COOPERATIVE EXTENSION

4-H Apparel & Textiles Sewing, Style Engineer, & Upcycle



Purpose

The primary goal of the Kentucky 4-H *Sewing* program is to teach youngsters about the art and skills of creating useful items using needle and thread. This includes not only the use of a hand needle and thread, but the sewing machine and the serger. Sewing is, and can be, used to create clothing and wardrobe essentials as well as useful items for daily living.

Equally important to teaching youngsters skills they can use throughout their lives, is the goal of encouraging critical thinking and creativity. Using STEM and design principals, sewing has evolved into its own science. Clinical studies have found that students who learned to sew a simple project showed elevated creativity after the activity. One study concluded that "children who sew today may have a real edge in the high-tech service economy of tomorrow where creative, flexible worker will be in high demand." In addition, these individuals who learn to sew may also be developing skills for a fulfilling, stress-relieving hobby.

Objectives

The Kentucky 4-H Sewing projects were developed around and based on the following principles:

- ♦ Youngsters can and do enjoy creative activities. They should be given the opportunity to choose items they want to sew, yet be given "healthy" parameters in which to work.
- Skill development begins with the basics and gradually builds as projects progress.
- ♦ Youngsters are encouraged, and should be given the opportunity, to repeat and practice skills over and over again to stimulate learning. Repetition is important and critical for learning.
- ♦ Manual dexterity will vary from youngster to youngster, but should increase with age and practice.
- Young people need encouragement and recognition through positive feedback.

Overview & Guidelines

- An item must fit the category in which it is entered. For specifics, refer to individual projects.
- ♦ All projects are designed to promote skill building beginning with the basic fundamentals. Although a specific age level is *suggested*, projects may be taken in any order.
- ♦ Individuals age 9 to 13 must select and exhibit in one of the Junior categories; individuals 14 to 18 must select and exhibit in one of the Senior categories.
- ♦ Individuals may exhibit in only one project unit per year. Within each unit they may select a clothing and/or a non-clothing project option where indicated. For state fair entries, counties may enter one item per class, limited to two classes per individual.
- Projects may be repeated at the discretion of the county and/or leader-teacher.
- Senior units are designed to progress in skills. Refer to the overview chart.
- ♦ It is suggested that Junior units be started in the fall with monthly skill sessions and that the exhibit projects be started after January.
- Upcycle and Style Engineer/Smart Clothing are exhibits that can be entered in addition to either a clothing or a non-clothing exhibit. Available for both Junior and Senior age divisions, guidelines are detailed on the Senior overview chart.



¹ Home Sewing Association, Guidelines Sew Creative!, 1997.

The following is an abbreviated overview of the entire *Junior Sewing* units. Refer to each Unit for more detailed information and guidelines.

Junior Sewing -- Ages 9 to 13

	Skills to be	Equipment/	Terms	Pı	roject	Practice/
Unit	(can be) learned	d Supplies Need	led to Learn	Clothing <u>C</u>	<u>DR</u> Non-clothing*	Service Project
I – Let's learn to Sew 4JD-01PB	 ◆ Basic sewing machine use and parts ◆ Fabric preparation ◆ Basic pressing ◆ Using pattern /pattern envelope ◆ Basic skills to sew a simple garment or usable item. 	 ♦ Woven fabric ♦ Pattern ♦ Sewing machine ♦ Serger (optional) Refer to Unit for additional items. 	 Woven fabric Selvage Grainline Raw edge Fabric preparation Seam /seam finish Casing Hem Etc. 	Sew and exhibit one item: Shorts with casing Skirt with casing Pants with casing Casing includes elastic and/or drawstring	Sew and exhibit one item: Drawstring tote bag/purse Laundry bag with drawstring casing Sew Green Tote Bag Apron	 Rectangular placemat "Scrunchies" hair ornament Tissue case Nine patch pillow Travel kit Square napkin with serged edge Bandana with serged edge
II - Let's Get to the Bottom 4JD-01PB	Continue to use and improve on the skills from Unit 1. Skills to be added: ◆ Using interfacing ◆ Curved & enclosed seams ◆ Darts & Facings ◆ Fasteners: zipper (required), snap or hook and eye ◆ Hand-stitched hem ◆ Beginning serger skills	 ♦ Woven fabric ♦ Pattern ♦ Zipper foot ♦ Interfacing ♦ Fasteners: ■ Zipper – required ■ Snap ■ Hook & eye ♦ Thimble ♦ Serger (if avail.) 	 ▼ Zipper ◆ Snap ◆ Thimble ◆ Hook & eye ◆ Interfacing ◆ Basic serger parts ◆ Waistband ◆ Bulk ◆ Darts ◆ Securing threads ◆ Etc. 	Sew and exhibit one item; it must include a zipper: Shorts, skirt, or pants with waistband Shorts, skirt, or pants with facing	Sew and exhibit one: Zippered tote bag Zippered purse Zippered gym bag Zippered garment bag	 Book cover Eyeglass case Cell phone case Holiday stocking Decorative pillow Zippered travel bag Simple doll clothes
III - Top It Off 4JD-01PB	Continue to use and improve on the skills from Unit 1 and Unit 2. Skills to be added: • Pattern fitting • Sleeves • Collar • Buttons & buttonholes required • Lining	 Woven fabric Pattern Buttons-required Buttonhole foot /attachment Cording foot (for piping application) 	 ◆ Pattern fitting ◆ Topstitching ◆ Trim ◆ Lining ◆ Collar Fasteners: Buttons and buttonholes shank 	Sew and exhibit one item; it must include buttons and buttonholes: Shirt Simple jacket Dress – 1-piece no waistline Bathrobe Vest with facing or	Sew and exhibit: Backpack with lining, applied trim, and button(s) and buttonhole(s).	 Serger constructed hanger cover Pillow with decorative trim Doll clothes Gift bag Simple curtains "Fanny" pack Sling purse

	◆ Topstitching ◆ Trim			lining Cape with hood or collar		Flapper purse
IV - Stretch Your Knit Skills 4JD-01PB	 ◆ Pattern and fabric selection for knits ◆ Basic knit sewing techniques ◆ Serger sewing techniques 	 ★ Knit fabric – stable, limited stretch fabric ★ Pattern ★ Sewing notions for knit ✦ Interfacing for knit 	 ♦ Stable knit ♦ Rib knit ♦ Stretch ♦ Stretch gauge ♦ Stretch recovery ♦ 3-thread overlock seam ♦ 4-thread overlock seam ♦ Double-stitched seam 	Sew and exhibit a one or two-piece complete outfit. Select from the following: Dress Shirt / jacket with pants / shorts / skirt Pajamas or night-shirt	Does not apply.	 No sew fleece blanket / throw Knit turban Headband Neck-coolers Bath mitt
Unit V - Moving on Up: Intermediate skills Suggested Age 12 - 13 Added for 2011 not yet included in 4JD-01PB	improve on the skills from previous units. Skills to be added: Making a complete outfit Other zipper applications Waistline seams Armhole facings Hook & e Buttons Thimble Serger (if a		 ♦ Seamline stay ♦ Waistline stay ♦ Catch-stitch hem ♦ Slip-stitch hem ♦ Graded seam ♦ Exposed zipper ♦ Flat fell seam ♦ French seam 	Sew and exhibit a one complete outfit from woven fabric. Select from the following: Dress Coveralls Jumpsuit Item must include at least a zipper and/or buttons and buttonholes. A waistline, simple lining, trim, collar, and sleeves may be included but are not required.	Does not apply.	Pillow case with enclosed seams
VI - Put It All Together This is listed as Unit V in 4JD-01PB	Youth are given more choice and flexibility, but should continue to build on previous skills. ◆ Pattern and fabric selection for specialty knit, stretch woven, print, plaid or border print fabrics. ◆ Fabric coordination ◆ Zipper variations ◆ Collar	 ◆ Fabric choice may be woven, knit, or a combination of the two. ◆ Pattern ◆ Invisible zipper foot ◆ Sewing notions according to pattern appropriate to 	 ◆ Elasticized waistband ◆ Invisible zipper / zipper foot ◆ Placket ◆ Pockets ◆ Seamline stay ◆ Waistline stay ◆ 2-way stretch fabric ◆ Regulation set-in sleeve 	Sew and exhibit a two or three-piece complete outfit with at least three new skills listed for this unit. No waistline casings. Select from the following: Swimwear with cover-up Warm-up suit	Using Wild Ginger Software, Inc. Wild Things! Software program, select the Tote Bag or Bicycle Bag option and design a bag that includes at least 2 pockets. Minimum size requirement for the tote bag is 12 inches in height and 12inches in width. At least one functional zipper must be included in your design and creative stitchery or applied	 Helmet covers Pillow with mitered corners Basket liners Chair or seat covers Shoe bag

	▲ Poolsets and plants	fabric being	 Dress with jacket 	trim to personalize your
	◆ Pockets and plackets	•	Jacket or shirt with	bag. Optional elements:
	◆ Elasticized openings	used.		lining, other type closure as
	◆ Regulation set-in sleeves		slacks/skirt	design dictates [button(s),
				hook and loop tape, or
				snap(s)]. If bag is not lined,
				it is suggested that the seam
				allowances be finished with
				a bound seam finish.
				Written documentation will
				need to include the printed
				design sheets (one for each pocket selected) from the
				program and answers to the
				following questions:
				How did you choose the
				size of your tote bag?
				Did you use any of the
				default settings in the
				program?
				Did you have any trouble
				using the software or
				printing your pattern?
				Explain
				Did you download the
				Wild Things! Program to
				your home computer or
				use the program at your
				county extension office?
				Did you make any
				changes to your pattern
				after it was printed? If so,
				tell what you changed.
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^{*}Up Cylcle and Smart Clothing Junior division have the same guidelines as the Senior division, but are judged separately.

Patterns for the Non Clothing are found in the Junior 4-H level Project guide, **4JD-01PB** http://www2.ca.uky.edu/agcomm/pubs/4jd/4jd01pb/4jd01pb.pdf WildThings software program may be downloaded free from http://www.wildginger.com/products/wildthings.htm

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The following is an abbreviated overview of the entire Senior Sewing units. Refer to each Unit for more detailed information and guidelines.

Senior Sewing -- Ages 14 to 18

Level 1	Skills to be	Equipment/		Level 2	Skills to be	Equipment/	•
Units	learned or refined	l Supplies	Project	Units	learned or refined	d Supplies	Project
Let's be Casual Suggested Age 14	 ◆ Fabric selection ◆ Fabric preparation ◆ Using pattern /pattern envelope ◆ Sewing machine and Serger parts ID, use, and care ◆ Fasteners: zipper, snap or hook and eye ◆ Enclosed seams ◆ Seams and seam finishes including flat fell seam ◆ Hand and machine hems ◆ CAD patterns 	 ♦ Woven and /or knit fabric, interfacing ♦ Thread ♦ Pattern ♦ Sewing machine ♦ Serger (optional) ♦ Machine accessories ♦ Basic sewing kit-Dressmaker's shears, thread snips, pins, pin cushion/magnet, tape measure, sewing gauge, marking pencil/pen needles, thimble 	Clothing Select 1-2 garments to make a complete outfit Top and bottom Dress Simple Pajamas Robe Non-Clothing piece set of fabric accessories: wallet, garment bag, duffle bag/purse, back pack. At least one piece must include a zipper. OR a barbeque apron and oven mitt	Leisure Time Suggested Age 15-16	Selection and sewing specialty fabrics to include one or more of the following: Two-way stretch knits Lingerie knit Fleece Nylon rainwear Rip stop nylon Microfiber	Pattern Fabric Interfacing Thread Sewing machine Serger (strongly encouraged) Machine accessories Basic sewing kit. Refer to previous unit for items.	Clothing 2-3 piece complete outfit for: ■ Active wear (swimsuit and cover up, tennis wear, warm ups, cycling wear, leotard) ■ Lounge wear (made from specialty fabric) ■ Raincoat and hat or rain suit Non-Clothing Kite (minimum size - 2' x 3')
Dress It Up Suggested Age 14 - 15	 Fabric and pattern selection for a dressy occasion French seam, hairline seam and serged seam. Hand and machine hems Napped fabric or one way directional designs Invisible zipper Princess Seams Double-pointed dart. 	 ◆ Pattern ◆ Fabric, interfacing ◆ Thread ◆ Sewing machine ◆ Serger (optional) ◆ Machine accessories Basic sewing kit-Refer to previous unit for items.	Clothing Select 1-2 garments to make a complete dressy outfit Dress Suit Pant suit Sportcoat and slacks Non-Clothing Not available for this unit	Formal Affair Suggested Age 16-18	 ◆ Fabric and pattern selection for a formal occasion (taffeta, satin, velvet, lace, sheers, brocade, gabardine) ◆ Narrow rolled hem done on the serger and/or sewing machine ◆ Linings 	Pattern Fabric Interfacing Thread Sewing machine Serger Machine accessories Basic sewing kit. Refer to previous unit for items.	Clothing 1-2 piece complete formal outfit Prom dress Formal Bridesmaid dress Tuxedo Non-Clothing Not available for this unit.

Match it Up Suggested Age 14 - 16	 Coordination of multiple fabrics and garment pieces Matching plaids, strips, and/or designs Napped fabric or one way directional designs Regulation set in sleeves Notched lapel collar Fashion accessories Decorative trims and borders Speed tailoring Traditional tailoring 	 ◆ Pattern ◆ Fabric, interfacing ◆ Thread ◆ Sewing machine ◆ Serger (optional) ◆ Machine	Select 1 item from each group to make a complete 3-4 piece coordinated outfit Shorts, pants, skirt Top, blouse, shirt Vest, jacket, sweater/cardigan piece must have regulation set in sleeves. An accessory may be included as the 4 th piece. Non-Clothing 3-4 piece coordinating luggage/travel accessories. Each piece to include applied trim or border, zipper, and pockets.	Style Engineers Smart Clothing Suggested Age 14-18	Incorporating electronics into fashion design including: • Sewing with conductive thread • Parallel circuit • Simple circuit • Soft circuits • Switches	LEDs – 3-5mm Conductive thread Felt or other base material or clothing item Battery holder 3V Coin-cell battery Marking pencil Small round, needle nose pliers Scissors/thread snips All-purpose sewing thread Snaps, hooks, or other conductive material to create switches Other decorative materials	Clothing or Fashion Accessory one soft circuit item created using conductive thread and hand sewing and/or machine sewing skills, LEDs, and battery pack. May include items such as an LED bracelet, an illuminating fashion applique, or an illuminating garment or fashion accessory constructed by the member. Please include circuit diagram that was used for the project Website: http://styleengineers.or g/module/smart- clothing/
Creative Expressions Suggested Age 15 - 16 Documentation required	 Fabric and pattern selection for a specialized activity Specialty fabrics Alterations Machine appliqué Durable seams and seam finishes 	 ◆ Pattern ◆ Fabric ◆ Interfacing ◆ Thread ◆ Sewing machine ◆ Serger (optional) ◆ Machine accessories ◆ Drafting paper ◆ Notebook Basic sewing kit-Refer to previous unit for items. 	Clothing Complete outfit for one of the following: ■ Costume ■ Uniform ■ Riding apparel Non-Clothing Select one ■ Fabric doll or animal with two outfits ■ Machine appliquéd banner (minimum size 2' x 2')	Up Cycle Suggested Age 14-18 Documentation required	Fabric embellishment to include one or more of the following: Dying Batik Quilting Embroidery-machine or hand Painting Appliqué Beading Printing	Pre-existing garment Fabric Interfacing Thread Sewing machine Serger(optional) Machine accessories Embroidery machine Rotary cutter and mat Notebook Basic sewing kit	Clothing Complete outfit to include at least one up cycled item made from a pre-existing garment . Non-Clothing Not available for this unit

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