

PRODUCE CAPSULE, PATTERN DESIGN and ZERO-WASTE TAILORING

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Introduction

The aim of this section is for the trainers to learn and teach to the trainees how to transfer their design into the practice. This includes:

- Implementing Circular Production: Zero-waste and upcycling techniques
- Discovering innovative solutions and manufacturing processes
- empowering the idea of collaboration
- the importance of the capsule collection

Learning Objectives

- Upcycling technique and its environmental and social impact
- Zero waste Pattern cutting techniques and philosophy
- Develop Creative Thinking
- Learn how to co-create a Capsule Collection
- Develop Team Spirit

Training program: How to design and produce your capsule collection journey

PIPELINE OF ACTIONS

Week	11th:	Pattern	Cutting	A'
Week	12th:	Pattern	Cutting	B'
Week	13th:	First		Samples
Week	14th:	Second		Samples
Week 15th: Final Line				



Week 11th & 12th : Pattern Cutting

- Creating the Pattern



Week 13th: First Samples

- Creating the first samples
- Correcting the patterns and applying changes
 - Emergency changes in trim or hardware that doesn't work. Fabric errors/alterations in pattern etc. should be worked out at this stage.



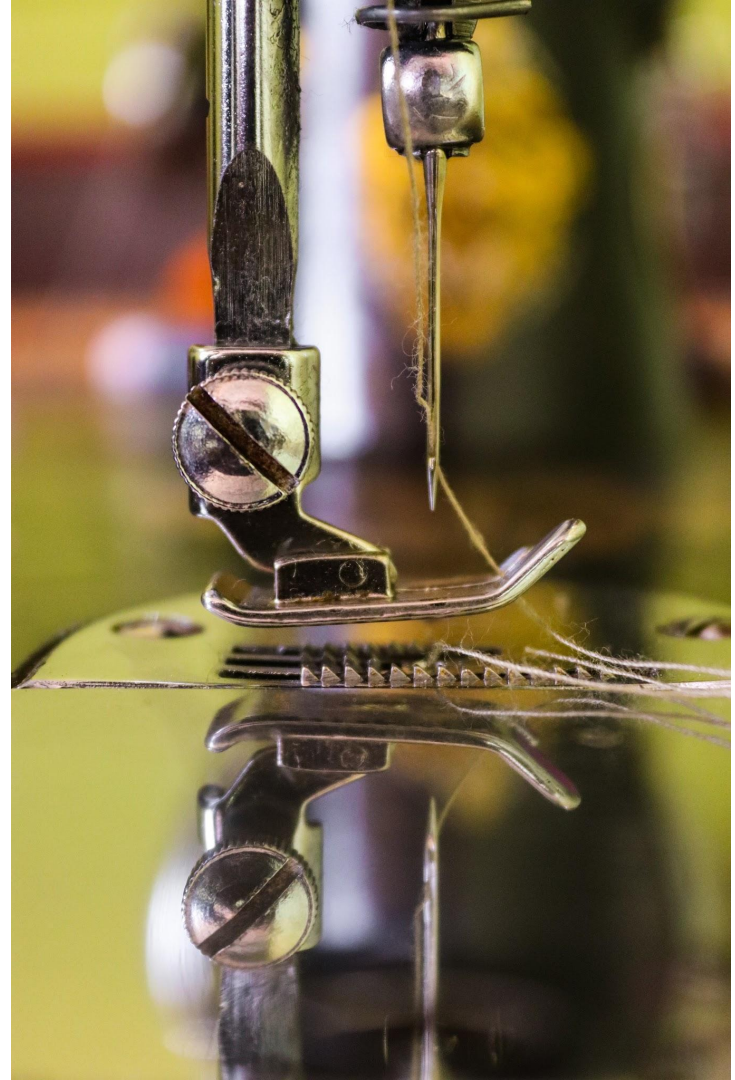
Week 15th: Second Samples

- Checking previous phase changes
 - These should ideally be minor corrections. No fundamental design changes should be made at this stage to ensure meeting the deadline.
- Approval for final samples



Week 16th: Final Line

- Final samples
- Production approval



Week 14th: Upcycling from textile and clothes waste

- Choose wastage of old textiles and clothes to use in the production of the Capsule Collections

Workshop on Zero-waste pattern cutting

Aim

&

Objectives

The Aim of this workshop is to learn how to do pattern cutting out of paper waste and then how to place it in a zero waste way (lay-plan) on the fabric. Additionally, you will be learning some basic pattern cutting techniques so that they can adapt your block. This includes pivoting darts, adding seams, altering necklines and basic skirt variations. Armed with this knowledge you can make many different designs at home.

Time

3

hours

Materials

Needed

Paper waste (newspapers, etc), Paper scissors, Marker, Rulers, Fabric waste, Fabric marker, Measuring Tape

Workshop on Zero-waste pattern cutting

Methodology

and

Techniques

The methodological background of the sessions is the learning of creating a basic pattern block (torso or skirt) from scratch and how to change an existing one according to different measurements or alterations on the design. Then, how to apply circular and zero waste techniques on these processes, like lay-plan, in order not to get that much fabric waste at the end of the process. There is also going to be a presentation on how digital softwares could support these methods. The techniques that are going to be used consist of the pattern cutting creation based on a design idea. Furthermore, the lay-plan placement and the final cutting of the fabric according to the pattern that has been used on it. The cutting of the fabric is an important step in the process since every material has different properties, thus different ways to handle.

Preparation

Research and read about zero-waste pattern cutting techniques (clo3d, Optitex, subtractive pattern cutting, layplan)
Prepare a simple design idea (torso or skirt)
Collect paper waste
Collect fabric waste

Workshop on Zero-waste pattern cutting

Instructions & schedule of the session

1. Present your understanding of zero-waste pattern cutting techniques according to your research (clo3d, Optitex, subtractive pattern cutting, layplan).
2. Present the design idea.
3. Practice the simple measuring process of a human based on the design idea.
4. Practice the pattern creation process (using paper waste) step by step.
5. Practice the lay-plan process on fabric waste.
6. Practice how to cut the fabric properly.

Workshop on Zero-waste pattern cutting

Debriefing

How did you find the session ? Would you like to give feedback in order to empower fellow classmates, feel the collaboration and that their voice matters? How did you come up with your ideas of the design? Do you prefer working in groups or individually and why?

Continue these exercises at home for your own practice.

Expected Outcomes

Knowledge

- o Pattern cutting techniques
- o Pattern cutting philosophy
- o How to treat some fabrics when you cut them

Skills

- o Pattern making
- o Pattern cutting
- o Lay-plan

Attitudes

- o Co-creation
- o Team Spirit
- o Collaboration
- o Team working
- o Sharing

Upcycling

Workshop

Aim

&

Objectives

The Aim of this workshop is to teach the students on how to give another chance to an unwanted/old/ripped garment. Upcycling is a main technique of Circular Fashion which requires some specific steps in order to construct a new garment. Additionally, to motivate participants to get creative with clothing they already own, to inform participants of the environmental and social impacts of the clothing they already own, and to provide inspiration.

Time

2.5 hours

Materials

Needed

Unwanted/old/ripped garment, Scissors, Pins, Pattern blocks, Measuring Tape, Cloth Marker, Unpicker, Threads, Needles, Optional: Additional fabric/trimmings/accessories waste

Upcycling

Workshop

Methodology

and

Techniques

The methodological background of the session is the repairing and deconstruction of an old/ripped or unwanted garment that it is not worn anymore. By learning and analysing its parts, the students could think of how they could turn these parts to something else - another garment. This process has to be made in a correct way that the educator will present in order to respect the garment by unstitching it and not cutting it that much. The techniques of the process will start by the presentation of the upcycling technique and its circular approach, the analysis of the construction of an old garment. Furthermore, to unpick the parts of the old garment and apply patterns on it and cut the new pieces and finally to stitch together a new garment.

Preparation

Preparation research on upcycling and its circular approach
Find an old garment and analyse it to be prepared to present it in the classroom
Unpick another old garment

Upcycling

Workshop

Instructions & schedule of the session

1. Present your understanding of upcycling in the classroom.
2. Show the old garment and analyze it.
3. Present the unpicked garment (the pieces).
4. Divide yourselves (classmates) into groups.
5. Unpick your collective garments.
6. Merge your pieces and create new garments by mixing them together.
7. Present your new creations.

Upcycling

Workshop

Debriefing

How did you find the session ? Would you like to give feedback in order to empower fellow classmates, feel the collaboration and that their voice matters? How did you come up with your ideas of the pattern? Do you prefer working in groups or individually and why?

Continue these exercises at home for your own practice.

Expected Outcomes

Knowledge

- o Upcycling
its environmental and social impact

Skills

- o Sewing technique
- o Unpicking
- o Upcycling
- o Creative Thinking
- o Work in groups
- o Collaboration/Capsule Collection

Attitudes

- o Co-creation and
- o Team Spirit
- o Collaboration
- o Team working
- o Sharing

Reflection Exercise

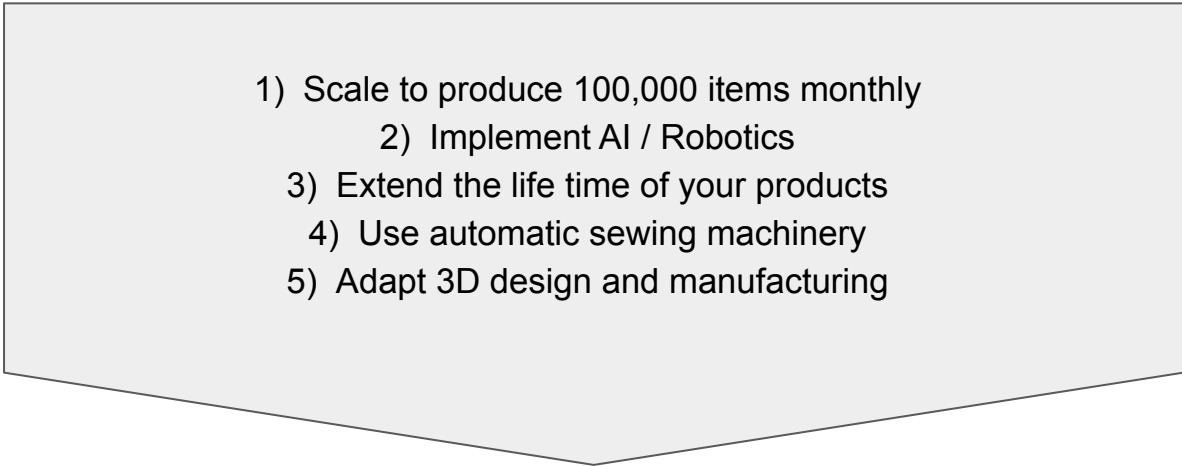
Please take a moment to answer to the below questions:

1. How ready are you to scale (Production-wise) & to what level do you use digital processes?
2. What are your biggest challenges related to production & manufacturing?

Reflection Exercise

What are the changes you would need to make to your manufacturing process if you would be asked to: (please list the decisions you would need to make in all stages of your supply chain).

In which activity of your supply chain, how it would be affected, and how would your impact change?

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- 1) Scale to produce 100,000 items monthly
 - 2) Implement AI / Robotics
 - 3) Extend the life time of your products
 - 4) Use automatic sewing machinery
 - 5) Adapt 3D design and manufacturing

Reflection Exercise: Manufacturing Checklist

Do you need a digital pattern and a technical pack for every design?

Do you know all the social certifications of suppliers (eg Fair Trade)?

Do you know all the environmental certifications of suppliers (eg GOTS)?

How would you publish on your website the details of your product and textile/raw materials manufacturers?

How would you set up a whistleblowing process visible on your website with the name and contact details of the board member responsible to investigate the claim?

Do you have an appointed person on sustainability with their contact details on your website?

What are the new trends in manufacturing that you have adopted?

Learning Outcomes: How to be a Sustainable Fashion Trainer

- Upcycle new clothing from used, unwanted or excess materials.
- Look for pre-consumer waste developed in a local level and manufacturers who recycle their waste.
- Research New textiles and technologies in Sustainable Fashion.
- When selecting materials, consider how the product will be used, dyed and washed. Match durability with garment type.
- Focus on the issues that have the highest environmental impact in your supply chain. Learn how to report on energy usage and carbon footprint.
- Be precise about the sustainability measures you have implemented.
- Educate your potential customers about your materials and manufacturing processes.
- Be able to pivot and make collaborations.

Reading list, Further Resources & references

- Pattern cutting online workshop example <https://inseamstudios.com>
- A technique of pattern cutting <https://researchonline.rca.ac.uk/3060/1/FREE-CUTTING-Julian-Roberts.pdf>
- Clo3d software for digital 3D garments <https://www.clo3d.com/en/clo>
- Software for pattern cutting placement and creation <https://optitex.com>
- What is upcycling? <https://fashionandtextiles.springeropen.com/articles/10.1186/s40691-021-00262-9>
- SOFFA selections on materials and suppliers <https://drive.google.com/file/d/1oMjoVrxSDu23t-lxgKuHM66er8IH58uH/view>
- Pattern Cutting Studio <https://patterncuttingstudio.com/2017/07/11/apparel-tech-packs-spec-sheets/>
- Free cutting n.d, Roberts, J. <https://researchonline.rca.ac.uk/3060/1/FREE-CUTTING-Julian-Roberts.pdf>
- Fashion Capital. 2022. Layplan - Fashion Capital <https://www.fashioncapital.co.uk/tools/layplan/%3E>
- Designer Eileen Fisher <https://www.eileenfisher.com/?country=GR¤cy=EUR>
- Patagonia <https://www.patagonia.com/our-footprint/>
- Vivify brand <https://www.vivifybrand.com/>