



Passos

Educational Workbook: Introduction to Handspinning



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Target Audience: Beginners and fiber enthusiasts (Ages 10 to 70+)

Approach: Clear language, step-by-step guidance, technical and pedagogical depth.

Course Overview

Handspinning is the magical art of transforming raw fibers (such as sheep's wool) into a continuous, strong thread. This workbook serves as a step-by-step guide accessible to all age groups, enabling learners to understand fiber science, master tools, and create custom handspun yarn with artistic intention.

MODULE 01

Fiber Science and Anatomy

Before spinning, it is essential to understand the raw material. Wool fiber possesses unique characteristics that dictate its behavior during the spinning process.

- **Crimp:** The natural wave in wool fibers that provides elasticity and loft.
- **Staple Length:** The average length of the wool lock from the fleece.
- **Fineness (Microns):** Determines whether wool is soft enough for next-to-skin wear (< 24 microns) or durable for rugs and outerwear.

Spinning Techniques: Worsted vs. Woolen

Feature	Worsted Spinning	Woolen Spinning
Preparation	Fibres combed parallel to each other	Fibres carded randomly in all directions
Yarn Characteristics	Smooth, dense, shiny, and highly durable	Fluffy, light, warm, trapping air inside
Best Use	Weaving, tailored garments, defined stitchwork	Warm knitting, blankets, cozy sweaters

MODULE 02

Tools and Mechanics of the Gesture

Spinning requires fluid coordination between hands, eyes, and body rhythm.

- **Drop Spindle:** The most accessible historical tool. The spinning weight of the spindle inserts twist into the fiber drafting zone.
- **Spinning Wheel:** A mechanical system using a wheel, treadle, flyer, and bobbin.
 - *Drive Ratio:* Determines the number of twists inserted per treadle rotation.
 - *Twist Direction:* Z-twist (clockwise, single yarn) or S-twist (counter-clockwise, plied yarn).

MODULE 03

Step-by-Step Practical Spinning

1. **Fiber Preparation:** Gently pre-draft roving or carded rolags to loosen the fibers.
2. **Drafting:** One hand holds the fiber supply gently while the guiding hand draws out a small bundle of fibers.
3. **Inserting Twist:** Allow the twist to enter the drafted zone to bind the fibers into yarn.
4. **Winding On:** Wind the spun yarn onto the spindle shaft or wheel bobbin.

MODULE 04

Plying and Finishing

Single yarns tend to twist back on themselves. Plying joins two or more single strands in the opposite twist direction to create a balanced yarn.

- **2-Ply Yarn:** Joining two singles wound together in an S-twist direction.
- **Washing and Setting Twist:** Immerse the skein in warm water with mild soap to relax the fibers and lock the twist. Hang to dry naturally without heavy weights.

Exercises and Skill Check

- ☐ Spin 10 meters of consistent single yarn.
- ☐ Perform the "U-bend" test to check yarn twist balance.
- ☐ Produce a balanced 50g 2-ply skein.