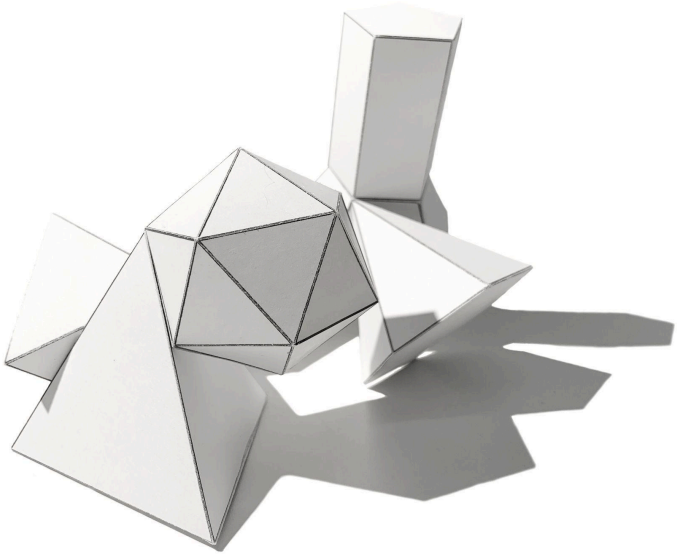
Example Teaching Materials
3D Foundations Studio Course at Ohio University
[Open to all students, no prerequisites.]
2019

SYLLABUS | ART 1230 | STRUCTURE + SPACE
Tuesday & Thursday, 9 am - 11:50 am | Siegfried 407
Course 2752 | Section 106

Audrey Shakespear (pronouns: she/her)
email: shakespe@ohio.edu
Office: Siegfried 119

Catalog Description

This course examines the application of structure and space as physical, conceptual, and organizational principles in contemporary art and design. Students will learn to develop their ideas through composition and fabrication, considering issues such as scale, site-specificity, repetition, impermanence, and performativity. Individual and collaborative making will provide students with an opportunity to explore, define, and create organizational systems and structures.



Course Layout Section 106

Structure + Space is designed as a series of specific, directed assignments and projects that introduce methods of object-making and visual problem-solving. Assignments explore ideas, techniques, and the School of Art + Design's fabrication resources while providing extensive opportunities to develop skills through practice. Studio demos will introduce you to various methods, materials, programs, and equipment, and guide you through their use. In the class projects, you will apply assignment skills to create a new artwork that incorporates your own artistic vision and creative style. The semester is divided into five units, described below.

ONE Introduction to Structure + Space	Assignment One: Geometric Solids Assignment Two: Minimize	Structure as 2D shapes that fold into 3D forms, vocabulary, and an introduction to studio critique formats.
TWO Digital Fabrication and Audio/Video	Assignment Three: Design Grid Assignment Four: 2D Design Assignment Five: Vector File and Laser Cut Puzzle Pieces Project One: Sound Puzzle	Creative possibilities of structure in time-based media, building structures that assemble and disassemble. Additive (RGB) and subtractive (CMY) color theory.
THREE Woodworking and Soft Structures	Assignment Six: Frame Loom and Tools Assignment Seven: Black and White Woven Pattern Sample Project Two: Woven Structure	Structure as it relates to material, tools, and object presentation. Exploring location and site-specificity in developing concepts.
FOUR Plastic and Performance	Assignment Eight: Collage and Sketch Assignment Nine: Drawing and Material Tests Project Three: Body-Site	Performative objects, large-scale structures, and material exploration. Techniques for documenting 3D and 4D (time-based) structures.
FIVE Final	Assignment Ten: Sketch, Model, & Material Tests Project Four: Chair	Structural integrity, aesthetics, and functionality.

Course Objectives

1. Increase dexterity and motor skills through the practice of drawing, cutting, and constructing.
2. Develop an appreciation for production quality and excellence in craftsmanship.
3. Develop heightened awareness of process and practice.
4. Synthesize, analyze, and apply skills developed in class.

Course Expectations

1. You are responsible for maintaining accessibility to email communication.
2. You are expected to attend each class on time and remain present and engaged.
3. Six hours of work a week outside of class are expected for the successful completion of assignments and projects.

Course Google Folder

We will use a shared Google folder as a repository for the course links, readings, assignments, and other relevant information. If you need more information or want to check the current version of our class calendar, you can find it here. I communicate regularly via class emails. Read them.

Evaluation

Each assignment and project sheet will include the associated grading rubric, and written feedback will be provided within two weeks of the due date. One of the most valuable sources of feedback on your work comes from your peers during assignment and project reviews. Due to the nature of this studio course, you must be present and willing to share your work and contribute constructively to the conversation on review day. Research, process, and studio involvement are graded aspects of this course. There are ten assignments and four project grades for this class.

Appropriation in Art

Appropriation is an accepted technique in art, but you must know the boundaries. If you incorporate parts of somebody else's work in your work, it must be significantly altered in some way to become your work. Be prepared to defend such use in terms of your concept and intent. A valuable tool is learning how to "hijack" a material, tool, or technique and adapt it to your specific creative needs. The objective is always to contribute more to the visual conversation rather than creating duplications.

Plagiarism and Academic Misconduct

It is assumed that all work will be the individual student's. Academic dishonesty will be dealt with in accordance with the Student Handbook. Utilizing work that is not of the student's own creation or is a direct copy of another's work will result in a failing grade for the course. The University's Judiciary Committee will oversee any inquiries into plagiarism and academic misconduct. For the complete Ohio University Academic Integrity guidelines, see: https://www.ohio.edu/student-affairs/community-standards

Academic Integrity

The University's policies on dishonest scholastic work place full responsibility on the student for the content and integrity of all work submitted. Integrity is a priority at the School of Art + Design and the basis for the ethical standards of all art and design professions. All Ohio University policies and procedures regarding academic integrity are fully implemented in this course.

Classroom Accommodations

Any student needing accommodation due to a disability should contact me to discuss specific needs. You'll need to provide written documentation from Student Accessibility Services. If you are not yet registered with Student Accessibility Services, please contact 740-593-2620 or visit the office at 348 Baker University Center. https://www.ohio.edu/uc/sas

Studio Etiquette

Collectively, we are responsible for maintaining a safe, clean, and inviting space for creative making. Individually, you are responsible for conducting yourself in a manner that promotes the collective creative learning environment while in the studio. You are required to abide by the following studio policies:

1. Use personal electronic devices responsibly. During class discussion and instruction, refrain from using your screens. Visual and auditory distractions in a studio environment place you at risk of physical injury. During individual work time, headphones are permitted, but not when operating equipment. Learning new techniques and developing a

creative studio practice requires the ability to slow down and focus on the task at hand. This studio class is an opportunity to make that a priority. Set aside your phones and other devices and allow yourself uninterrupted time.

2. Studios are about community and shared knowledge, the camaraderie that requires "people." Please work when others are in the studio, for safety reasons and to foster a sense of community.

3. We share room 119 with two other studio classes. Before you leave the classroom, all projects and materials must be stored on our class shelves, and tables must be clear.

Health and Safety

In the case of injury or medical emergency:

1. Call campus emergency response (740) 593-1911. Campus security is trained to provide appropriate medical care and will escort you to the health clinic or other medical care providers as needed.

2. The first-aid cabinet contains essentials for minor cuts and surface wounds. Injuries requiring more than a bandage must be reported immediately. Please ask for assistance even if you feel the injury is minor.

Please let me know if you have any health concerns I should be aware of so we can avoid injury and reduce risk.

Materials and Tools

The following personal tools and materials are required and will be used in all your foundation classes.

- #1 X-acto knife
- #11 X-acto replacement blades
- Stainless-steel scissors
- Steel ruler, cork-backed, 12in
- 11 x 17 inch cutting mat
- Masking tape
- Sharpie Markers (Fine and Ultra Fine)
- 9in x 12in tracing paper pad
- Elmer's multi-purpose glue
- UHUstic glue stick
- Selection of writing/mark-making implements: Ballpoint pen, a mechanical pencil and replacement lead, HB pencil, fine point pen.

All other required materials used in this class will be provided for you. For several assignments and projects, material selection is open, and you will be asked to source your own material. I encourage you to source free and/or found materials for these opportunities.

CALENDAR | ART 1230 | STRUCTURE + SPACE
Tuesday & Thursday, 9 am - 11:50 am | Siegfried 407
Course 2752 | Section 106

Week One
Topic: Introduction to the course, the studio, and each other.

Tuesday, August 27	**Thursday, August 29**
Course Introduction and Assignment One *Paper cutting, folding, and glue techniques demo*	Introduction to Assignment Two *Digital Lab Workshop*

Week Two
Topic: Elements of 3D design and composition.

Tuesday, September 3	**Thursday, September 5**
Assignment One and Two Workday *3D composition and vocabulary workshop*	Assignment One and Two Workday

Week Three
Topic: Studio critique techniques, Project One introduction, and audio file editing.

Tuesday, September 10	**Thursday, September 12**
Due: Assignments One and Two Introduction to Project One and Assignment Three	Due: Assignment Three (Part I) *Sound, Movement, and Mark Making Workshop*

Week Four
Topic: Idea development, 2D design, subtractive (CMY) and relative color theory.

Tuesday September 17	**Thursday, September 19**
Due: Assignment Three (Part II) Introduction to Assignment Four	Due: Assignment Four. Introduction to Assignment Five *Adobe Illustrator and Laser Workshop*

Week Five
Topic: Time-lapse and stop motion video tutorials, and additive (RGY) color theory.

Tuesday, September 24	**Thursday, September 26**
Stop Motion and Time-Lapse Video Workshop	Due: Assignment Five Work day for Project One

Week Six
Topic: Audio and video editing and open work time for Project One.

Tuesday, October 1	**Thursday, October 3**
Video and Audio Editing Workshop Work day for Project One	Work day for Project One

Week Seven
Topic: Project One critique and introduction to the woodshop.

Tuesday, October 8	**Thursday, October 10**
Due: Project One Project Review	Introduction to Assignment Six *Woodshop Safety and Equipment Operation Workshop*

Week Eight
Topic: Weaving tutorial, open work time in the woodshop, and introduction to Project Two.

Tuesday, October 15	**Thursday, October 17**
Introduction to Assignment Seven *Weaving Workshop*	Work day for Assignments Six and Seven Introduction to Project Two

Week Nine
Topic: Methods of display workshop and open work time for Project Two.

Tuesday, October 22 Due: Assignments Six and Seven *Presentation Workshop*	**Thursday, October 24** Project Two work day

Week Ten
Topic: Project Two critique and introduction to Project Three.

Tuesday, October 29 Due: Project Two Project Review	**Thursday, October 31** Introduction to Project Three and Assignment Eight *Collage Workshop*

Week Eleven
Topic: Working with plastic and creating paper patterns for large structures.

Tuesday, November 5 Due: Assignment Eight. Introduction to Assignment Nine *Plastics Workshop*	**Thursday, November 7** Work day for Assignment Nine

Week Twelve
Topic: Open work time for Project Three.

Tuesday, November 12 Due: Assignment Nine Work day for Project Three	**Thursday, November 14** Workday For Project Three

Week Thirteen
Topic: Project Three critique and introduction to Project Four.

Tuesday, November 19 Due: Project Three Project Review	**Thursday, November 21** Introduction to Project Four and Assignment Ten *Vinyl Cutter and Transfer Paper Workshop*

Week Fourteen
Topic: Open work time for Assignment Ten and Project Four.

Tuesday, November 26 Work day for Assignment Ten	**Thursday, November 28** No Class - Thanksgiving

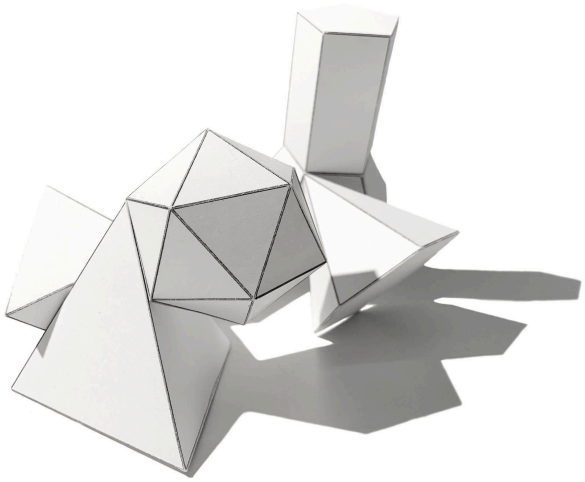
Week Fifteen
Topic: Open work time for Project Four.

Tuesday, December 3 Due: Assignment Ten Workday for Project Four	**Thursday, December 5** Workday for Project Four

Week Sixteen
Topic: Project Four critique and end-of-semester clean-up.

Tuesday, December 10 Due: Project Four Project Review	**Thursday, December 12** Studio Clean Out

Unit One | **ASSIGNMENT ONE** | Geometric Solids
Due Tuesday, September 10



Objective

This assignment introduces the connection between 2D patterns and 3D forms, elements of 3D design and composition, and techniques for working with paper.

In this assignment, you will learn the following:

1. How to cut accurately with an X-acto blade and ruler.
2. How to score and fold paper.
3. How to assemble paper patterns into 3D solids using a variety of adhesives.
4. The terminology used to describe sculptural forms.

Materials and Tools

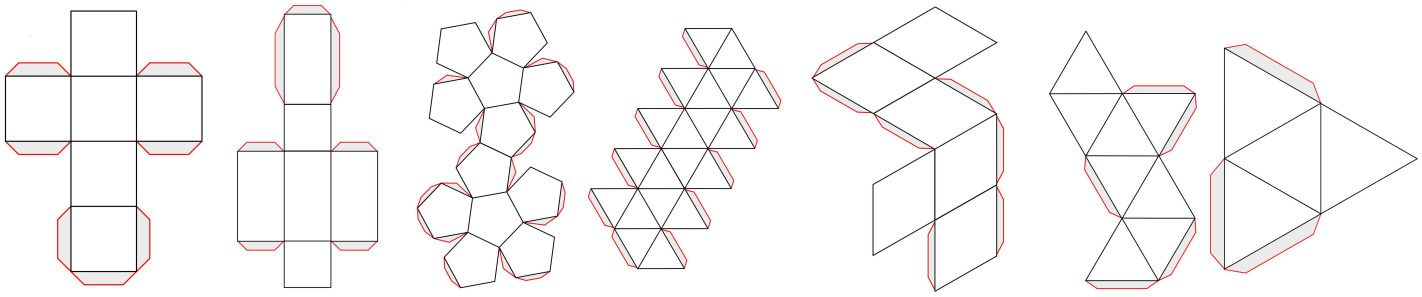
Cutting mat, X-acto knife and blades, scissors, #2 pencil, Sharpie, cork-backed metal ruler, Elmer's glue-all, glue stix, double-sided tape, and 13 printed geometric solid patterns (multiple patterns per sheet).

Assignment Components

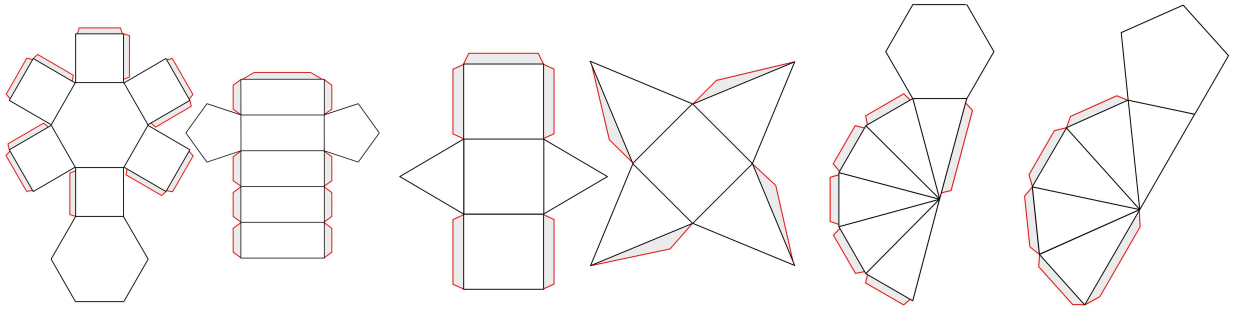
1. Cut, fold, and glue the 2D patterns to form 3D geometric solids.
2. Once all 3D geometric solids are complete, attach 5 to 7 solids to form a 3D composition.

Notes

1. The 2D pattern shapes are listed below. The 2D patterns are printed on 90-lb bright white paper.



Cube | Cuboid | Dodecahedron | Icosahedron | Rhombic Prism | Octahedron | Tetrahedron



Hexagonal Prism | Pentagonal Prism | Triangular Prism | Pyramid | Hexagonal Pyramid | Pentagonal Pyramid

Unit One | **ASSIGNMENT TWO** | Minimize
Due Tuesday, September 10

Objective

This assignment explores the use of flat patterns in industry for producing packaging and how to scale a pattern using the computers, scanners, and printers in the Digital Lab.

In this assignment, you will learn the following:

1. How to use the flatbed scanner.
2. How to scale an image in Photoshop.
3. How to use the color printers.
4. How to cut, fold, and glue the miniature package pattern.

Materials, Tools, and Programs

Cardboard commercial package (found), flatbed scanner, Adobe Photoshop, color printer, X-acto, glue, and cutting mat.

Assignment Components

1. Create a miniature version of a small commercially manufactured cardboard package.
    a. Find a unique small commercial packaging box (such as candy, food, or office supplies—recycle bins are an excellent resource for finding options).
    b. Unfold your small commercial packaging box into a flat 2D pattern.
    c. Follow the written instructions on the next page for scanning, adjusting size in Adobe Photoshop, and printing in the Digital Lab. Print two copies of your scaled pattern. Video Tutorial
    d. Cut out both of your scaled patterns to match your original pattern.
    e. Re-fold and glue your original back into its 3D form. Fold and glue one of your scaled patterns to match your original.

Notes

2. Accessing Computers, Scanners, and Printers: Please log in to the school computers using your Ohio student ID. In the Lab, two of the computers are connected to flatbed scanners. All lab computers are connected to the lab color printers.

3. X-acto blades are sharp. Please be careful when cutting your scaled pattern.

Digital Lab

Required reading:

1. Introduction to the School of Art + Design Digital Lab.

Unit Two | **ASSIGNMENT THREE** | Design Grid
Part I Due Thursday, September 12
Part II Due Tuesday, September 17

Objective

This assignment is the foundation of your Sound Puzzle project. It will guide you through the steps of audio editing, free-form idea generation, and a formal structure for presenting design ideation.

In this assignment, you will learn the following:

1. Audio file editing to select a short section from a longer track.
2. How to align and draft a uniform grid structure.
3. Design ideation methods.

Materials, Tools, and Programs

#2 pencil, cork-backed metal ruler, compass, pens, sketch paper, 11 x 17 inch grid paper, audio file, and a device for listening to audio (example, phone and headphones), and Adobe Premiere Pro.

Assignment Components

1. Part One: Select an audio clip between 20 and 60 seconds in length to use in your Sound Puzzle Project. Spend time on your audio selection — this is the audio you will be working with for the duration of Unit Two.

    a. You will need access to a file of your selected audio (MP3, MP4, WAV, FLAC, AAC, and AIFF are all acceptable file formats).

    b. Bring your audio file to class on Thursday, September 12th. We will review how to shorten your audio to create a clip that is just 20 to 60 seconds long.

2. Part Two: Create a design grid that presents your puzzle piece design ideation. Format it as a 3 x 5 grid, with each square measuring 2 inches and a quarter-inch gap between vertical rows and an inch gap between horizontal rows. Your design grid will be on 11 x 17-inch grid paper and drawn in black ink. Please reference the class demo for clarification on the design layout.

    a. Select three of your designs from the class workshop and redraw them in the top three boxes. Use the full 2 in x 2 in space — you want to maximize your puzzle piece size. Remember that puzzle piece designs must be non-representational abstractions — no icons or recognizable graphics are allowed.

    b. In the boxes below each design, draw new idea variations that grow out of the original.

Notes

1. “Ideation” in art refers to the creative process of generating, developing, and refining ideas for an artwork.

2. Your design grid should show development and slight alterations in your design—the details matter, and small changes will have a significant impact.

3. Balancing design and practicality. Problem-solving. Consider the positive and negative space of your design. How will this function as a 3D object?

Unit Two | **ASSIGNMENT FOUR** | 2D Design
Due Tuesday, September 17

Objective

In this assignment, you will finalize your puzzle piece design and create a series of design samples that explore how your puzzle piece design functions as a 2D pattern.

In this assignment, you will learn the following:

1. How to use tracing paper and stencils.
2. Black and White patterning.
3. Subtractive and relative color theory.

Materials and Tools

Pencils, ruler, tracing paper, 90-lb bright white paper, and black pens in different line weights.

Assignment Components

1. Refer to the class design layout and draw the base grid structure. The position, size, and line weight of your grid should match the class design layout.

2. Within the grid structure, draw your puzzle piece design as a line in the top three boxes (these should be identical). In the second box, fill in the space around your design with black. In the third box, fill in your design with black, leaving the space around it white.

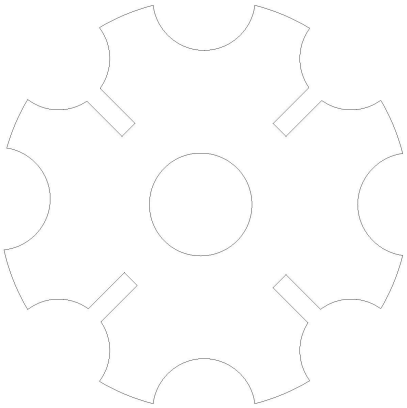
3. In the remaining three boxes, create two black-and-white patterns and a color pattern using your puzzle piece as the base unit. Select a color palette that links to your audio for this assignment.

Notes

1. Use light pencil marks to draw your design before tracing it in ink. Use the techniques demonstrated in class (template, tracing paper transfer, and color layering) to complete your black and white and color patterns.

2. Further reading on subtractive CMY Color Theory and Relative Color.

Unit Two | **ASSIGNMENT FIVE** | Vector File and Laser Cut Puzzle Pieces
Due Thursday, September 26



Objective

This assignment guides you through the process of creating a vector file of your puzzle piece design in Adobe Illustrator and using the laser to cut out multiples.

In this assignment, you will learn the following:

1. How to use Adobe Illustrator to create a vector file.
2. How to use the Boss Laser HP2436.

Materials, Tools, and Programs

Adobe Illustrator, 100 pt. Davey Board, laser cutter.

Assignment Components

1. Recreate your puzzle piece design in Adobe Illustrator and add "notches" where your shape(s) will slot together. Adobe Illustrator files must have the following characteristics:
    a. 2-inch x 2-inch artboard in RGB color mode.
    b. Line Weight (Stroke Weight) set to 0.001
    c. No fill
    d. Your vector line should be a single continuous path on a single layer.
    e. You should have *at least* two "notches" cut into your design, measuring 0.25 (height) x 0.10 (width). The width needs to be exact; the height can vary if you would like to adjust it for your design.

2. Laser Cut 60 Puzzle Pieces on the Boss Laser out of 100 pt. Davey Board.

Notes

1. If you are familiar with Adobe Illustrator, feel free to create your puzzle piece using the workflow that best suits you. Please review the necessary file characteristics before you begin, and set up your workspace accordingly. If you are new to Adobe Illustrator, follow the step-by-step written guide on the following page. Video Tutorial

2. For cutting your puzzle pieces on the Boss laser, follow the step-by-step guide on the following page. Please note that the guidelines apply only to the specific type of material we are using for our class project (100 pt. Davey Board). They are not universal parameters. Video Tutorial

Digital Fabrication Safety Training

Required reading:

1. Boss Laser HP2436. Guide to Safe and Proper Use.

Unit Two | **PROJECT ONE** | Sound Puzzle
Due Tuesday, October 8

Objective

Create a stop-motion (or time-lapse) video and a stationary 3D structure out of puzzle pieces inspired by an audio clip.

Project Design Criteria

1. Audio Recording: Your audio track can be a song, instrumental music, or a recording of a specific environment. Your audio track must be between 20 seconds and 60 seconds in length.

2. Puzzle Piece Design: Designs must be non-representational, abstract shapes. No icons or recognizable forms are permitted. Use your audio recording as a springboard for envisioning shapes, colors, patterns, and movement.

3. Video: Create a stop-motion or time-lapse video set to the soundtrack of your selected audio clip. Videos will be between 20 and 60 seconds long and employ puzzle pieces as the subject or characters. You are welcome to use any app or other program/equipment you prefer to capture and edit video—we will explore several options together in class.

4. 3D Puzzle: Once your video is complete, create a static structure with your puzzle pieces. Build your 3D structure by fitting your puzzle pieces together. No adhesives can be used in this project – structures must be able to be disassembled into the original puzzle piece components. Your sculpture can be a single object or multiple objects; there is no size requirement for this component.

5. Material and Color: Your puzzle pieces will be laser cut out of 100pt. Davey Board. No physical modifications to puzzle pieces are allowed after they are cut on the laser – no painting or otherwise altering their physical appearance. You are welcome to use any materials you wish while creating your video. Keep in mind that the primary focus of your video should be on the puzzle pieces. Color in your video is at your discretion - full color, partial color, or black and white.

Notes

1. Independent creative production is one of the trickiest components of studio practice; be patient. Remember to experiment, play, and have fun.

2. This is not a linear process; you will most likely need to “start over” many times as you work towards completing your video and 3D structure.

3. Further reading on additive (RGB) Color Theory.

Questions for Consideration

1. Consider what we discussed regarding material color in assignment four, and experiment with the new opportunities of colored light as you create your video. What color palette best suits your audio? Black and white? Accent color?

2. What movement (or lack of movement) would sync with your audio track? How will light and shadow interact?

Unit Three | **ASSIGNMENT SIX** | Frame Loom and Tools
Due Monday, October 22

Objective

Complete the safety and operational training to use the woodshop equipment and resources.

In this assignment, you will learn the following:

1. How to safely use the chop saw, band saw, drill press, belt & disc sanders, oscillating spindle sander, and brad nail gun.
2. How to accurately measure and mark wood using templates, tape measures, squares, and rulers.
3. How to use wood glue and pin hammers.
4. How to hand-sand and finish wooden tools.

Materials and Tools

Chop saw, band saw, drill press, belt & disc sander, oscillating spindle sander, brad nail gun, 3⁄4 inch 18-gauge brad nails, wood glue, 1⁄2 inch 19-gauge wire nails, pine wood, cherry wood, hand sandpaper 120 + 220 grit, #2 pencil, cork-backed metal ruler, tape measure, framing square, safety glasses, ear protection.

Assignment Components

1. Frame Loom: The Frame loom is composed of a wooden frame (much like a picture frame) with “warping bars” (rails opposite one another that have nails at predefined intervals) onto which the warp is stretched. Frame-loom weaving is a method closely related to the traditional techniques of tapestry weaving.

2. Shuttle: A broad flat tool in which the weft yarn is wound around the tool lengthwise. The shuttle is traditionally passed horizontally across the warp through an open shed. It can also be held and used similarly to a tapestry bobbin, where the shuttle is held parallel to the warp and passed under a group of warp threads held up by your other hand.

3. Shed Stick: A long, flat stick used to create an opening between warp threads, which is referred to as the shed.

Notes

1. In the Woodshop, a completed demo loom is available for your reference. The plans (directions) for the frame loom, shed stick, and shuttle are on the following page. Video Tutorial

2. We have extra materials available if you would like to re-cut or re-do any portion of the process. Frames should be cut, glued, and brad-nailed in the woodshop. Please bring your frame back up to the classroom to measure and hammer in your wrapping bar nails. Likewise, your shed stick and shuttle should be cut and power sanded in the woodshop and brought back up to the classroom for hand sanding.

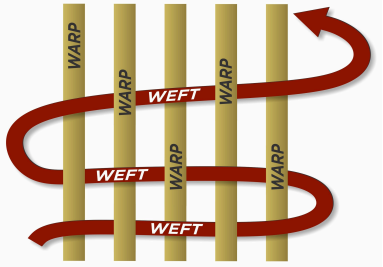
3. Please take advantage of the open Woodshop hours, Monday through Friday, from 2 pm to 8 pm. These hours are staffed by shop monitors who are familiar with the project and are there to ensure safety and correct use of equipment and tools.

Woodshop Safety Training

Required reading:

1. School of Art + Design Woodshop Safety Guidelines.
2. School of Art + Design Woodshop Equipment Overview.

Unit Three | **ASSIGNMENT SEVEN** | Black and White Woven Pattern Sample
Due Monday, October 22



Objective

This assignment introduces the components of a weave (the warp and weft) and how to use the provided materials to create a sample pattern that explores tone, pattern, and tension.

In this assignment, you will learn the following:

1. How to string a warp on your frame loom.
2. How to use your shuttle and shed stick to weave in the weft.
3. How to remove a weaving from your frame loom.

Materials and Tools

Black & white 8/4 warping thread, black & white eight-ply cotton cord, frame loom, shed stick, shuttle, cork-backed metal ruler, scissors, #2 pencil, tapestry needle, sketch paper, tracing paper.

Assignment Components

1. Sketch a black-and-white pattern in an 8 in x 8 in square. Use the class demo for reference and clarification.
2. Using the 8/4 black and white warping thread, place a warp on your frame loom that correlates to your pattern design.
3. Using your shuttle, shed stick, and eight-ply black and white cotton cord, weave in the weft to create your pattern.

Notes

1. A “sample” is similar to a “sketch.” Samples are not intended as final artworks, just a means through which we explore the material, process, and possibilities. Experiment with the black and white warp and weft threads to achieve a range of tones, from light to dark. The amount of tension on the thread will affect the overall shape of your weaving.

2. If you are exploring more advanced weaving techniques, there are many example tutorials online that will demonstrate various methods for producing shapes and images. Practice your research skills to help solve technical questions as they arise.

3. As with all 3D making, weaving takes time. Please schedule accordingly; this is not a process to postpone to the night before review.

Unit Three | **PROJECT TWO** | Woven Structure
Due Tuesday, October 29

Objective

Create a 3D structure that uses weaving (interlocking vertical and horizontal elements and/or interlocking angled elements) to produce its form, and use the display of your 3D structure to emphasize an attribute of its design.

Project Design Criteria

1. Your 3D structure must use weaving as the method for form-giving. This means that joints, angle changes, and component attachments should all be incorporated in a weaving style rather than using applied adhesives or mechanical fasteners.

2. Size: Your project should occupy a space appropriate to its material - for example, if you are working with large natural reeds or bulky plastic tubing, your woven structure should be relatively large.

3. Project Presentation: Consider the display of your woven structure as a key component when designing your project. Your Woven structure can be presented as a structure on a table, on the floor, mounted to a wall, or suspended from the ceiling.

4. Material(s): Select a material or materials that interest you and will inspire you to make. Hazardous and bio materials must be pre-approved by the instructor.

Materials and Tools

Independent material(s) selection. All tools we have covered so far this semester are available for use.

Notes

1. This project is an opportunity to apply the skills and techniques introduced in Unit Three to your own creative work. Take note of the materials around you throughout your day – You're looking for a unique material to create a woven structure. From ornamental grass to gum wrappers, there are endless material possibilities. What materials have meaning to you? Think outside the box here; if you have an idea, chances are we can make it happen. Push yourself to try something new.

2. Consider the project timeline and plan accordingly. If you need access to the large woodworking equipment, please use the outside-of-class hours provided by our shop monitors.

Questions for Consideration

1. How do the inherent characteristics of your selected material(s) add to your design?
2. How does the presentation of your project highlight the attributes of the work you would like viewers to focus on?

Unit Four | **ASSIGNMENT EIGHT** | Collage and Sketch
Due Tuesday, November 5

Objective

This assignment forms the foundation of your Body-Site project, introducing collage and mixed-media sketching techniques.

In this assignment, you will learn the following:

1. Collage techniques.
2. Techniques for mixed-media sketching.

Materials and Tools

Magazines, cutting mat, X-acto knife and blades, scissors, #2 pencil, Sharpie, cork-backed metal ruler, Elmer's glue-all, glue stix, paper, pens, tracing paper, colored pencils, watercolors, markers, crayons.

Assignment Components

1. Select two descriptive nouns and one surface adjective.

2. Create a 2D collage inspired by your selected words and surface adjective.

3. Sketch a minimum of three design ideas for your Body-Site project.

Notes

1. This assignment builds off of our in-class collage exercise. Use the collage and sketch process as a method for generating, developing, and redesigning ideas. Shifting the direction of your design during development is natural – just remember to update your descriptive nouns and surface adjective to align with your new direction.

Unit Four | **ASSIGNMENT NINE** | Drawing and Material Tests
Due Tuesday, November 12

Objective

This assignment introduces descriptive drawing for three-dimensional forms and techniques for working with thin plastic sheeting.

In this assignment, you will learn the following:

1. How to fuse plastic to form sheets.
3. How to make large paper patterns for body-scale reference.
4. How to create a design drawing that describes a structure from two sides and the top.

Materials and Tools

Plastic bags, irons, heat guns, towels, paper rolls, parchment paper, cutting mat, X-acto knife and blades, scissors, #2 pencil, Sharpie, cork-backed metal ruler, tracing paper, paper, pens, colored pencils, watercolors, markers.

Assignment Components

1. Create a drawing that depicts your Body-Site project design from two sides and the top view. Refer to the class example for sizing and visual reference.

2. Create three small material studies that demonstrate the fabrication techniques you plan to use in your Body-site project.

Notes

1. Use cardboard and/or towels to protect your work table and cutting mat from heat. Use the parchment paper to prevent plastic bags from fusing to other surfaces when you apply heat. If you are using an object as a mold or surface to form your plastic over, ensure that it can withstand heat and won't be damaged in the process.

2. Work in a well-ventilated open area. Fusing layers into sheets and other low-heat techniques are acceptable in the classroom. If you are applying enough heat to cause fumes, you must work under the vent hoods in the shop.

Unit Four | **PROJECT THREE** | Body-Site
Due Tuesday, November 19

Objective

Build a structure from plastic bags that utilizes the body as a display location (site).

Project Design Criteria

1. Your structure must have a substantial visual impact from 15 feet away.

2. You may work collaboratively, in pairs, or individually. If you are working collaboratively or in pairs, your concept must support/necessitate the grouping, and all bodies must be incorporated as a site.

3. Your project can be performative or stationary. Your structure must be built to withstand wear – it should not fall apart when you move around.

4. Materials: Only plastic bags are permitted. All forms of material manipulation are encouraged (knotting, weaving, cutting, fusing into sheets, etc.), but no glue, string, thread, tape, or other adhesives are allowed.

Materials and Tools

Plastic bags, irons, heat guns, towels, cardboard, paper rolls, cutting mat, X-acto knife and blades, scissors, #2 pencil, Sharpie, cork-backed metal ruler, tracing paper, paper, pens, colored pencils, watercolors, markers.

Notes

1. This project builds on prior units, while placing new emphasis on physical scale and concept development through metaphor and narrative. Please review the project introduction for clarification.

2. Use plastic's characteristics (such as heat fusion, flexibility, transparency, and tensile strength) to inform your design.

Questions for Consideration

1. How does the form and surface of your Body-Site project connect to your concept?

2. What can the plastic bag material offer in terms of visual and cultural connections? Color, graphics, branding, opacity, transparency, etc.?

Unit Five | **ASSIGNMENT TEN** | Sketch, Model, and Material Tests
Due Tuesday, December 3

Objective

Develop the design for your Chair project and experiment with the structural and aesthetic possibilities of corrugated cardboard.

In this assignment, you will learn the following:

1. How to use the Vinyl Cutter.
2. How to create cardboard weight-bearing structures.
3. Techniques for making cardboard hinges, curves, and free-form shapes.

Materials, Tools, and Programs

Pen and pencils, thin cardboard, tape measure, corrugated sheet cardboard, box cutter, cutting mat, X-acto knife and blades, scissors, #2 pencil, Sharpie, cork-backed metal ruler, hot glue gun and glue stix, wood glue, bulk Elmer's glue, chip brushes, water, cups and bowls, tape, adhesives, black vinyl, and vinyl transfer paper.

Assignment Components

1. Sketches: At least five ideas should be sketched, and you should draw your final design from the front, side, and top. Your sketches should indicate how you intend to incorporate black vinyl text into your design.

2. Material Studies: Use the class examples as a reference, and make three small material studies that incorporate techniques you are considering for your chair. Use a black Sharpie to experiment with different text options.

3. Using thin cardboard, create a small (under 6 inches x 6 inches x 8 inches) sketch model of your chair design.

Notes

1. The hot glue guns have a “low” and “high” heat setting. As you conduct your material studies, experiment with how the settings affect your process. Dry hot glue can be made fluid again with a heat gun.

2. Consider the project timeline and plan accordingly. If you need access to the large woodworking equipment, laser, computers, or printers, remember to use the outside-of-class hours provided by our shop monitors. There will be no monitor hours over Thanksgiving Break.

3. To use the vinyl cutter, follow the step-by-step instructions on settings and setup on the next page. Video Tutorial

Digital Fabrication Safety Training

Required reading:

1. USCutter, Model SC Plotter, Safety and Operation.

Unit Five | **PROJECT FOUR** | Chair
Due Tuesday, December 10

Apply this semester's content: Assembly and disassembly of components, geometric shapes, and composition (Sound Puzzle Project), Woodshop tools and weaving (Woven Structure Project), and body scale and material handling (Body-Site Project).

Objective

Design and build a structure out of corrugated cardboard that supports your weight. Incorporate black vinyl text into your design and final structure.

Materials and Tools

Pen and pencils, tape measure, corrugated sheet cardboard, box cutter, cutting mat, X-acto knife and blades, scissors, #2 pencil, Sharpie, cork-backed metal ruler, hot glue gun and glue stix, wood glue, bulk Elmer's glue, chip brushes, water, cups and bowls, tape, black vinyl, and vinyl transfer paper.

Project Design Criteria

1. Size and Structural Integrity: Your structure will be presented/performed with you as the occupant. Your structure will also be presented as an independent object. You may work collaboratively or individually. If working collaboratively or in pairs, the work's concept and design must allow all collaborators to sit on the structure simultaneously. Your Chair must fit through the classroom (119) door.

2. Performative or Still: Your chair can be a singular object, a collection/stack of multiple objects, or an object that transforms into various shapes.

3. Material, Color, and Graphics: *Corrugated Cardboard and Black Vinyl only.* A set amount of sheet cardboard is provided for this project. You may augment this material supply with other found corrugated cardboard if it is the same thickness. No applied color (paint, maker, pigment, etc.). Color and text on found corrugated cardboard is permitted. A specified quantity of black vinyl is allocated for this project. Many students don't use the full amount provided. If your design requires additional vinyl, consider consulting with your classmates to see if it is available.

Notes

1. This project offers an opportunity to apply the techniques and concepts learned this semester to the design and fabrication of a new structure. Consider the various methods, tools, and processes we employed. What do you want to re-engage with as you create a new structure?

2. The Chair project is a standard 3D studio assignment. Feel free to collect reference/source material, but *be careful not to replicate another's work directly*. As artists and makers, we strive to contribute new ideas to the visual conversation rather than replicate existing visual objects.

Questions for Consideration

This is a structure that supports your weight. This is *your* chair.

1. How do you want to sit? Do you want to wobble? Roll? Relax? Be kept awake? Squat? Recline?
2. How do you want to position your body(s)? Is your Chair a space for a conversation? A protective personal bubble?