

Soft Fabrication Micro Course (99-352)

Dates: Saturdays 9/14, 9/21, 9/28

Final Project due: October 7

Class Time: 1:00-3:50pm **Lab Time:** 4:00-6:00pm

Location: A5, Hunt Library

Instructor: Natalya Pinchuk, npinchuk@andrew.cmu.edu

TA: David Perry, dbperry@andrew.cmu.edu

Class website: <https://courses.ideate.cmu.edu/99-352/f2019/>

This course aims to provide hands-on experience and knowledge on the process of working with textiles and soft fabrication techniques to be applied across different disciplines.

The fabrication skills and concepts that will be covered in this course will be taught from an interdisciplinary approach to merge practices in arts and technology. Students will learn methods of sculpting with fabric, along with merging aspects of digital fabrication and physical computing using flexible materials.

Class 1

Discussion Topic	Demo/Lab
Hand Sewing	<ul style="list-style-type: none">• Sewing Sampler: running stitch (basting) long and short, backstitch, blanket stitch, overcast stitch, appliqué (half overcast, half blanket) hem stitch (slip) https://www.youtube.com/watch?v=sWIE_-mS1-M hem whip stitch https://www.youtube.com/watch?v=INcjixkx66o&t=17s
Machine Sewing	<ul style="list-style-type: none">• Setting up machine• Machine samplers: perfect straight lines, tension sampler, square spiral, circular spiral, doodle with various settings, two fabric pieces together

Class 2

Discussion Topic	Demo/Lab
Fabric: Flat to 3-D	<ul style="list-style-type: none">• Seam allowance, darts, pattern making• Samples: heart shape form, pouch or cube, darted circle laser cut, darted circle freestyle
Felting, Knitting, Crochet	<ul style="list-style-type: none">• Wet and Dry Felting• Samples: felted ball, felt sheet, hollow felted 3-d form, dry felting

Class 3

Discussion Topic	Demo/Lab
Fabric Surface Manipulation Smart Textiles + Soft Circuits	<ul style="list-style-type: none">• Light up fabric circuit, diy soft sensors• Sample: laser cut name tag with bead sensor
	<ul style="list-style-type: none">•

Sample Book + Final Project:

Throughout the class, students will create samples that will go into a sample book (1" binder with plastic sheets). This will serve as a reference for future projects.

For the final project students will choose to either further investigate a skill covered (or not covered) or create a project proposal that incorporates techniques from the class as a way to apply these skills into their own ideas and projects.

Students will upload a digital portfolio of their sample books and final project to the [IDeATe Gallery website](#) in the Soft Fabrication pool. Your digital portfolio will include photographs of each sample created in class as well as your Final Project (Proposal or Skill Investigation) as well as written reflection. Details of what to upload as part of your Final Project are below.

Due: Monday, October 7

Upload your documentation to the IDEATE gallery in the Soft Fabrication Pool <http://ideate.xsead.cmu.edu/gallery/pools/soft-fabrication-skills-pool-99-352>

- Photo of sample book + brief written reflection
- Final project:
 - **Proposal Option:** You will create a proposal for a project that utilizes techniques or concepts covered in the class. This project could be for another class or be for personal inquiry. Make sure to include:
 - Sketches
 - Write up of materials
 - Techniques and Concepts used
 - **Skill Investigation Option:** You will learn a new textile skill and create a sample to show what you have learned. This skill could be one that we discussed in class (but did not cover in a demo) or one for personal inquiry. Make sure to include:
 - Photos of your sample
 - What resources and guides used
 - What materials used
 - Possible applications

Special note: Register early for the [IDEATE gallery website](#). All requests are manually approved so it may take some time to get access.