



Lesson plan

Learning Tracks:

Track 1: Physical → Digital (Design, patternmaking, and virtual prototyping skill classes)

Track 2: Digital → Physical (Design, virtual prototyping, and sewing skill classes)

Track 2 – Digital to Physical

In this track, students depart from a particular kind of workwear: the apron. In the first part of the assignment, students will be introduced to virtual prototyping techniques, and explore the creative possibilities of it. Studying the form and details of their chosen apron in relation to its cultural context or students' lived experience will inform a digital draping process. By virtually deconstructing and reshaping the design and altering its volume, materiality and functional elements, the students will bend, challenge or question the meaning and shape of the chosen apron. In the second part of the term, the pattern will be printed, and the design will be executed. Students end the project with a physical garment.

Week 1.

Research the apron

Pick an apron that you find interesting. Be as specific as possible. Studying the form and details of your chosen apron in relation to its cultural context or lived experience will later on inform your design process. We will brainstorm your chosen apron, using Joseph Dumit's *Writing the implosion*.

In this assignment, you will brainstorm about the embeddedness of your chosen apron in the world, and the world in the object. How can it be dissected conceptually? What does this apron mean to you? How is it situated in the world and how is the world situated in it? You will explore the many dimensions through which you can look at your chosen apron and analyze it.

Upload images of your apron. Choose 3 dimensions that you find interesting and describe your apron and research findings.

[Images of student apron choices](#)

Week 2.

Digital Replica

In this class you will be introduced to using open source libraries. By adapting patterns of existing aprons in the WdKa library you make a digital replica of your apron of choice. Also consider the



avatar, what body is usually wearing this apron? Which bodies are represented in the CLO 3D Avatar Library? Which bodies are missing?

Images of apron replicas

Week 3.

Concept and draping experiments

Formulate a 3 sentence concept which informs your design process. This can for example refer back to your research, or it can be a short explanation of an atmosphere you try to achieve with your design. What is the chosen apron for you? What do you want to tell with your design? Now you will start designing.

In this class you will learn how to save a digital creative process, and you learn to save your work in a way you can still access it later. Archive all variations in CLO 3D as a stage by using “save as..”. Make an image of each iteration.

Create 3 design variations in which you alter the original volumes and proportions. This means you can change the total volume of the garment, or change the volume of its parts. How can this tell your story?

Create 3 design variations in which you play with the material properties. Change the texture and material properties of your apron, or parts of your apron. Can it be furry or glossy? Can it be thicker? or very thin? How can this tell your story?

Create 3 design variations in which you play with functional details or decorative elements and their function such as straps, buckles, trims etc. NB your final design will include a minimum of one pocket. You can also introduce elements you found that relate to your apron and its context such as heads, skirt parts or other layers that you found in your research. How can this tell your story?

Create 1 design variation in which you play with the relation to the wearer. How does changing the body that wears your apron design influence your story?

Week 4.

Reflection and final design

Choose your 3 favourite variations from your previous study. Improve the design based on your findings. Reflect on your designs. What worked well? Which choices tell your story the best? Make 3 variations that continue the most successful findings.

Week 5.

Print pattern final design

Present your chosen apron, replica and 3 final designs in relation to your concept and research. Describe which design you choose for execution. Research possible materials that you could use to materialize your design. How much fabric does your design consume? Prepare your design for printing. Add seam allowance to your pattern.

Images of student work

Week 6 – 8.

Materialisation

You will study all aspects of your apron by making little samples. Study minimum 3 pockets and/or details. In these studies you do try-outs for your final pocket and details in your final piece. Use real fabric/buttons/zippers for this. Choose what is most relevant to your project. Based on your printed pattern you create a prototype of your apron. Take pictures from your prototype every week (front/side/back). By doing so you study:

- Volume: How do I achieve the right volume?
- Construction: Does it need support fabrics, or interfacings?
- Fitting: How can it be worn on the body? Does it need a closure? What happens when the body moves?
- Seams: How do I finish it? What stitches are needed? How do I finish round edges?
- Concept: How can I tell my story with the material, fit and shape?

The final apron design is 1 object, with minimum 1 pocket and finalized details. In three samples you study for example:

- Details: what buttons/zipper/flap do I use?
- Seams: What stitch length / yarn / finishing is fitting my story?
- Pockets: which parts does it contain? How are they sewn together? How is it sewn on the garment? How will it be connected to the apron?
- Material: What material do I use? How do I work with this material? What is the best way to cut it?
- Concept: How do my details refer back to my research? How can I tell my story with it?

Week 9.

Presentation and reflection

Present your apron both as digital design and physical piece. Describe your process. How did your concept inform your choices along the way? How did you materialize your design? If you compare your virtual design and physical outcome, what do you notice? How do they differ? Which part of the process worked well for you?