# Design Workbook

**THE DESIGN PROCESS / LEARNING PATH 1**

This workbook is part of *The Design Process* class for the Handweaving Academy.

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Happy weaving!

*Tien Jarrett*
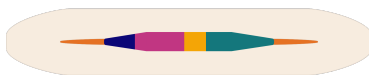
# Finding inspiration
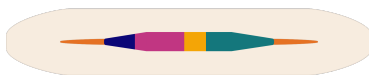
Some ways to use this page:

- Paste in images, and/or write down what inspires you about the image
- Brainstorm ideas or themes for new work
- Add snippets of yarns you're thinking of using
- Anything else that helps you collect and create ideas for new work!

## Inspiration source:

**(remember to write down the name of the creator, so you can credit them!)**

**What I like about it:**

**Ideas for new work:**

# Finding inspiration, continued

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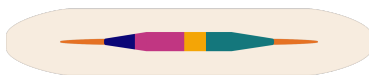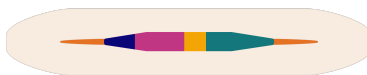
## Constraints for my piece:

**Choose 3-5 of these constraints before brainstorming the project.**

- **My piece is a (type of object):**

- **It's inspired by:**

- **I want it to inspire these thoughts/feelings in people who see it:**

- **It uses these kinds of colors:**

- **It uses this technique/structure:**

- **The patterning will be:**

- **It uses these yarns:**

- **Other constraints:**

## Brainstormed designs:

**Come up with at least five project ideas that satisfy the constraints on the previous page. Don't think about whether they're good or bad; just write them down!**
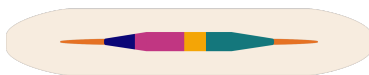
**Design 1:**

**Design 2:**

# Brainstormed designs (continued):

**Design 3:**

**Design 4:**

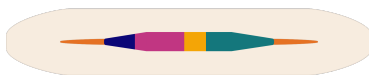# Brainstormed designs (continued)

**Design 5:**

# Flesh out your design

Write down what you know about the project. If you aren't sure, leave it blank.

| Description | Importance (high, medium, low) |
|---|---|
| **What's the purpose of the project?** | |
| **What kind of thing is it?** | |
| **What is its function? What traits does it need to have in order to be useful?** | |

| | |
|---|---|
| **What mood does it convey? What feelings should it bring up for the viewer?** | |
| **What kind of patterning will it have?** | |
| **What will you learn from doing this project? What would you like to explore while doing it?** | |
| **How else do you want to describe this project?** | |

# Flesh out your design, continued

**Describe two or three design possibilities below, or sketch them if you prefer.**

**Fill in the details of anything you left blank in the previous section.**

## Select your yarn type

What type(s) of yarn do you plan to use?

## Checklist:

**Check these items off after you've considered each one. If the item isn't important, cross it out.**

Functional and visual requirements:

- ☐ **Has the right appearance (texture, luster, etc.)**
- ☐ **Non-Itchy**
- ☐ **Warmth**
- ☐ **Stain resistance**
- ☐ **Absorbency**
- ☐ **Storage needs (insects, humidity, etc.)**
- ☐ **Washability:**
  - ☐ How well will it hold up to repeated washing? (If it needs to be washed often.)
  - ☐ Is it colorfast?
  - ☐ Will it felt if agitated?
  - ☐ Does it wrinkle?
  - ☐ Is it easy to wash?

Weaving considerations

- ☐ **Strength:** Is it strong enough to use as warp (if you're using it as warp)? Will it produce a suitably durable cloth?
- ☐ **Abrasion resistance:** Will it pill or wear away easily, or shred in the reed as you're weaving it?
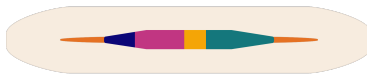
- ☐ **Flexibility:** How stiff or supple is it? Will it produce cloth with the drape you want?
- ☐ **Thickness:** Will the yarn make the fabric too heavy or too light to serve its purpose? How will it affect the drape? In general, thicker yarns are less flexible than thinner yarns of the same fiber and spinning method, so if you want more drape, use a thinner yarn.
- ☐ **Shrinkage:** Does it shrink a lot when washed? How will this affect the dimensions?
- ☐ **Compatibility:** Does it weave up similarly to the other yarns in the fabric? Are the care and laundering requirements similar?
- ☐ **Stretchiness:** Are your warp yarns equally stretchy? If there's a big stretchiness difference between stripes of warp yarns, you will likely get ripples or ruffles in your finished fabric.
- ☐ **Availability:** Do you have/can you get enough of it, in the right colors, to weave your finished piece?
- ☐ **Cost:** Can you afford enough to make the piece? If selling, will it be profitable?
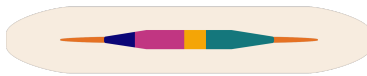
## Select your draft

**Paste an image of your draft (without colors) below:**

Below is a list of things to evaluate about your draft. Check them off when you've considered them. If not important, just cross them out.

### Physical considerations

- ☐ What drape and density will your draft give the finished piece? (More interlacements = thinner, stiffer cloth; fewer interlacements = drapier, thicker cloth.)
- ☐ Are there long floats to snag?
- ☐ Is it a collapse weave? Will the cloth change radically when wet-finished?
- ☐ Will the selvages look even or ragged if no floating selvage is used?

### Visual considerations

- ☐ Does your draft mix colors? (Is it a separating, blending, or semi-separating draft?)
- ☐ How much pattern clarity does it inherently have?
  - ☐ Is it a sturdy or delicate pattern? (Sturdier patterns have crisper edges and large shapes, and are easier to see than delicate patterns with blurry edges and fine lines.)
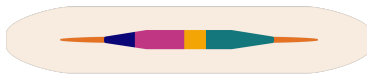
☐ How big is the pattern scale? (Larger scale = easier to see)

☐ How complex is the pattern in the draft? Will it coordinate well with your color patterning?

## Select my colors

**The colors I plan to use are:**

**(attach snippets of the yarn, add images/color swatches, or enter yarn names)**

## Evaluating my color palette

- ☐ *If my draft mixes colors*, how will my colors blend? (If saturated colors are wanted in the end cloth, follow the Two Primary Rule.)
- ☐ Are the colors equal or greater saturation than the ones I want in the finished cloth?
- ☐ Mood:
    - ☐ Do I have enough color contrast to create the right drama level?
    - ☐ Is my value range big enough to create my preferred mood?
    - ☐ What will be the dominant value in the finished cloth? How will that affect the mood of the cloth?
- ☐ Do I have enough value contrast to create the pattern clarity I want?
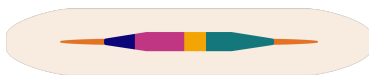
# Physical design calculations worksheet:

**A desired finished length per item (include hems)**

**B + take-up and shrinkage [or 10-20% of A]** 　　+ _____

**C = total woven length per item [A+B]** 　　=

**D number of items to be woven** 　　x

**E = total woven length of all items [CxD]** 　　　　=  _____

**F length of desired fringe (add extra for trimming)**

**x 2 (fringes at both ends!)** 　　x 2

**G = length to leave unwoven between items [Fx2]** 　　=

_____

**H x (number of items – 1) [D-1]** 　　x _____

**I = total fringes between all items [GxH]** 　　x _____

**J + loom waste [20-24"]** 　　+

**K = total unwoven warp length [I+J] = L = M** 　　　　=  _____

**= total warp length in inches [E+K]** 　　　　　　= _____

**= total warp length in yards [L/36]** 　　　　　　= _____

**N desired finished width**

**O + draw-in and shrinkage [or 10-15% of N]** 　　+ _____

**P = total warp width in reed [N+O]** 　　　　　　= _____

**R ends per inch**

**x warp width in reed [P]** 　　x _____

**Q = total number of warp ends** 　　　　　　= _____

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**length of warp in yards [M]** _____

**x total number of warp ends [Q, or per color]** 　　x _____

**S = total warp required in yards** _____

**length of each weft pick = width of warp [O]**

**T x weft picks per inch**        x      

**U = total weft per inch of cloth in inches**    =     

**V = total weft per inch of cloth in yards [U/36]**    =     

**x total woven length [E]**        x      

**W = total weft required in yards =**            =     

Use the project calculator online and let it do the math for you (you'll need a Handweaving Academy membership for this): https://my.handweavingacademy.com/tools/project-calculator/

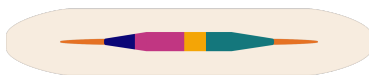**Do I have enough of the colors I'm thinking of using, bearing in mind that each color won't make up the entire item?**

## Roughing out my design

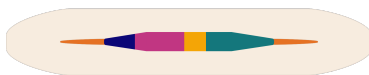**Create a rough draft of the design in weaving software (or make a physical sketch) and paste a screenshot here:**

# Evaluating my design

**What do I like about my piece?**

***Why*** **do I like it? What design characteristics are appealing to me, and why do they work in THIS piece?"**

**How can I build the piece around the parts and themes I like?**

# Revising my design

**Paste a screenshot or drawing of the revised design here. Use as many pages as you want to record the design's evolution.**
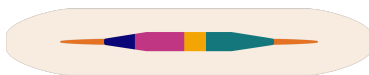
## Polishing my design

**Now that I've built on the best parts, what are the weakest parts of the design? (What *don't* I like about the design?)**

**What makes the weak parts weak, design-wise?**

**What can I do that might fix the problem?**

# The finished design