

2 x 2 Assignments and Puzzle Project. 2016

From Structure. Foundations 3D Studio.

School of Art + Design, Ohio University. Athens, Ohio.

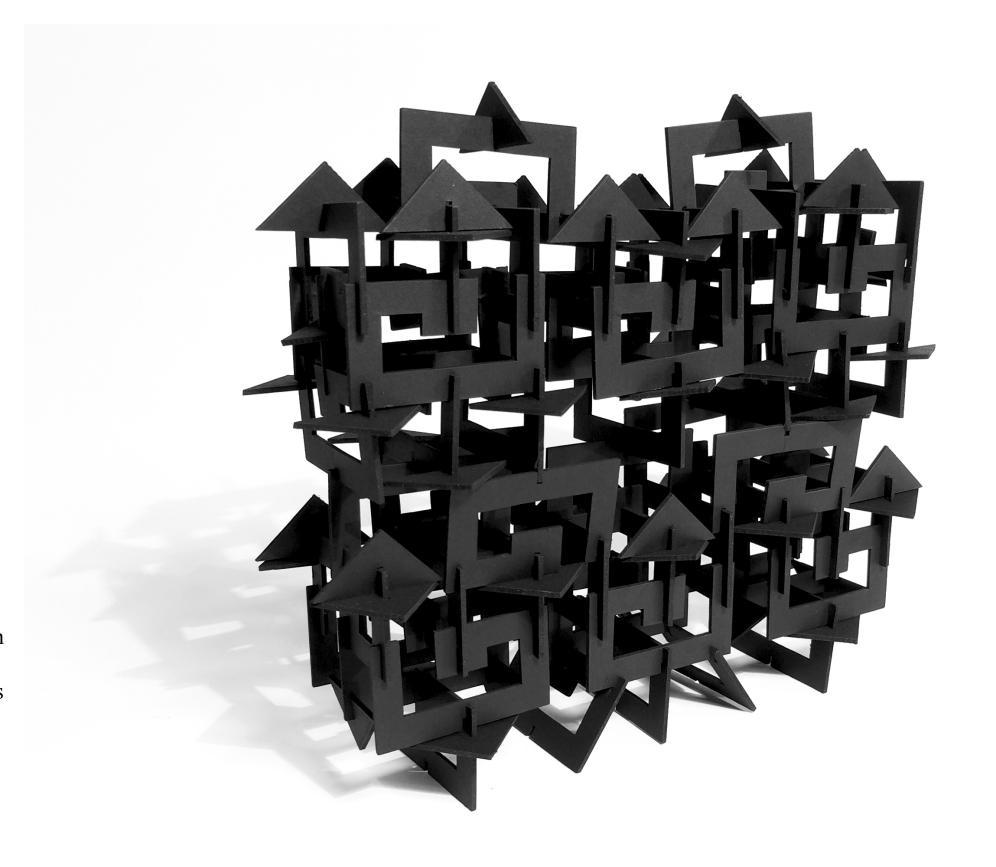
The 2 x 2 Puzzle assignments introduced design principles, including abstract geometric shapes, tessellation, black-and-white patterning, and relative color theory. These assignments build technical skills while forming the physical "puzzle pieces" students use in their Puzzle Project. Students draw an abstract shape (or shapes) within a 2 x 2-inch square. Students rendered this line drawing as negative-positive and positive-negative tiles. These tiles are developed into tessellated or patterned black, white, and color designs. The assignment transitioned from a pen-and-paper 2D study to a 3D structure via an introduction to digital fabrication. Students recreated their 2 x 2 line drawings in Adobe Illustrator, selectively adding "notches" to indicate where their shapes would slot together. This digital file enabled students to use a laser cutter to mass-produce 30 exact copies of their puzzle piece design.

The Puzzle Project asked students to build a 3D structure that explored the negative-positive relationship of material shape and surrounding space in a 360-degree composition using their interlocking laser-cut components.

Shaylee Hoey (Assignments above, project to the left) 2in x 2in squares and 5in x 5in squares Pen and Ink Line Drawings on Paper 4in x 10in x 5in Black Mat Board

AUDREY SHAKESPEAR

Teaching Portfolio



Damion Diffendal

Puzzle Project 8in x 8in x 2in Black Mat Board

Sound Puzzle Assignments and Project. 2019

From *Structure* + *Space*. Foundations 3D Studio. School of Art + Design, Ohio University. Athens, Ohio.

The Sound Puzzle project grew from student feedback on the Puzzle Project. This project begins in the same format (a line drawing within a 2 x 2-inch square) but pushes the process further by moving it into 4D space with an audio/video component.

Sound Puzzle assignments begin with each student selecting an audio clip. The objective of the 2D design work is to establish a shape that carries qualities similar to those of the sounds they hear in their audio track. Students worked in Adobe Illustrator to create a vector line drawing of their design and placed the "notches" to allow their shapes to slot together. This digital file enabled students to use a laser cutter to mass-produce 60 exact copies of their puzzle piece design.

Evan Comella

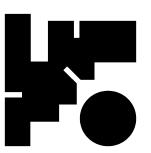
Sound Puzzle Project. 3D and 4D Structure 16in x 9in x 14in. 100pt. Davey Board MOV 00:46. Color Video with Audio Track Link to Video: https://vimeo.com/489628007



The Sound Puzzle Project consisted of a video and a 3D structure. Students made either a stop-motion or a time-lapse video clip that used their puzzle pieces as the "subject" or "characters." The video's objective was to think through the creative opportunities its structure offers: timing, light, color, and speed. The students worked primarily with camera phone apps for video capture and Adobe Premiere to edit their original audio clips and video files. Students then designed a stationary structure in response to their audio and video clips. Only the puzzle pieces could be used to build this structure. No glue or other adhesives were allowed, allowing each structure to be disassembled into the original puzzle pieces after class discussion. This exercise highlights how the design of the 2D base unit (the puzzle piece's shape and notch placement) affects possible puzzle piece pairings and the available arrangement opportunities for designing a 3D structure.

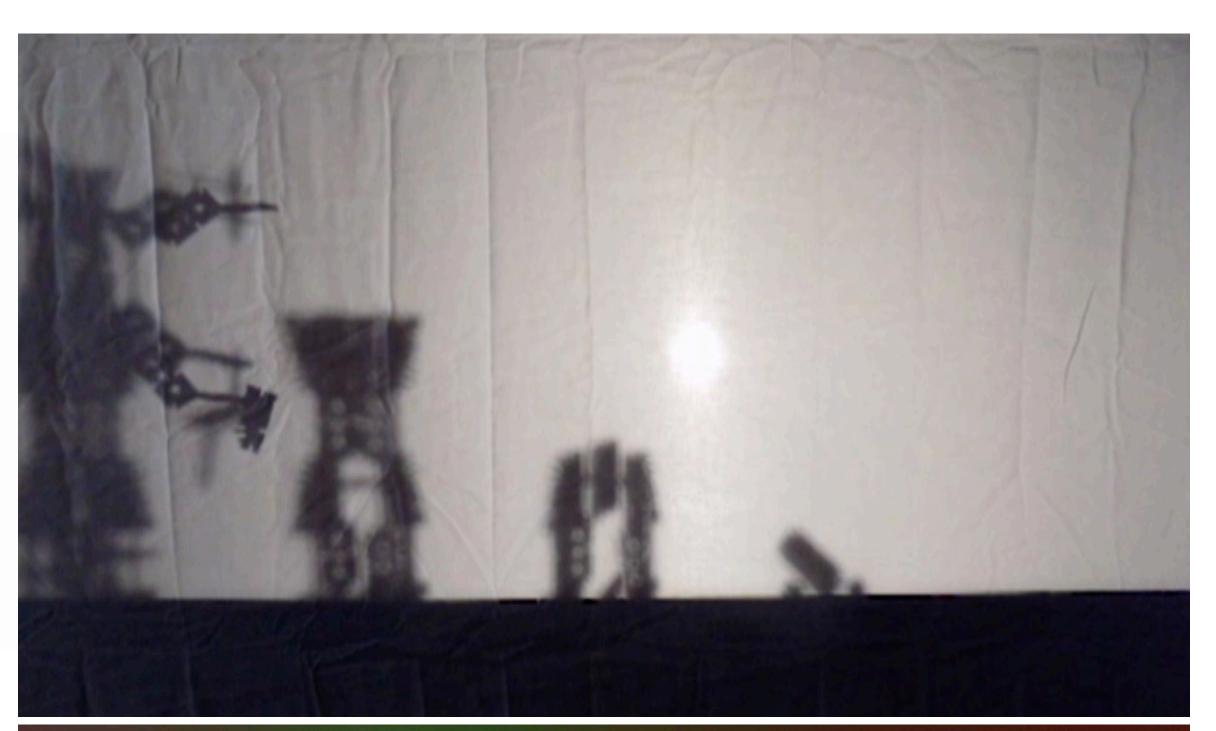
Keann Wilson

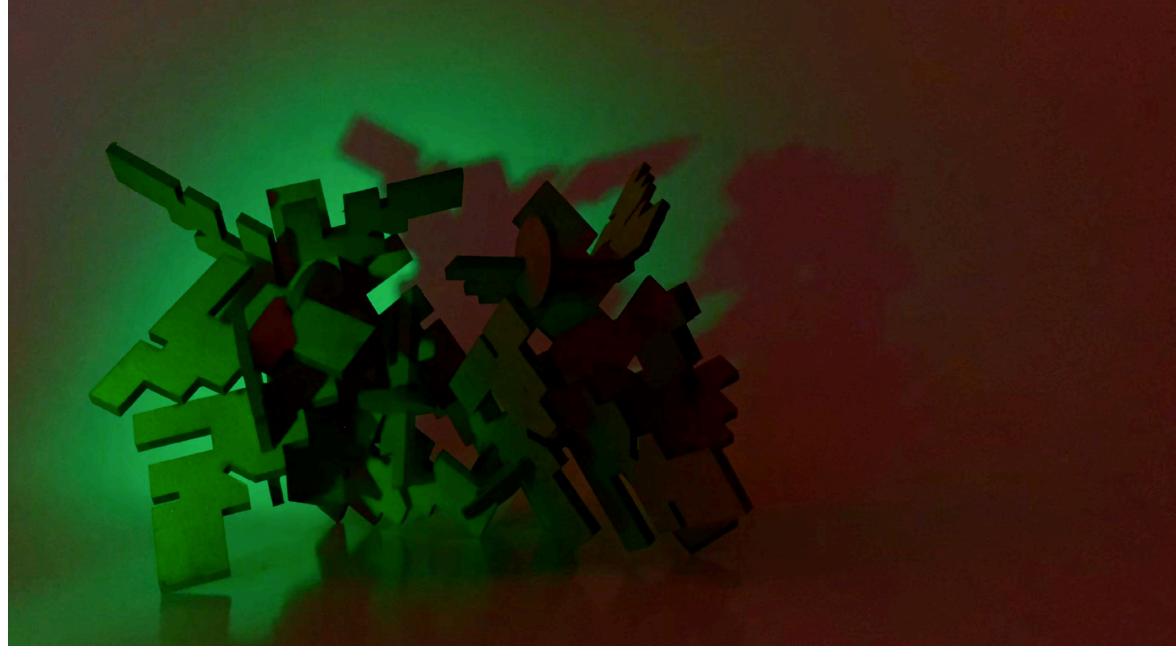
Sound Puzzle Project. 3D and 4D Structure 5in x 4in x 7in. 100pt. Davey Board MOV 00:50. Color Video with Audio Track Link to video: https://vimeo.com/489625805

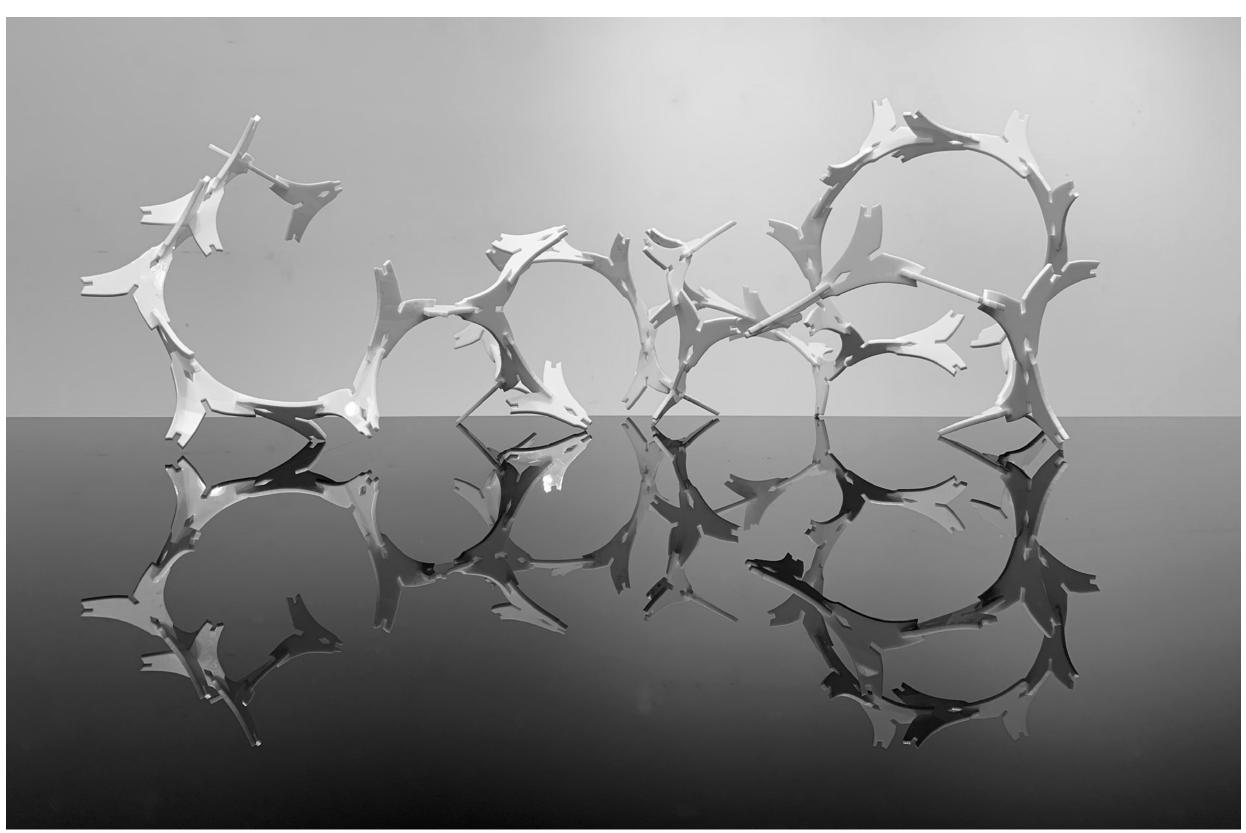














Sound Puzzle Project. 2022

From *Sculpture One*. Introductory Sculpture Studio. Bowdoin College. Brunswick, Maine.

The 2022 Sound Puzzle was similar in design to the 2019 version but introduced plastics and reflective surfaces. Students created their 3D structures with the understanding that they would present them on a reflective black surface, integrating both the structure's physical composition and the reflection created by the surface on which they were placed.

Diana Wickersham (Above)

Sound Puzzle Project. 3D Structure

10in x 7in x 24in

White Acrylic

Students cut their puzzle pieces from an eight-inch white acrylic sheet on the laser cutter, creating plastic pieces that could be submerged in liquids. As they made their videos, students were able to experiment with more locations (underwater, in the rain, etc.). These three puzzle projects merge traditional "thinking with your hands" and digital fabrication to produce 3D art reflective of contemporary art trends.

Manny Santiago Moran (Above)
Sound Puzzle Project. 3D Structure
8in x 9in x 27in
White Acrylic

Color and Composition Assignments. 2021 and 2022

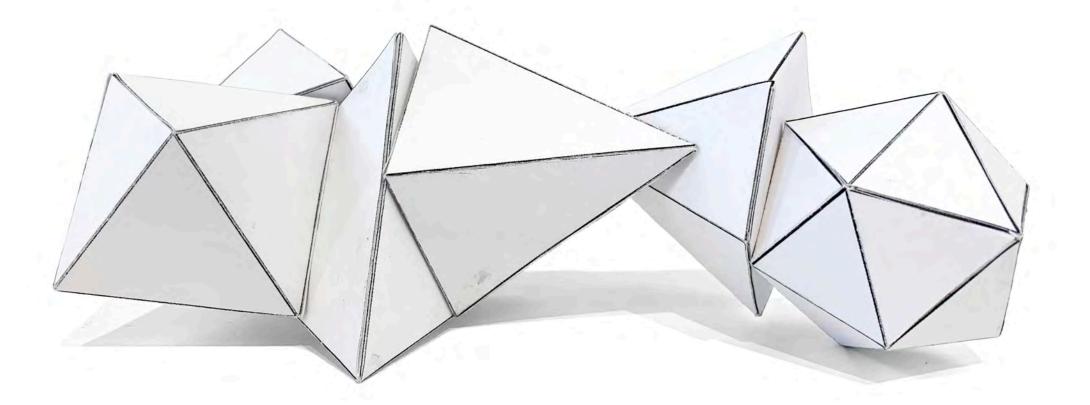
From Sculpture One. Introductory Sculpture Studio.

Bowdoin College. Brunswick, Maine.

These assignments introduce geometric solids, patterns, and the interaction of color and graphics on a 3D form. Below left is an example of a Geometric Solids Composition. For this assignment, students begin by folding a series of thirteen small geometric solids from printed paper patterns, gaining familiarity with how 2D patterns relate to 3D shapes. After a class discussion on the terminology used to describe design elements (balance, contrast, focal point, etc.), students glue these shapes together to form a composition that addresses the solid geometric forms and the shadow pattern they cast.

Matsu Hikida (Below)

Geometric Solids Composition Assignment 4in x 5in x 10in 90-lb Bright White Paper







Above are examples of a Truncated Tetrahedron assignment. This assignment builds on the geometric solids assignment by introducing how to use a 2D paper pattern to create a 3D structure in cardboard. Students used a paper truncated tetrahedron pattern to trace the needed 2D shapes onto cardboard from commercially printed packaging. When deciding where to place their 2D pattern shapes, students must consider how the graphics and colors on the cardboard would interact to create a unique composition around the 3D surface.

Angelina Mayers (Above Left)

Truncated Tetrahedron Assignment

5 in x 5 in x 5 in

Found cardboard

Maya White (Above Right)

Truncated Tetrahedron Assignment
5in x 5in x 5in
Found cardboard





Color Composition Project. 2021 and 2022 From *Sculpture One*. Introductory Sculpture Studio. Bowdoin College. Brunswick, Maine.

This project builds on the Color and Composition assignments by asking students to apply their technical skills and commercially printed cardboard to create a unique "Color Composition" of abstract shapes. Left is an early example of this project (2021), where the focus was on color and graphics interaction on the 3D elements, and to the right is an example from a later iteration of the project (2022) where the focus was on both the use of material (how the attributes of the commercial cardboard were used; it's flexibility vs. rigidity, it's printed surface vs. back surface, etc.) and the shadow pattern the 3D composition would cast.

Lo Hoglin (Upper Left)

Color and Composition Project

7in x 7in x 7in

Found Cardboard

Will Jorgensen (Lower Left)

Color and Composition Project

8in x 10in x 3in

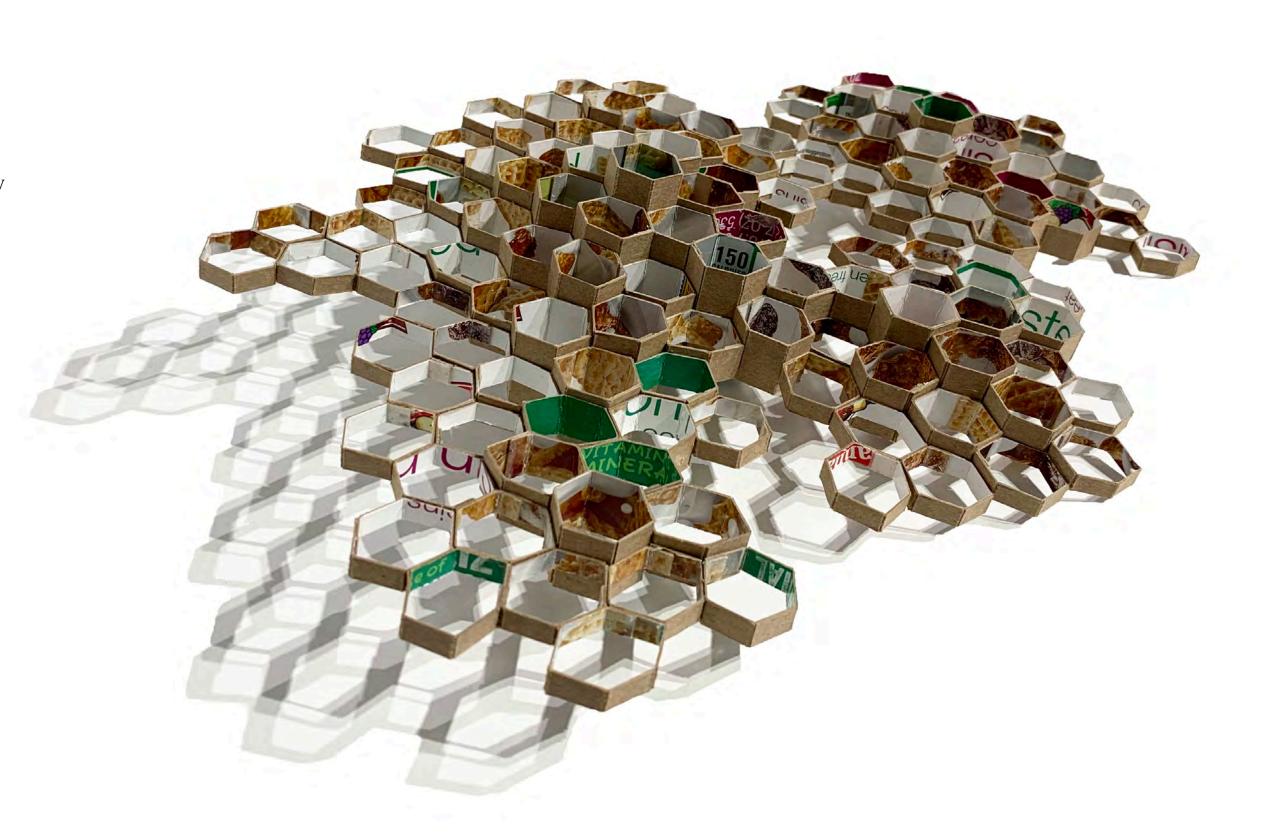
Found Cardboard

Nico Brown (Right)

Color and Composition Project

2in x 9in x 11in

Found Cardboard



Weaving Assignments. 2019

From *Structure* + *Space*. Foundations 3D Studio. School of Art + Design, Ohio University. Athens, Ohio.

These assignments introduced students to the safe use and operation of woodworking equipment by building a loom and accompanying wooden tools. In 2019, I worked as the technician and manager of the Ohio University School of Art + Design Woodshop. I designed this project to incorporate all of the core introductory equipment tutorials, covering but not limited to measuring and marking with a tape measure, operation of the chop saw, band saw, drill press, stationary sanders, pneumatic nail guns, use of templates, proper wood gluing, hand-nailing, and hand-sanding, along with appropriate safety guidelines.

In a series of introductory assignments, each student measured, cut, glued, nailed, and shaped their frame loom and tools (a shed stick and a shuttle) from pine and cherry wood. These looms were used to weave a black-and-white pattern study that introduced the process of placing a warp on the loom and weaving in the weft.

Tristen Luken (Upper Left)

Black & White Pattern Study Assignment
7in x 9in

Black & White Cotton Cord

Emma Dengler (Upper Right)

Black & White Pattern Study Assignment
7in x 9in

Black & White Cotton Cord

Evan Comella (Lower Left)

Frame Loom & Tools Assignment

10in x 14in x 1in

Pine and Cherry Wood, Nails, Black & White Cotton Cord

JC Talbott-Shere (Lower Right)

Frame Loom & Tools Assignment

10in x 14in x 1in

Pine and Cherry Wood, Nails, Black & White Cotton Cord











3D Weaving Project. 2019

From *Structure* + *Space*. Foundations 3D Studio. School of Art + Design, Ohio University. Athens, Ohio.

Students apply the skills acquired in the weaving assignments to their 3D weaving projects. In this project prompt, "weaving" is defined as "interlocking horizontal and vertical forms" and must be used as the foundational structure of their response. All students must incorporate a technique, process, or material not introduced in the previous assignments. The objective is to push past the familiar and experiment with materials, introducing texture, color, and tension.

Evan Comella (Above)

3D Weaving Project 13in x 13in x 14in Newspaper



3D Weaving Project. 2021

From *Sculpture One*. Introductory Sculpture Studio. Bowdoin College. Brunswick, Maine.

The second iteration of the weaving project in 2021 incorporated programming on the Bowdoin College campus. The Bowdoin Art Museum presented a student-curated exhibition, Innovation and Resilience Across Three Generations of Wabanaki Basket Making, and invited artist and activist Geo Neptune to visit campus. Neptune's artist talk and community weaving workshop explored the intersection of politics, culture, and craft. Students were asked to select materials connected to self and environment, focusing on introducing components of personal narrative, lived history, and location into their artwork.

Sonya Sidhu (Left)
3D Weaving Project

20in x 6in x 48 in Medical Plastic Tubing

Will Hyde (Below)
3D Weaving Project
2in x 1in x 3in
Rubber Bands and Pine Needles



Body-Site Project. 2016 and 2019 From *Structure* + *Space*. Foundations 3D Studio. School of Art + Design, Ohio University. Athens, Ohio.

This project builds on prior assignments in plastic fabrication techniques and 3D composition while placing new emphasis on physical scale and concept development through metaphor and narractive. The design prompt for the Body-Site project asks students to build a structure that uses the body as a display location (site) and has a substantial visual impact from 15 feet. In these project examples from 2016 and 2019, students were asked to begin by selecting two descriptive nouns (for example, emptiness and longing) and one surface adjective (for example, ridged) describing the concept or narrative they aimed to convey. Their projects could be performative or stationary, and students could work collaboratively in pairs or individually. If working in pairs, the project concept had to support the pairing, and both bodies needed to be used for display. Students' structures needed to be built entirely from plastic bags, using the plastic's characteristics (such as heat fusion, flexibility, and tensile strength) to inform their design. All forms of material manipulation were encouraged (knotting, weaving, cutting, etc.), but no glue, string, thread, tape, or other adhesives could be used. Students used a variety of irons and heat guns to fuse their plastic bags into flexible sheets and forms.

Grace Gribble and Lila Fisher (2016 Below)

Body-Site Project
Resistance, Defence, Pierced
10in x 15in x 15in and 40in x 23in x 16in
Plastic Bags





In the 2016 example, students used recycled bags from local stores, limiting their color palette to primarily neutral tones. Based on student feedback, I redesigned the project in 2019 to allow students to use purchased and non-local plastic bags, providing a broader range of color options.

William Varney (2019 Above)

Body-Site Project

Cover, Support, Warm

32in x 24in x 66in

Plastic Bags





Chair Project. 2019

From *Structure* + *Space*. Foundations 3D Studio. School of Art + Design, Ohio University. Athens, Ohio.

The project prompt for "Chair" asks students to design and build a structure from corrugated cardboard that supports their body weight. I have used this project in different classes for varying instructional intents. These selected examples are from the 2019 Foundation 3D class, from which several prior examples were pulled. The purpose is to present how various aspects of the semester's assignments and projects are incorporated into the student's final semester project. The examples above present students' application of the semester's content: assembly and disassembly of components, geometric shapes, and composition (Sound Puzzle Project), body scale and material handling (Body-Site Project), and woodshop tools and weaving (3D Weaving Project).

Evan Comella (Above)

Chair Project
15in x 15in x 45in
1/8in Corrugated Cardboard





Students were given six 4 x 3-foot sheets of 1/8-inch corrugated cardboard to construct their structure, and any adhesive (hot glue, wood glue, tape, etc.) could be used. Like the Body-Site Project, students could work collaboratively or individually. If working collaboratively, the work's concept and design had to allow all collaborators to sit on the structure simultaneously.

Andrea Matthews (Above)

Chair Project
40in x 21in x 29in
1/8in Corrugated Cardboard









Construction Techniques Assignments. 2023

From Sculpture One: Wood. Introductory Sculpture Studio.

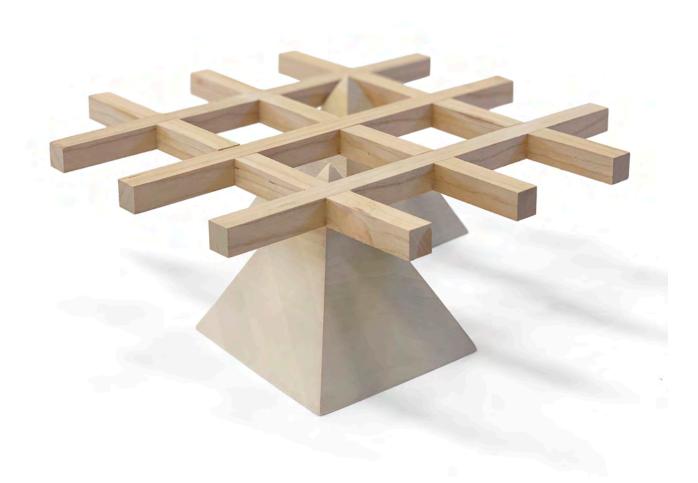
Colby College. Waterville, Maine.

This assignment introduces safe operation of woodworking equipment in the studio while giving students practice with a range of techniques for working with plywood and dowels.

Elodie Koo, Yixin Li, James Hayakawa, and Norah Adler. (Upper Left to Lower Right) Construction Techniques Assignments

6in x 6in x 6in (Cubes) 3.5in x 1in (Rings)

15/32 inch AC Plywood, Wooden Dowels, Teak Oil, Shellac, and Clear Acrylic Spray.





Abstract Sculpture in Wood Project. 2023

From *Sculpture One: Wood*. Introductory Sculpture Studio. Colby College. Waterville, Maine.

This example is the final project prompt from an introductory sculpture studio focused on woodworking techniques and 3D design concepts. Students were asked to apply the technical skills covered during the semester and create an abstract sculpture in wood. Students needed to incorporate a grid structure into their sculpture, showcasing half-inch-square cherry wood strips they had milled from a rough-sawn cherry board with a live edge (bark still attached). The selected student project examples presented here highlight several critical areas of instruction during the semester: wood milling, wood carving, wood grain and material attributes, and surface finishes.

Gretta Scholz (Above Left)

Abstract Sculpture in Wood Project
6in x 6in x 5in
Cherry and Basswood

Lindsey Delbanco (Above Right)

Abstract Sculpture in Wood Project

24in x 11in x 4in

Cherry and Poplar Wood



Language Project and Assignments. 2023

From *Sculpture Two: Artifact*. Intermediate Sculpture Studio. Colby College. Waterville, Maine.

The introductory series of assignments, comprising a collage, archival research, and gestural wire studies, helps students develop their design for the Language project. The collage assignment asked students to think critically about content and context as they pulled images and text from magazines to create new compositions. Special Collections and Archives at Colby College assisted in curating a selection of materials on the theme of "language," including illuminated manuscripts, artist books, posters, books on typefaces and fonts, old lead type, and other items. Students were asked to investigate the collection through the lens of sculpture, looking at the artifacts as tactical, physical objects and as a resource for building a solid conceptual base for their language project.

The language project prompt asked students to use "language" as the source or subject of their sculpture. For this project, "language" was defined as formats of human communication that include, but are not limited to, written text, spoken language and dialects, graphic fonts, sign language, body language, graffiti, braille, emojis, and wayfinding signage. In the example shown here, Xing created a sculpture based on the Chinese character for 'female' + A performance of plaster sculptures held against her body, her design was influenced by her connection to the brush strokes of writing and her personal interpretation of the word 'female.'

Jess Xing (Left)

Content and Context Collage Assignment
8in x 14in
Magazines

Jess Xing (Right)

Language Project

31in x 24in x 15in

Wire and Plaster





Abstraction of an Architectural Line Project. 2024

From *Sculpture Three: Stone*. Intermediate Sculpture Studio. Colby College. Waterville, Maine.

This project is a semester-long undertaking. It involves working through all the stages of stone carving, from sketches and design development to finished Limestone sculpture. Students begin by researching a stone architectural style and building, and selecting a photo that captures a specific architectural element from their chosen building. Students trace a profile line from their photo and use it to inform the design of an abstract object. The original architectural line needs to be visible somewhere on their final sculpture. In the example shown above, the top edge of the sculpture, from the far left to the far right, is a line pulled directly from the top of the front profile of La Catedral de la Virgen María de la Concepción Inmaculada, in Havana, Cuba, built in 1777. Accompanying the intensive hand-skill development of learning to carve, lectures introduce students to the direct material history of their limestone (where and how it was quarried in Indiana and transported to the Colby College studio in Maine), the historical significance of Indian limestone in United States architecture, and a selection of global stone carvers.

Lindsey Delbanco

Abstraction of an Architectural Line Project 15in x 8in x 8in Indiana Limestone

Material Studies Assignment. 2017

From *Environment and Action*. Intermediate Studio. School of Art + Design, Ohio University. Athens, Ohio.

The material study shown here results from a rapid-fire, direct-material-response build. Students are given 20 minutes to select materials, tools, and supplies from a curated selection of random items and build a small object. Students complete three response builds back-to-back, each time choosing new materials, tools, and supplies from a different curated selection, for a total immersive build time of one hour. The goal is to produce unexpected pairings, forms, and shapes, emphasizing the power and role of "play" in studio practice and sculpture.

Katie Moore

Material Study Assignment
8in x 5in x 5in
Collection of Fabric, Plastic, Foam, Tape, Adhesives,
Wire and String



From *Sculpture Two*. Intermediate Sculpture Studio. Bowdoin College. Brunswick, Maine.

The Tape Replica Assignment is an exercise in detailed observation and hand-modeling skills. Students select a small human-made object (e.g., a camera, a shoe, a watch, or a water bottle) and model a replica of it using masking tape. The challenge is to apply the masking tape's material attributes (sticky and nonsticky sides, strength, etc.) to re-create the selected object with as much accuracy and attention to detail as possible.

Chapman Odlum

Tape Replica Assignment Kendama 2in x 5in x 7in Masking Tape







Eye-of-David and Wooden Tools Assignments. 2018 From *Classical Contemporary*. Advanced Sculpture Studio. School of Art + Design, Ohio University. Athens, Ohio.

Modeling parts of Michelangelo's David sculpture — eye, ear, nose, etc. — is a classic assignment common in atelier academies. Students in the Classical Contemporary class worked collectively to cast plaster copies of David's eye and independently to fabricate their wooden tools and complete their clay replicas.

Collectively, the class created a rubber mold from a preexisting plaster cast of David's Eye, then cast a replica for each student to use. Students mounted their plaster cast to a white Melamine board and built a wire armature adjacent to the cast to support a clay replica. Production tasks were divided among the students involved: cutting boards to size, casting, wiring armatures, etc., to facilitate a speedy build and to allow the group to gain experience working as a team. Each student cut, shaped, and sanded a set of wooden modeling tools while working on the team build project in the shop. While students were required to produce the four tool designs above, they were encouraged to continue to develop alternative modeling tools to suit their hands and desired modeling effects. Once shop production was complete, each student had a Melamine board with a plaster cast of David's eye on the left-hand side and the wire support structure for a clay replica on the right. At this point, students began independent work, modeling a replica of the plaster cast in clay, using their wooden tools.

Tag Hauschild

Eye-of-David Study & Modeling Tools Assignments
(Project Board Dimensions) 24in x 8in x 5.5in (Tools) approximately 6in x 1/4in x 3/4in Plaster Cast, White Melamine Board, Wire, Clay, Poplar Wood





Head Study Project. 2016 From *Sculpture One*. Introductory Sculpture Studio. Caine College of the Arts, Utah State University. Logan, Utah.

The Head Study was a semi-strict modeling project with the objective of creating an anatomically accurate self-portrait. Students were encouraged to experiment around the edges of this primary objective - bringing in personal style, attitude, and unexpected twists. This project included studio tutorials on facial anatomy and skeletal structure, as well as photographic reference images and clay armatures. Head studies were done on a very traditional central post armature; however, many students expanded their armature understructure to include accessories (headphones, helmets, hoodies, body piercings, etc.) that required additional support.

Jessica Luckenbill Head Study Project 12in x 18in x 10in Clay and Metal Armature