan | 09:15— 17:00 | M202 + O008 | Intro Lecture (Julia Valle) Workshop (Sasu Kauppi) | Concept Development and Sketching/Methods (DL: 26/01) |
| 26.Jan | 09:15— 17:00 | O008 | Peer Feedback + Tutoring (Julia Valle) | |
| 2.Feb | 09:15— 17:00 | M202 | Visiting Lectures: Tina Verbic (online) and Tuomas A. Laitinen (IRL) Workshop (Sasu Kauppi) | First prototypes, digitized patterns (DL: 03/03) (book time with Sari Kivioja) |
| 3.Mar | 09:15— 17:00 | L208 | Clo3D (Jane Palmu) + Visiting Lecture: Rickard Linqvist (atacac) (TBC) | Print draft patterns for final physical prototypes |
| 10.Mar | 09:15— 17:00 | L208 | Clo3D (Jane Palmu) + Peer lecture | Physical silhouette in final material (DL: 23/03) For Transmissions group — Portfolio (DL: 22/03) |
| 17.Mar | 09:15— 17:00 | L208 | Clo3D Peer Feedbacking Session | Physical silhouette in final material (DL: 23/03) For Transmissions group — Portfolio (DL: 22/03) |
| 23.Mar | 09:15— 17:00 | O008 | Fittings | (book slots in Mycourses Scheduler) |
| 30.Mar | 09:15— 17:00 | G202 | Individual Tutoring (Julia Valle) | 1 fully finished physical silhouette + 2 silhouettes digital prototypes, process diaries, reflective essay (DL: 21/04) |
| 21.Apr | 09:15— 17:00 | G202 | Final Presentations (Julia Valle, Anna Ervamaa and Jane Palmu) | (book slots in Mycourses Scheduler) |



Assignments

Description and evaluation criteria

| Assignment Description | DL | Grade | Assessment Criteria |
|---|-------|-------|--|
| Concept Development and Sketching Methods | 26/01 | 10 | Clarity and alignment in concept and method description Active participation in peer reviewing |
| First prototypes and their digitized patterns | 03/03 | 10 | Overall quality of garment's forms and flat patterns Alignment between concept, method and final forms Quality of digitized patterns |
| Silhouette (in final material) | 23/03 | 10 | Ability to solve 3D shaping issues to achieve forms Overall quality of pieces |
| Final Assignment <ul style="list-style-type: none">- 1 finished physical silhouette- 2 digital prototypes- process material- reflective essay | 21/04 | 50 | Detailed description in Course HandBook + MyCourses You must present ALL PARTS to have your final assignment evaluated |
| Participation in Class | --- | 20 | Class attendance, active participation in class and peer feedbacking sessions |
| Total | | 100 | |



Assignment 1 (DL: 26/01/2023)

Concept Development

Aim: Refine the concept development carried in Innovative Fashion Design / Experimental Textile Design courses (or your own current concept development) via peer feedback.

This assignment will be constructed via peer review. Peer groups will be formed for work on the 26th January session. A final submission via MyCourses should be made in text and visuals and include:

- Outlining of the concept
- Methodology and Advanced 3D Shaping Approaches to achieve it

Assignment 2 (DL: 03/03/2023)

Prototypes and Digitized Patterns

The flat patterns of selected silhouettes and pieces should be digitized for development in Clo3D.

Be in touch with Sari Kivioja
(sari.kivioja@aalto.fi) to book timeslot for digitizing the patterns if you need support.

No submission — the digitized patterns will be used in class between 03—17 March.

Assignment 3 (DL: 23/03/2023)

Final Silhouettes

Final silhouette, in final fabric

Other silhouettes as prototypes (optional)

Fittings: Book slots on MyCourses Scheduler

— For Transmissions group: + portfolio (submit via MyCourses by the 22/03/2023 before 12:00)

Assignment 4 (DL 21/04/2023)

Final Assignment (Parts A,B,C,D)

The final assignment consists of 3 parts which will be evaluated in class + an essay.

A (10 points) – Finalised physical silhouette (in final material, fitted and fully finished)

B (20 points) – Finalised digital silhouettes (choose 2 from your FCD silhouettes)

C (10 points) – Process material (concept development, method description, process diary, material selection, etc.)

D (10 points) – Reflective Essay (DL: 21/04/2023 by 20:00)

Please mind the deadline: late submissions will suffer marking reductions (1 point per day of delay).

NOTE: ALL parts of the assignment MUST be delivered for your final assignment to be considered

Assignment 4 (DL 21/04/2023)

Final Assignment (Part D)

D – Reflective Essay

In this essay you are expected to reflect on your creative process and outcomes following the guidelines below:

- Describe your creative process during the course in brief, start by setting out your expected outcomes and general expectations. Discuss how your creative process/methods, background material/inspiration and outcomes align. Position your work within the current fashion environment (i.e. how would you define your work and where do you see it placed). Include critical reflection on how your work responds to contemporary fashion system in relation to the different planetary ecologies (i.e. what does your work do?).
- The essay should be around 1000 words (2 pages), in PDF format, max. 5Mb. You may include as many images as you would like, however, images will not add to the word count.
- Make correct use of academic referencing (guidelines for [Chicago](#), [APA](#)) and be consistent

Assignment 5

Participation in Class

In total there are **nine (9) contact sessions**:

Students are expected to be present and actively participate in all scheduled sessions.

Attendance counts for **20% of the final grade**.

80% Attendance is mandatory (i.e. you must attend a min 7.5 full day classes in order to pass the course). All attendance will be self-marked on MyCourses. Remember: Being on time is respectful to all involved.

If you know you won't be able to join a session (e.g. course clash, etc.), discuss your absence beforehand. In the case of unexpected absence (e.g. illness), notify teacher asap.

Assignment 5

Participation in Class

MyCourse self-marking attendance.

Questions?

Extra notes

Fittings and Presentations

Be prepared well before your time slot.

Agree with a peer in advance to take notes for you so you can concentrate on marking the pieces or presenting your work.

Fabric available (per student)

2,5m calico (heavy)

1,3m batist (light)

BREAK

15 mins

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Introductions

Expectations

What would you like to achieve in your work through this course?

5min individually + post via:

<https://presemo.aalto.fi/a3d>



Learning Outcomes

WHAT:

- Identify your **own aesthetic approach and strategy** in 3- dimensional shaping and strengthen your own creative voice in fashion design
- Integrate advanced tools** of 3D design into your creative process
- Develop patterns for garments parallel in **physical & digital space by using Clo3D** software and other applications.

HOW:

- Align concept, construction approach and form** and be able to reflect on how your work impacts/affects the world
- Learning '**computerly ways**' of designing
- **Understand the particularities and opportunities** across digital and physical design processes

Advanced 3D Shaping

Draping and creative pattern making — tools to strengthen designer identity

Material knowledge — understand weight, grain, general material properties

Collaboration and cross disciplinarity — innovation also in form

Strong concept — guide and support aesthetics, experience, affordances

Advanced 3D Shaping

Draping and creative pattern making — tools to strengthen designer identity

Material knowledge — understand weight, grain, general material properties

Collaboration and cross disciplinarity — innovation also in form

Strong concept — guide and support aesthetics, experience, affordances

how does your work as a (fashion) designer/artist impact the world?
how do 3D shaping approach and concept align?

In this lecture

Discuss:

What Advanced 3D Shaping can do

Contemporary Directions in 3D Shaping

Affective Fashion

Collaboration between physical and digital

Dressing digital bodies

Seely, Stephen (2012) How do you dress a body without organs? Affective Fashion and Nonhuman Becoming

Säärmäkari, Natalia and Annamari Vänskä (2021) Just hit a button! – fashion 4.0 designers as cyborgs, experimenting and designing with generative algorithms.

Fashion and Affect

Shapes in fashion deliver a lot.

What does a garment represent?

What are its semiotics—symbols, meanings, etc.?

What identity, idea or social position?

Advanced 3D Shaping

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~~What does a garment represent?~~

~~What are its semiotics—symbols, meanings, etc.?~~

~~What identity, idea or social position?~~

What fashion can do?

How does it transform/affects bodies?

Advanced 3D Shaping

~~Shapes in fashion deliver a lot.~~

~~What does a garment represent?~~

~~What are its semiotics — symbols, meanings, etc.?~~

~~What identity, idea or social position?~~

What fashion can do?

How does it transform/affects bodies? — society, ecologies, etc.?

What does Advanced 3D Shaping affords*? How does it affect** fashion?

* Gibson ([1979] 2014) The ecological approach to visual perception

** Deleuze and Guattari (1987) A thousand plateaus. Capitalism and Schizophrenia

To give “attention to its (fashion)
political implications, rather than
reducing it to the wholly aesthetic”

**”Instead of disciplining bodies,
(...) foreground fashion’s power to
give access to a field of
potentiality”**

Rei Kawakubo

Hussein Chalayan

**“it impossible to tell where the
body ends and the dress begins”**

“it
bo

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A? Aa
Sci
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Rei Kawakubo, The Art of the In-Between
Metropolitan Museum of Art/Costume Institute, NY

“it
bo



”

Rei Kawakubo,
Comme des Garçons SS 1997
Body meets Dress, Dress meets Body
Institute, NY

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and

What a body can do?

Rei Kawakubo,
Comme des Garçons SS 1997
Body meets Dress, Dress meets Body
Institute, NY

“

b



Hussein Chalayan AW2000
Afterwords

A?

ts Body
e, NY

“

b



Hussein Chalayan AW2000
Afterwords

A?

ts Body
e, NY

“

b



2000

A?

Hussein Chalayan SS2007
One hundred and eleven

ts Body
e, NY

Collaborations between physical and digital

Collaborations between physical and digital

‘Digital fashion transforms the fashion design process for both physical and virtual practices.’ (Säarmäkäri 2021)

Collaborations between physical and digital

‘Digital fashion transforms the fashion design process for both physical and virtual practices.’ (Säarmäkäri 2021)

**From your experience and in your view in which ways can digital fashion transform design process?
(discuss in groups of 3, be ready to share)**

ARTIFICIAL INTELLIGENCE

Amazon Has Developed an AI Fashion Designer

The retail giant is taking a characteristically algorithmic approach to fashion.

By Will Knight

August 24, 2017



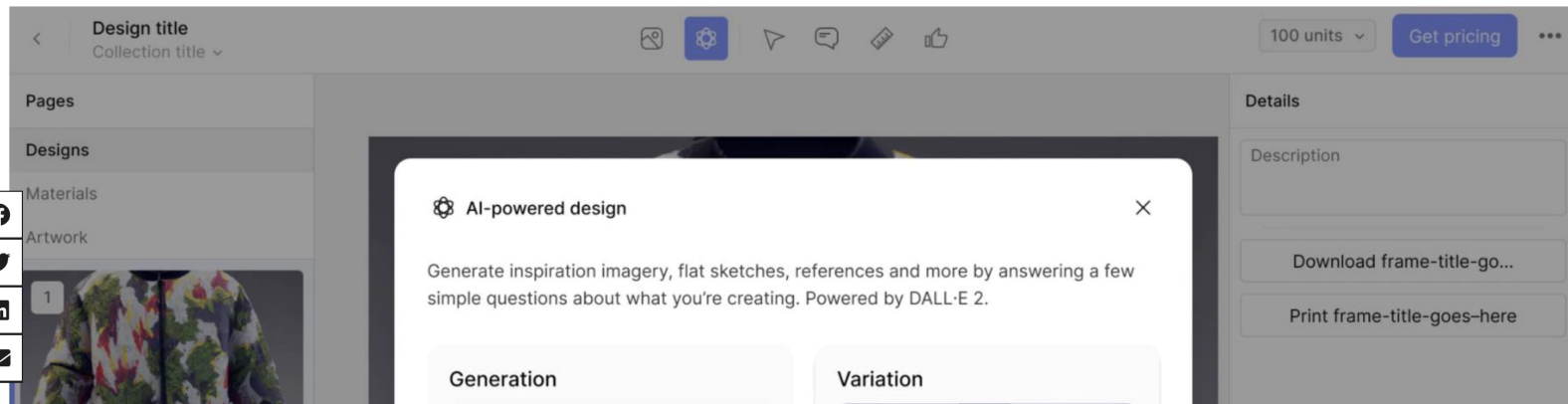
Collaborations between

ARTIFICIAL INTELLIGENCE

TECHNOLOGY

AI Is Designing Clothes Now

Companies are starting to pitch AI tools that can generate new clothing designs from something as simple as a text description.





@ai_clothingdaily

School of Arts, Design and Architecture

Pages

Designs

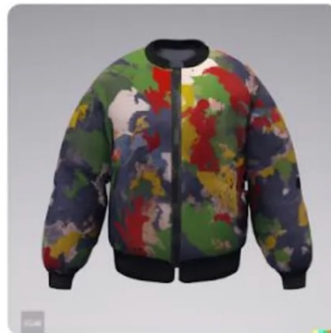
Materials

Artwork



< Select generated designs

×



Dall-e AI Platform

Regenerate

Insert 2 images

Q 100% ▾

Collaborations between physical and digital



Collaborations between physical and digital



Coll phy



Nevous System

Picture: Tetra Bodysuit for Grimes' Shinigami Eyes videoclip (2022)

Kinematics Dress (2014)

Collaborations between physical and digital



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Neri Oxman
Material Ecology
Picture: Otaared (3D printed)

Dressing digital bodies



FORTNITE | BALENCIAGA



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Dressing digital bodies



Dressing digital bodies



DRESSX Marea by Larissa Castellano Pucci

Seashells skirt

\$40.00 USD



UPLOAD PHOTO

Please upload your image(s) before adding to cart. File size should be between 1 Mb and 100 Mb. If you file is more than 100 Mb, please use the field to add the link to the file after adding the product to cart.

Paste link here

Quantity

1

ADD TO CART

Every morning the sea leaves a gift to the earth – its shells. This skirt is composed entirely of seashells.

THIS IS A DIGITAL ITEM, IT ONLY EXISTS DIGITALLY AND WILL BE APPLIED TO YOUR PHOTO(s).

Color: ivory and pink.

Material: digital seashells.

Digital clothes fit all sizes.

About the collection:

Larissa Castellano Pucci is a Florentine creative who loves to mix watercolours, 3D, sketches and film photography. As the grand daughter of Emilio Pucci, Larissa has grown up surrounded with whimsical colours and prints. Inspired by her heritage she has begun her own line of silk foulards made in Italy by small family businesses. This drop created together with DRESSX marks the beginning of Larissa's dream of blending the

Dressing digital bodies



DRESSX Marea by Larissa Castellano Pucci

DRESSX / PLACEBO DFH / LOBSTER PET



Placebo DFH LOBSTER PET

\$200.00 USD



UPLOAD PHOTO

Please upload your image(s) before adding to cart. File size should be between 1 Mb and 100 Mb. If you file is more than 100 Mb, please use the field to add the link to the file after adding the product to cart.

Paste link here

Quantity 1



This special edition coordinating pet look will be the cat's meow. The Lobster jacket features a quilted frill outdoor glam jacket with lobster sleeves. The coral pink jacket is made of digital vinyl. A digital pearl necklace is attached to the neckline of the jacket.

THIS IS A DIGITAL ITEM, IT ONLY EXISTS DIGITALLY AND WILL BE APPLIED TO YOUR PHOTO(S).

Color: coral pink.

Material: digital vinyl.

Digital clothes fit all sizes.

About the brand:

The Mother of Pearl digital fashion line is an exclusive drop celebrating both the Mother of Pearl collection and its complementary metaverse experience, brought to you by Placebo Digital Fashion House and VR

Dressing digital bodies



Discover

Shop

Logi

UKRAINE - 4TH OCTOBER - 10AM PACIFIC TIME - 1PM EASTERN TIME - 7PM CENTRAL EUROPEAN TIME - 5TH OCTOBER - 2AM JAPAN STANDARD TIME // NOW LIVE: DMAT X

All Creators

All Blockchains

Q

PHYGITAL



ion coordinating pet look will
w. The Lobster jacket
d frill outdoor glam jacket
ves. The coral pink jacket is
inyl. A digital pearl necklace
e neckline of the jacket.

ALL ITEM, IT ONLY EXISTS
WILL BE APPLIED TO YOUR



Vogue Ukraine x DMAT
PHYGITAL IENKI IENKI BEAR MI...
2000€ ~1.404494Ξ

Sale ended

VOGUE Ukraine x DMAT
GUDU AVANT COAT
150€ ~0.105337Ξ

Sale ended

Vogue Ukraine x DMAT
BEVZA SAILBOAT CLUTCH
50€ ~0.035112Ξ

Sale ended

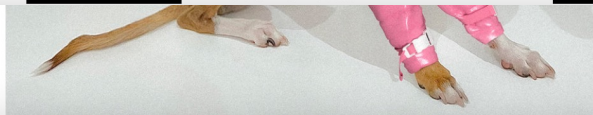
/inyl.

: all sizes.

: earl digital fashion line is an

exclusive drop celebrating both the Mother
of Pearl collection and its complementary
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Placebo Digital Fashion House and VR

Quantity 1



A? Aalt School of Arts, Design and Architecture

Where does A3DSW sit?

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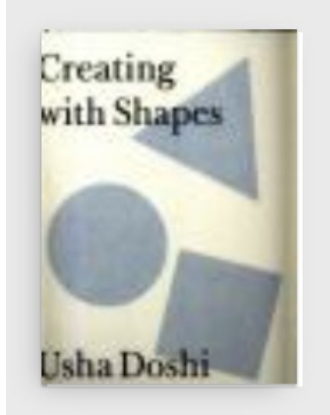
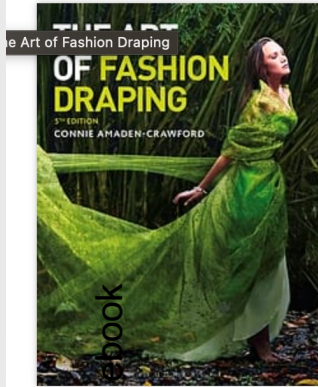
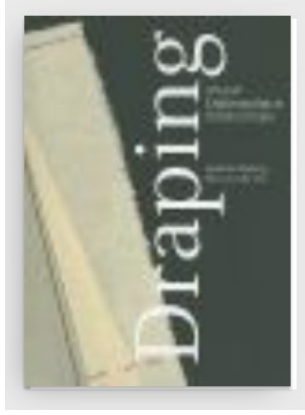
Collaborations between physical and digital

Where does A3DSW sit?

Collaborations between physical and digital

belief in the sustainable and creative support in digital
essential to have knowledge on what the materials afford

Resources from Learning Center



Defining approaches in Advanced 3D Shaping

Material for 26/01

Research material (incl. literature)

Fabric samples

Sketches

Concept description

Defining approaches in Advanced 3D Shaping

Peer Review Activity 26/Jan

Brief summary of what you learned

What do you feel is needed

What you need to understand better?

What works well? What is the strongest part of the work
— why?

What can be improved? How can they achieve it?