

Introduction to Media Synthesis and Analysis (62-150)

SECTION A:

Introduction to Textile Media

Instructor:

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course curriculum developed by Olivia Robinson

Teaching Assistant:

Gary Bailey

Soft Technologies

Soft technologies is an emerging field of robotics, the arts, craft, and engineering with far-reaching commercial, research, and social implications. Individual disciplines address components of this burgeoning field, but the IDeATe *Soft Technologies* minor helps students integrate the pieces to be able to make significant contributions to this developing sphere. Through the courses in the minor, students weave together a rich set of established and experimental techniques in traditional soft materials (such as fibers and textiles) and new soft materials (such as current hybrid and dynamic materials) to design and create a variety of forms with applications ranging from novel to practical. Students explore the unique qualities that soft material technologies afford in design and interaction in relationship to environments and the human body—responsiveness, adaptivity, flexibility, sensitivity, morphing, and biomimicry. Students will engage in project-based inquiry, using research, experimentation, making, and reflection to inform their creativity and to develop critical perspectives. Students will be able to envision their own projects and develop sensitivities to the breadth and limitations of soft technologies.

Through coursework in the minor, you will gain skills and competencies in:

How to Participate

IDeATe collaborates with the [Robotics Institute](#) to offer an undergraduate minor in *Soft Technologies*, which is open to students from any major. Students interested in the minor should [contact the IDeATe advisor](#) to discuss curriculum and to make a loose plan of study.

All students are welcome to take IDeATe's *Soft Technologies* courses to fulfill requirements or to explore an area of interest. Pursuing the minor is not required to take the courses.

IDeATe

Undergraduate Programs

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Animation & Special Effects

Media Design

Sonics Arts

Design for Learning

Innovation & Entrepreneurship

Intelligent Environments

Physical Computing

Soft Technologies

Immersive Technologies in Arts & Culture

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Olivia Robinson

Teaching Professor, Entertainment Technology
Center

› [Contact](#)

Bio

Olivia Robinson teaches courses in IDeATe's [Soft Technologies minor](#), and she manages IDeATe's Soft Technologies Studio. Olivia is a multimedia artist whose work spans performance, installation, research, and public engagement. Robinson's diverse body of work, which ranges in scale from hand-built textile circuits to architectural-scale inflatable structures, investigates issues of justice, identity, community, and transformation.

Within her work at CMU, Olivia is invested in exploration of large-scale sustainable textile

Overview


Welcome to Introduction to Textile Media – a glimpse into the technical, historical and conceptual grounding of this medium. Technical exploration, complimented by the study of historical precedent and contemporary practice, supports students in exploring textiles as an expressive medium.

Course work includes creative projects, technical samplers, and critical feedback.



In this class you will:

- Learn many practical and artistic textile skills
- Learn about textile structures and traditions
- Grow awareness of artists, designers, craftspersons, makers, architects and others who employ textile techniques in their contemporary practices
- Participate in critiques about your own and others' work
- Document and reflect upon your own work
- Critically think about history, cultural context and social implications of the textile field

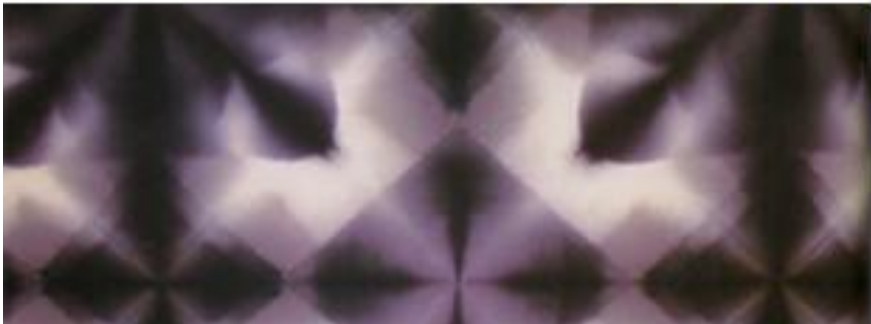
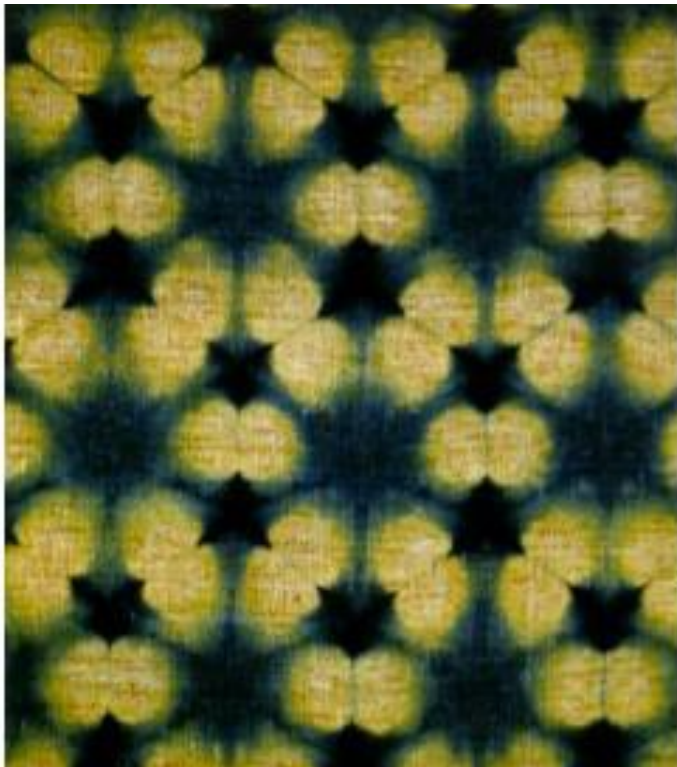
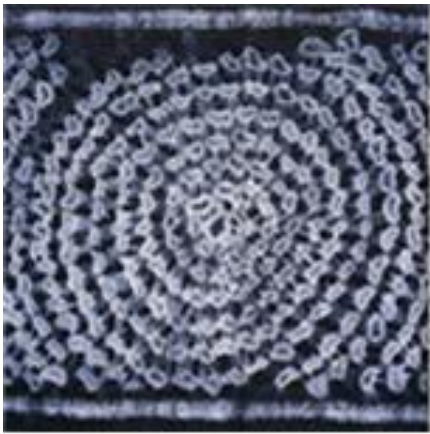
A vibrant collage of various fabric samples, including polka dots, stripes, plaid, and solid colors in shades of red, blue, yellow, and green. The fabrics are layered and cut into different shapes, creating a rich, textured background.

*Techniques and Processes
we will explore...*



Spin and Dye Wool





Dyeing Cellulose Fibers using a variety of Resist Dyeing Techniques




*Learn about
Weaving*





Create a Tapestry

A detailed felted landscape with various colors and textures. The scene includes a central white text box, a purple and orange bowl-like structure, a green textured area, and a blue stream. The background is a mix of orange, pink, and green felted terrain.

*Wet and Dry Felt
with Wool*



*Block Print and Silk Screen on Fabric
with Cricut*



***Sew
with machines and by hand***



Applique & Quilt



Assignments & Documentation:

Weaving Project (includes a sample and final weaving)
Technical Samples

What Matters? Banners project (quilting/applique project)

Final Project (open)

All Technical Samples will be documented and posted on PINTEREST in appropriate secret boards as we go through the semester

Outside of class, you will be asked to: watch recorded videos/presentations and follow technical videos, complete independent sample making, do research online and in the library, document your work. If a video is assigned under homework, you can assume there will be a quiz to assess whether you watched it.

Student Expectations

- Be present. Be engaged. Show up to class on time. Full presence in class each week. Preparedness/Bringing necessary materials to each class. Make helpful contributions to discussions.
- Be responsible. Communicate with your instructor beforehand if you must miss a session. Make a friend in class who will update you on what you missed.

Student Expectations

- Be aware. Contribute to the well being of the class community. Clean up. Use of safe and respectful studio and online practices and protocols.
- Be diligent. Submit all of the Assignments on time. Watch assigned videos outside of class.
- Follow instructions.
- Use the class website.

Student Expectations

- Time commitment. At least 6 hours of work time outside of class each week.
- Follow Your Passion. Love what you do. Make awesome work. Embrace experimentation and play. Explore options. Take chances.

Student Expectations

- FOLLOW YOUR PASSION

This is a class based in creativity and making. I strongly suggest that you (the creative maker) make the assignments interesting to you. Our assignments are starting-points, prompts and propositions.

Student Expectations

ON PERFECTION

Not every project you make can or will be a work of brilliance. It's OK. In this class, it is much more important to submit work on time than to freeze up, because your work isn't perfect. Get it done and then get some sleep. This class is about developing fluency through practice. When you're just learning how to speak a new language, no one expects you to make beautiful poetry. Your ability to explore and experiment is a critical ingredient, which means sometimes your work will not look like what you expected. This is okay and part of learning.



Instructor Commitments

- **Be accessible -**
 - office hours Tuesdays and Thursdays 4:00-5:00pm, and by appointments (scheduled by email)
- **Quickly respond to emails**
 - Within 24-48 Monday through Friday
- **Promptly return grades**
 - Via email within two weeks of completed work
- **Welcome feedback**
- **Help provide necessary accommodations**
 - access@andrew.cmu.edu



Evaluation

On a 100 point scale:

Weaving Project = 20 points

What Matters? Banner = 20 points

Technical Samples = 20 points (pass/fail)

Pinterest, Participation, Quizzes = 20 points
(assessed at the end of the semester)

Final Project = 20 points

PINTEREST, DISCUSSIONS, PARTICIPATION, ATTENDANCE, ATTITUDE: 20 POINTS

This category includes:

- active participation in the class community
- being present in class activities (not using personal social media during class, not actively texting, not checking news etc)
- stewardship of communal space and resources, participation in clean up, helping peers
- contributing to discussion and critiques; attentive listening
- general demeanor and respect of peers, faculty, and staff
- regular posting of work and research on Pinterest in the requested format and in appropriate folders
- watching of assigned videos outside of class
- quizzes
- attendance and on time arrival

All students start with 20 points at the beginning of the semester. Poor participation may result in loss of up to 20 points at the discretion of the instructor. Students will receive an update regarding their standing in this category with each graded project. Students may inquire at any point in the semester in regards to their standing in this category.

Quizzes will be utilized to assess whether students are watching the assigned videos outside of class and retaining the presented information. If a video is assigned as homework, students should assume that there will be a quiz the following class.

Attendance to all classes and class-related activities is expected. You are responsible for what happens in class whether you're here or not. Check the website to find out what you missed. Organize with your classmates to get class information and materials you have missed. Students are allowed 2 unexcused missed classes. Unexcused late arrivals are strongly discouraged.

Expected absences: Within the first week of our course, please look ahead and see if you need to miss class for any excusable reason (religious holidays, CMU-sponsored events, medical or family emergencies, etc.) and [email me](#).

Illness: Let me know before class if you are ill and must miss class. I am understanding and accommodating about medical issues when you inform me in a timely and professional manner.

Mental presence and social media. Physical and virtual presence means nothing if you're "checked out"; your mental presence is paramount. During the instructor's lectures or guest presentations, open laptops and social media are prohibited. You can exist for few hours without tweeting, facebooking, chatting, texting, emailing. Any laptop or phone for social media, texting, etc. is banned during lectures, critiques and group discussion, unless specifically allowed/requested by the instructor.

Critique: Your presence and participation is especially important for critiques. Sometimes students who have not completed their projects think that missing class is better than coming empty handed. This is the wrong assumption! Your participation on critique days is essential, regardless of whether or not your project is complete. Critique sessions and conversations help you understand our class standards, expectations, and criteria for good work. Even if your own project is unfinished, you are still expected to contribute productively to the class discussion.

Materials

Many materials will be provided for you, but not all. You'll need to procure:

- **Acquire and bring with you each class:**

High quality fabric scissors (we have plenty but not all may be sharp)

Pen, pencils, sharpie

Journal or notebook

Metal fork, a must for weaving (if you can't find one, let me know)

Reusable rubber gloves (kitchen gloves will do)

Special fabrics if you cannot find what you need in the Sewing Lab

An aerial photograph of a large-scale art installation on a paved plaza. The installation consists of numerous rectangular panels, each covered with a different piece of fabric or paper, creating a colorful, quilted effect. People are seen walking across the panels, and their long shadows are cast across the ground, indicating it is either early morning or late afternoon. The overall scene is bright and open.

IDeATe

Check out IDeATe website to learn more about IDeATe facilities, safety, lending, classroom and lending access, laser cutter access.

For any questions about IDeATe, email help@ideate.cmu.edu

Class Website

contains syllabus and calendar

class notes documents what we did in class and what you need to do before the next class

all video links that you need to watch

extra resources

Pinterest

images of all samples and research will be pinned on Pinterest in appropriate secret folders

we will share resources in Pinterest throughout the semester

*Studio A, storage cubby with your name +
access*

A4 Sewing Lab

A31 Dye Lab

Sink Use and special rules

read the facilities rules

Dye Lab sign up sheet to reserve table time