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# Wholecloth Quilting: Machine and Hand-Quilting Techniques with Carolyn Friedlander

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## Chapter 1 - Wholecloth Quilting

### Overview

(bouncy music) - Hi, I'm Carolyn Friedlander, author of *Savor Each Stitch*. I'm a fabric designer, pattern designer, and quilter. Quilting is one of my favorite parts about quilting. It's one of the first things that drew me in. I saw some free motion quilting and it looked like drawing, but with a sewing machine. So, in today's class, we're going to be tackling some of those skills. We will be taking on a whole cloth project; and a whole cloth project is basically using a whole, single piece of fabric as your top layer, and the design will be created by the quilting itself. So we'll learn a few techniques for that such as free motion quilting, quilting with a walking foot, using some big stitch hand quilting, as well as some hand tying. It's really easy to be intimidated by this process. When I first started quilting, I just used whatever I had and, you know, that was totally fine. I was able to put in a lot of practice and build my skills. (bouncy music)

### Materials

- The materials you'll need are a piece of fabric for your top layer. You can really cut this to any size you'd like since you're doing a whole cloth project. Today I will be working with a size that is 21 by 24. You'll also need some batting. Cut a few inches larger than that, depending on what your needs are. I'm using wool batting, one of my favorites because it's got a thicker loft, which will really show off some stitching. And then you'll also need some backing fabric, which is also cut larger than your top piece. You'll also need some different types of thread. I will be using a number 12 weight pearl cotton for some big stitch quilting. And then I've also got some wool yarn that I'm gonna be doing some hand tying with. You'll want some machine quilting needles. 90 over 14 is what I'm using. Small pair of scissors, some quilting gloves, which are also gardening gloves. You can find them at the hardware store. I like using this silicone thimble for big stitch quilting. You'll need some safety pins. I've got the bent quilters kind. You'll need some needles. So some big stitch needles, one with a really large eye that you can thread your yarn with. And then I've got another one with a smaller eye that I'm gonna be using with the pearl cotton. You'll also want some thread to machine quilt with, as well as a matching bobbin. I'm matching the top of my project, so I've got a blue. And you'll want your darning foot, a walking foot, your sewing machine, and an extension table if you have it.

### Quilting Techniques

#### Basting

- To start, press your backing fabric and lay it flat on a flat surface. I usually baste on my cutting table. With this project, it's small enough that it'll fit in one section, but if I've got something larger, I will baste it in sections on the cutting table. Okay, so we've got this nice and flat. Make sure you've pressed your backing fabric. You're gonna lay it wrong side up. Make sure it's clean of any extra threads. You wouldn't want those showing through. Then you're gonna take your batting. Double check that it also does not have any threads on it, and kind of smooth it evenly onto your backing. The wool batting has some different colored fibers, so some of that's unavoidable. Just make sure you don't have any crazy threads that you'll see later. Finally, take your top piece of fabric and put it

on the top of your sandwich, making sure that it also does not have any extra threads. And you're just gonna center that over your different pieces. Now we're going to pin these layer together. Grab your pins. If they are all knotted, just throw them onto your surface, and that usually breaks them up. I like to start in the center and pin out, and you kind of want to go in regular intervals. Since we don't have any piecing to go by, sometimes I'll use the blocks to help dictate kind of the order I'm piecing it in, I'm just kind of using the width of my palm to pin evenly. A rule of thumb is to space your safety pins so that if you have a fist, you can kind of move it around a little bit. You don't want them any further than that. I pin everything in place first before closing the safety pins. Now that I have my entire top pinned, I'm gonna close them. Now's a great time to think about your quilting strategy. Here, since we have one whole piece of fabric, you have a blank canvas to work with, which can maybe be daunting, maybe be exciting because there's total freedom here. What I'm planning to do is take some inspiration from the design of the fabric itself. There are tons of straight lines, different sized grids, different directions of grids. I'm gonna play off of that. If you have a fabric that you love that's maybe got some kind of cool motif, you can totally play off of that, use that as inspiration. In fact, that could be really great because you can use that as your guide for how the direction that you're going with your stitches or whatever. Or, if you have a motif that you want to do that's something that you came up with, you can translate that onto here as well. Choosing how you mark your quilt can be a little bit tricky. Always test on the fabric that you're going to use if you're using any type of pen, or chalk, or pencil. There are some other ways that don't involve actual marking. There are hera pens that score your fabric. Those definitely come out later, although they can be a little bit hard to see. You can also use drafting tape if you're doing straight lines. It could get in your way, but it's something that works really well. So audition whatever way you're planning to mark your quilt before actually using it.

### Big stitch quilting

- Whenever I'm quilting with a hybrid of techniques, I'm gonna always start with some of my hand techniques. Since I'm doing big stitch quilting, I'm starting with that. First, big stitch quilting is really just hand quilting but you're using a thicker thread. Pearl cotton is a thicker thread that's spun, so that it won't separate like embroidery floss. You can totally use embroidery floss but pearl cotton would be a lot stronger. And you're gonna wanna at first, cut your length of pearl cotton to about 20 inches. You're not going to want to cut your pearl cotton as long as you would a strand of thread when you're hand appliqueing or even if you're using hand quilting thread because of the nature of the thread. About 20 inches is really the best length. Knot the end that you cut and you can leave your tail. You're always gonna wanna knot the end that you cut because you want to use your thread in the direction that it came off the spool. Thread has a direction to it and so you wanna make sure to be using it in the direction that it's spun, so that you have fewer knots. To start with this piece, and what I'm gonna do here is I'm gonna use. I got two colors, my yellow and my blue. I'm gonna use my yellow for some straight lines, kinda going the length of the piece and then I think I'll use my blue going the other direction. You always wanna start in the center of your project and work out. I'm gonna do my first line, kind of along here in the center I'm gonna start here using the line in the fabric as a good starting point. You always wanna start in your center and work out. So I wanna start right here. I'm gonna use my finger to kind of roughly mark where I wanna start. Because you wanna come up through the back of your piece. So my finger is like right here but I actually wanna travel to it from the back. Stick your needle into your backing fabric. And if you can see my needle, it's only in the back, the backing fabric. It's not in the batting quite yet. And now, I'm

coming to the front. You see I'm not quite on my mark, which is right there. So I can kind of adjust where that needle is, hold that, go back and make sure that I didn't come up through my backing. So I'm still traveling back there and you're gonna pull, your thread through. Go to our know and you wanna pop that knot under your backing fabric. So just kinda work, work it around. See I'm just kinda rolling it around the fabric to make the hole just a little bit bigger. I'm not breaking any threads or anything. I'm just kinda opening it up and then I'm gonna pull with my left hand and I'm kind of gently popping that knot in there. So I didn't pull it through the front. I just pulled it through the back. I'm gonna, just kind of massage those threads back together. And we're ready to start. I'm gonna put on my thimble. I don't always use a thimble when I'm doing hand applique or other hand techniques. But when I'm hand quilting, you really kinda need one. So I'll always use one on my (mumbles) and my right middle finger for pushing the needle through. This piece is pretty small and I'm not going to be doing a ton of hand quilting to it. But on larger pieces or on pieces where I am doing a lot of hand quilting, I might use a silicone, just kind of sticky thimble for my left middle finger. Because this is the one that's kind of taking the hit from the needle from underneath. With a small piece like this, it should be ok. To start, you see I've taken my left hand, I'm putting it under the piece. Kind of get a nice smooth grip on your fabric. So my thumb's here holding it a little bit but I'm making sure not to pull the top layer out of sync with the back. And now, we're just going to go straight down and I'm using my middle finger to make sure my needle has come all the way through the fabric and you just rock back and forth, couple stitches. I'm kind of eyeballing my straight line but this is one of those cases where if you really want it to be positioned or perfectly straight, you could figure out a way to mark it. And with big stitch quilting because we're using a thicker thread, you can really play with the length of your stitches. The goal is to have them pretty even but I kind of like seeing the hand, the hand in it. I mean, we're making these things so I don't feel like they need to be perfect. It's totally okay if they have a little personality. So you're gonna take a look on the back and you can see that my stitches have come through. If I'm doing any kind of hand stitching mixed with machine stitching, I'm always going to do my hand stitching first. This is because it just makes it so much easier. First, it helps further base the project. Second, since you're gonna be burying your threads, it's much easier to do that when you don't have to contend with the machine stitches. Plus when you machine stitch over them, they still rise to the top and you can see them very well. I made it to the end of my first row and I'm at the edge which is where I wanna start, stop. So to knot it, I'm just gonna grab a little bit and do, loop it through to make a knot. I'm gonna do two knots. I'm grabbing a little bit of the batting and a little bit of the backing. You don't want it to gather anything too much but then you can trim it like that. I finished the first half of my line so now I'm going to flip it around, so that I can work from the center and finish up the other half on the line. Since I already have this first part of the line, I know roughly where I'm going, but I've still got my finger back there to know where I wanna start. But I'm gonna start somewhere over here, travel from the back with the needle, bring it up to the front and you see I'm right over my stitch, so I wanna move it just a little bit. I want a space where I'm coming up to look like just a normal stitch that's continuing along the same line. So I'm going to grab my needle, flip to the back and pull, pull it through. Got my knot there. I'm gonna just kinda work the hole a little bit and gently pop the knot to the back. I use my fingernail just to smooth back out those fibres. Now we're ready to finish stitching the rest of the line. Just like we did before. Like I mentioned, I like to build things up evenly. So starting from the center working out. I'm also going to be working in both directions, evenly. Both with hand stitching and later when I'm doing the pre motion quilting So I've done my one stitch this way, I'm gonna start here in the center and go the other way. Put my finger where I

wanna start and I'm gonna drop my needle into my backing and start right there, pop the knot through by working that hole and pull it in. Now ready to stitch the next line. If you notice that your thread is pulling a little too tight, that just means your tension is a little tight. All you have to do is, let's say this next row, I pull it a little too tight all you have to do is use your finger to kinda work the thread back in place, so that it's nice and smooth. Continue building up your lines in different directions or however you wish. I'm coming up on this line but I don't wanna cross it. I actually wanna stop at the line. So this is kind of an intentional design decision but it could also be something that you'd need to do, if you're actually running out of thread. Stitching towards this line and this really isn't gonna be that much different than how you would start your line. It's just kind of the reverse of it. Okay so I wanna stop right here at this line. So I'm gonna put my needle down, come to the back of the project and now I'm going to make a knot. Just a little ways off, so I'm about half a inch, three quarters of an inch away from my stitch from where I came up and I'm just going to imagine this line continuing, come down and I'm only going through the backing, gonna travel diagonally through the back quite aways. Now you're going to pop that thread into your back, just like that. Take your scissors and trim. And now you're nicely buried and finished. So that was a clean way to finish in the center of your quilt.

#### Tying a quilt

- Next we're going to add some hand ties, which will be a great little textural embellishment, and another way to get those layers together. So you are going to thread your needle. Now the needle will need to have a very large eye to thread yarn through it. You might need to use a needle threader. And I'm just gonna pick a spot to start. Kind of just plan this one out as I go along. For the first one, just grab some from your backing and through all of your layers. Leave a tail and then go back through it again. Make sure to smooth it out if anything's pulled too tightly. Now you're going to want to figure out where your next stitch is gonna go. I usually like doing just a grid of them. So I'm grabbing up another chunk of... There we go, sometimes with the yarn you really just have to ease it through. Now leave a long loop, and then go back through it again. Smooth it out. I'm gonna do a couple more, so I'm gonna do a couple here. No, closer like that. Leaving a long loop, go back through again. There we go. And you really wanna keep a long tail, so I think I'll just leave that and thread the needle again. Sort of the rule of thumb when you're working with different types of threads and yarn is that the thicker the thread or yarn, the shorter the length you'll want to cut. Because, you know, when you're using yarn with all of these layers, you don't wanna run into any kind of knots, and you also don't wanna wear down the fibers so that they break apart. I'm gonna, with my new strand, do the same thing before, leaving a tail, and loop back through like that. I think I'll do a couple more. Alright, looks pretty good. I'm happy with these six so I'm ready to tie off. Go ahead and clip your loops right in the middle. And now we're just going to knot them. I usually like to do three knots. Make sure they're good and tight, but don't pull the first one too tight that it really puckers your fabric. Now that they're all tied, I'm going to trim them. I usually like to leave about a half of an inch tail. And trim them all pretty evenly. Tying your quilt can serve a functional need if you're not wanting to quilt it. Here I'm using it not only for that purpose, but also as more of a decorative element. It's really fun to mix thicker yarns with pearl cotton to add this little decorative detail to your quilt. I'm gonna be incorporating more ties throughout the quilt, just kind of spaced in asymmetrical ways that I think will help balance out the design, but feel free to explore tying your quilt in a way that feels great to you.

### Machine quilting techniques (free motion and walking foot)

- My strategy has really been to start with the loosest stuff and I'm slowly getting finer and finer and tighter and tighter. So I've started with my hand quilting. I've did some tying and I'm just slowly fine-tuning my design which makes things a lot easier to work that way. To start big and get smaller and smaller. So the next step will be to do some walking foot stuff. I wanna add some more straight lines. Since I'm going with the machine, they'll be a little bit tighter. That'll also helps further subdivide my space so that I can keep fine-tuning kinda the look that I'm going for. So even though I really do want a variety of densities. Not only in terms of the hand stitching, the tying, the machine quilting, I want to build them up evenly. And I kinda want to space them throughout the project evenly. You wouldn't want a lot of really tight stuff on one side and then only loose stuff on the other end. It's okay to have different levels of fullness but you don't want to do it to the point where it just completely distorts your piece. I do ultimately want it to lay relatively flat or hang on a wall without coming away from the wall at different parts. You wanna keep it nice and flat in the end. So I'm gonna start over here with my straight stuff because it's really the loosest part. I've already built up more handwork here so I wanna balance that out over here. To start I wanna pull my bobbin thread up to the top by dropping my needle down and billing it back up. You noticed I had to drop the presser foot. Sometimes you just need that tension to pull up your bobbin. So I've got them both up. I'm gonna pull them to the back. Drop my needle back down. Drop my presser foot down. To lock it in place, I'm gonna shorten my stitch length to 0.5. This will be a bunch of really tight stitches right on top of each other. Make sure your needle is in the needle down position and do a few stitches. You'll see it barely moves at that stitch length. It's exactly what you want. Now we're going to jump back up to three which is what I like to do straight stitches at with the walking foot. Get a good grip of where you are. I like to have my left hand making sure everything is feeding through. And go. If you notice that your top fabric is kinda pulling, I'll just lift up my presser foot and use my left hand to work it back into place. At the end, do some small stitches to lock in place. Bring your needle up and cut your threads. Just like I did with the hand quilting, I'm now going to do my next row of straight stitching in the perpendicular direction. Pull your threads up to the top. Drop your needle down, shorten your stitch length. Do a few stitches. And turn it back up to three. I'm not going for perfectly straight but I'm eyeballing the distance using my hand stitching as a way to measure as a reference. And then also some of the straight lines in the fabric itself. Lock in place at the end. Trim your threads. I'm going to continue to build up my straight rows of stitching. Now I'm ready for some free motion quilting so I've switched out to my darning foot. I've got my quilting gloves ready and I'm looking at my quilt to see where I wanna start. My general strategy here is to still keep building up these layers, building up the grid. I don't want it to be totally perfect or even. I wanna kinda change up my direction, change up my density of lines. I'm gonna kinda respond to my hand stitching that's already here. Gonna respond to the binding, the ties. And just kinda work as I go. I'm really familiar and comfortable doing that. Just kinda on the fly, think it's really entertaining but if you're new to free motion and that kind of overwhelms you, to just kinda go at it, then you can go ahead and mark some areas. Maybe put a safety pin in the areas that you want to be more dense. Or mark areas that you wanna go only up and down. You know, the length wise. Whatever system you wanna use, you can totally figure out your own system for doing that. In general, same rules apply. You kinda wanna work in the center and jump out because I know I wanna be doing straight lines, changing my directions with that. I definitely anticipate I'll be jumping around a little bit. But in general, you kinda wanna figure out how to link neighboring areas so that you don't have to jump around as much. To start, drop your needle down. Same thing with the walking foot like



when we were doing our starts there, you wanna pull bobbin thread up, drop your needle back down while you're holding your threads away. Do some small stitches in place to lock it. Now you can start quilting. So now that I've worked a little bit away, I'm gonna just knot my threads a couple of times. And then trim right close to them. There are different ways to tie off so this is the way that works well for me. I find that I can get clean results with that but if there's another way that you're comfortable, go for that. With free motion quilting, what you wanna keep in mind is you're in control of how your fabric is feeding through the machine. That's the really cool part so you don't need to worry about a stitch length being adjusted on the machine. You are controlling your own stitch length based on how fast you're going and how fast you're moving the fabric and how fast you're controlling your stitches. So if you're just getting started, kinda play around with the speed of the needle going up and down and how you're moving your fabric. You want your stitches to be pretty much the same as that three when we were doing the walking foot. Not too long, not too small. And you wanna keep them pretty consistent. I'm gonna put on my gloves and get going. You wanna make sure to have a really good grip on the fabric which why I wear the gloves. And kinda space them so that they give you good control over your piece. You'll notice that I slow down once I get to the end and then I am using the next set of lines to kind of track over. I'm gonna change it up. One thing I do when I need to jump around from one section to another if it's not too far away, instead of cutting my threads and then going to that section and pulling the threads back up, doing the small stitches and starting again. What I'll do is when I stop, I'll use small stitches to lock it in place and then I will just jump, leaving the thread connected to the next place if it's nearby. When I put my needle back down, I use small stitches to lock it in the new place and then I continue on. I'll trim these threads later. Yoink. Let's take a look at what I've done so far. So I've completed some of this and I would continue working my way around which I'm actually kinda happy with how I've been able to flow 'cause sometimes you'll work yourself into a corner and have to jump somewhere else. It's not a big deal but this is just a nice smooth way to go. I'm gonna go ahead and clip these threads. Just so that they are out of the way. I think that's all I have are three. And then you flip to the back. And clean those up. Yeah, anytime I'm at a stopping point, it's always nice to get those threads out of the way 'cause you wouldn't want to get hung up on them later. So I'm gonna look at what I've done. And I've got some looser areas where it's just really full. I've got some tighter areas where to help emphasize the fuller areas. I've got my ties. This will be a great step to... I mean, I've kinda like where it's going. I would continue on with my different grids but here I kinda played off the ties. It could be that I wanna add some more. There are no rules. You're totally welcome to come back in and add some more ties or add some more hand stitching if that will help balance out your design. Go ahead and continue quilting the rest of your top. Here I've got a completed one. And you can see I've kinda played around with my densities. I've played around with shape. In this one, I did the exact same thing that I did before where I did some ties but I ended up adding some more later before I finished because I liked how I had this really loose section that just felt very full and I didn't want to quilt it much more but still needed to be bound together somehow so I just did some more ties. Plus I liked how it just repeated those elements. After you've quilted and tied and done every bit that you've wanted and you're really happy with how it's laid out, go ahead and add your binding or if you've like to add facing, you can do that as well. Whatever your preferred edge treatment is. Now your quilt is ready to hang on the wall.