## <u>Lesson One</u>

- I. <u>Parts of a Sewing Machine:</u>
  - 1) Bobbin winder: winds thread onto the bobbin for use as the lower thread
  - 2) Spool pin: holds the spool of thread (upper thread)
  - 3) Thread guide: can be used with bobbin winder or to thread the machine
  - 4) Thread take-up lever: follow guides to get to the needle
  - 5) Stitch width dial
  - 6) Upper tension-control dial
  - 7) Thread cutter
  - 8) Needle threader
  - 9) Reverse sewing lever: used to stitch backwards, usually used for backstitching
  - 10) Pattern selection dial: chooses stitch type
  - **11)** Stitch Length Dial: controls stitch length
  - **12)** Handwheel/Balance wheel: used to manually raise and lower the needle
  - 13) Presser foot lever
  - 14) Foot controller pedal

Manual for Brother model XI2600i:

http://download.brother.com/welcome/doch000266/bm35002600ug01en.pdf

Sewing machine manuals are actually really useful; they're basically sewing books.

- II. <u>Hand Sewing Stitches:</u>
  - A. **Straight Stitch** aka. **running stitch**; most basic stitch, tie a knot and pass needle in and out of the fabric
    - 1. https://www.youtube.com/watch?v=1TRyD\_NgqYo
  - B. Whip Stitch: <u>https://www.youtube.com/watch?v=INcjixkx66o</u>
- III. <u>Machine Sewing Stitches:</u>
  - A. **#2 Straight Stitch**: used for almost everything
  - B. **#14 Triple Stretch Stitch**: straight stitch but much stronger because it goes over each stitch three times
  - C. **#3 Zigzag Stitch**: used when straight stitch doesn't suffice; good for stretch fabrics
  - D. **Basting/Tacking**: large, temporary stitches; can be used to make gathers and ruffles; can be done by hand but on machine done by increasing the stitch length
  - E. **Backstitching**: done with reverse sewing lever; stops seams from coming apart, the sewing machine substitute for knots
- IV. <u>Types of Fabric Fibers</u> -what the raw material the fabric is made from
  - A. Plant-based (cellulose): cotton, linen, hemp, bamboo, soy, rayon

- B. Animal-based (protein): silk, wool, yak down, angora
- C. Synthetic: polyester, nylon, spandex, lycra
- V. <u>Types of Fabric Structures</u> -how the fabric itself is made
  - A. **Woven**: stiff, not a lot of stretch, unravels when cut unless countered by something like hemming or pinking shears ex. muslin, twill, shantung, chiffon
  - **B. Knit**: one continuous thread looped around itself in a pattern; very stretchy, does not unravel; favored by stores because the stretchiness allows for a wider range for each size ex. jersey knit, interlock knit, sweatshirt knit, french terry (type of double knit)
  - **C. Felted:** formed when fibers are meshed together with heat and agitation; does not stretch or fray; ex. washing and shrinking a wool sweater