

Scholar of Global Distinction Program

Course

3D Visual Design

Author

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Course Description

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply and understand three-dimensional design concepts in art.

Number of Students Enrolled in Course:

Maximum 12

Module Description

This module consists of four activities for global learning to encourage 3D Design students to consider their own work in the context of global creative expression. Students will be introduced to legendary and contemporary sculptors and installation artists from across the globe who infused their cultural background, indigenous materials, and self-taught artistic skills into their artwork. Students will conduct independent research to create a single 3-Dimensional piece of art utilizing a specific technique associated with a chosen artist and/or region. Each student will give a presentation to the class highlighting the artist, region, artistic technique and the artwork produced. The primary regions selected include Asia, Europe, and Latin America.



Student Global Learning Outcomes:

1. Identify and analyze 3D artworks created in the Asia, Europe, and Latin America that engage human interaction, social discourse, and express social and cultural concerns.
2. Investigate artistic techniques from specific regions and research the artists and artwork associated with those skills and materials.
3. Discuss the similarities and differences between artists and their regions, concentrating on the various approaches to making sculpture.

Global Learning Activities:

Activity 1: Between 2D and 3D: From Frame to Form

Objective: To distinguish the differences between the two-dimensional picture plane and three-dimensional volume, space, and structure.

Discussion: Many art students feel comfortable with the 2D picture frame but often arrive in 3D Design with little to no experience in creating 3D objects. This unit consists of manipulating cardboard, a flat material, and building it up layer-by-layer into a bas-relief. The goal of Unit I is to provide a bridge between the relatively familiar territory of the flat picture plane to the "new" territory of the third dimension. Working from a photograph or digital image, students will create a relief wall sculpture that compresses space into a relatively shallow relief in cardboard and black marker. By gluing the layers together, the wall sculpture will contain both low and high relief.

Vocabulary: two-dimensional, three-dimensional, picture plane, form, positive, negative, volume, solid, space, low and high relief

Artists/Cultural References: Pablo Picasso (Spain), Isamu Noguchi (United States), Naum Gabo (Russia), Vincent van Gogh (Netherlands), Jonathan Borofsky (United States), Magdalena Abakanowicz (Poland), Tom Burckhardt (United States) Jozef Sumichrast (United States), Ana Serrano (United States), Peeta (Italy) Junior Fritz Jacquet (France), Shigeru Ban (Japan), Selma Burke (United States), Balinese folded palm fronds, Japanese origami



Procedure: Students begin by researching paintings, prints, and drawings that are highly detailed and contain foreground, middle ground, and background. Once the artwork is chosen by the student and approved by the instructor, the students then recreate it using cardboard. A black marker is used at the end to add highlights. The goal is to create 8-10 layers of cardboard using techniques demonstrated in class by the instructor. Students will learn to problem-solve while creating dimension using a malleable, mundane, easily accessible material.

Presentation: Upon completion of the bas-relief based on a 2D artwork, each student will give five-minute presentation to the class on the artist they chose to render in cardboard. This presentation will include but not be limited to: biographical information, artistic movement and style, materials used, size of the work, and cultural relevance. Students will be encouraged to discuss whether or not they enjoyed the process of making a bas-relief in cardboard.

Sketchbook Entry: Students will write personal reflections addressing:

- What would you do differently if you had to start this project over from the beginning?
- What do you feel were the most and least successful aspects of your work?
- What (if any) insights did you gain throughout the process of this project?
- What would you do differently if you had unlimited time and access to resources?

Assessment: Students will receive:

- 10 points for the Sketchbook Entry
- 20 points for the Artist Presentation
- 70 points for the Bas-Relief in Cardboard
= 100 points possible

Specific criteria (size, materials, tools) and critical feedback will be provided by the instructor. Students will be given a three-week period to complete the unit in a fifteen-week course.

Activity 2: Points, Lines, Planes, and Volume

Objective: To describe three-dimensional space using a vocabulary of points, lines, and planes defining actual and implied elements

Discussion: Paul Klee explained that creating an expressive line is like "taking a point for a walk." Try to imagine space having "points" that have the potential to generate lines. By extension, a plane can be seen as a moving line, and a three-dimensional volume can be understood as a moving plane (or line). This conceptualization of space dates back to Leonardo da Vinci who discussed it in his notebooks. Consider how a ballet dancer's arm describes a plane in space, or how a Caldermobile in motion describes space described in time. This method of spatial description should be familiar to students from 2D classes (implied line, biomorphic shapes, blind contour, etc.).



Vocabulary: point, line, plane, volume, dynamic, implied, non-objective, in-the-round, abstract, subtraction, free-form, non-objective

Artists/Cultural References: El Anatsui (Ghana), Joseph Fucigna (United States) Kenneth Snelson (United States), Eero Saarinen (Finland), Naum Gabo (Russia), Shiro Kuramata (Japan), Victor Horta (Belgium), Frank Gehry (United States), Antoine Pevsner (Russia), Max Bill (Swiss), George Rickey (United States), Ruth Asawa (United States), Jesus Rafael Soto (Venezuela), Alexander Calder (United States), Michael Heizer (United States), Aiko Miyawaki (Japan) William King (United States), Guerra de la Paz (Cuba), Khalil Chishtee (Pakistan), Yun-Woo Choi (Korea), Imigongo (Rwanda), Kente cloth (Ghana), Barbara Hepworth (United Kingdom), Constantin Brâncusi (Romania), Augusta Savage (United States), Henry Moore (United Kingdom), Alberto Giacometti (Italy and Switzerland), Richard Serra (United States)

Procedure: Students begin by researching abstract art made by artists from the past and present to study the origins of abstract art and how it grew into the full-scale artform that it is today. Fine art sculptures of the past were typically made from very hard and permanent materials, like marble, bronze, plaster. However, sculptors today have a wider range of acceptable materials available to them, such as recycled or found objects. Students are required to hunt for and gather recycled materials to create a “non-objective” or abstract sculpture that is freestanding. The form should have no distinct front or back and must be viewed in the round in order to fully experience and understand the artwork.

Presentation: Upon completion of the abstract artwork, each student will give a five-minute presentation on an abstract artist they found inspiring while working on the project. This presentation will include, but not limited to: biographical information, artistic movement, style, materials used, typical size of the work, and cultural relevance. Students will be encouraged to discuss whether or not they enjoyed the process of making their abstract piece.

Sketchbook Entry: Students will write personal reflections addressing:

- What would you do differently if you had to start this project over from the beginning?
- What do you feel were the most and least successful aspects of your work?
- What (if any) insights did you gain throughout the process of this project?
- What would you do differently if you had unlimited time and access to resources?

Assessment: Students will receive:

- 10 points for the Sketchbook Entry
- 20 points for the Artist Presentation
- 70 points for the Abstract Artwork
= 100 points possible

Specific criteria and critical feedback will be provided by the instructor. Students will be given a four-week period to complete the unit in a fifteen-week course.

Activity 3: Mass and Form

Objective: To demonstrate both traditional and non-traditional approaches to the concept of mass as applied to 3D form

Discussion: Traditionally, sculpture in our mind's eye is the classic form of a figure carved in stone and mounted on a pedestal. That style of sculpture was traditionally made from materials that are often treated as solid volumes, such as clay, wax, plaster, etc. In an age when synthetic materials often serve as "simulations" of such traditional materials (Styrofoam, plastic bags, fiberglass), the contemporary sculptor can choose to absorb or ignore traditional materials in order to efficiently build 3D forms. Something is lost and something is gained in this process. What is lost is the highly-skilled craftsmanship associated with the traditional methods and materials to density, mass, and structure. What is gained is a range of possibilities that far exceed most sculptors' imaginations. This unit highlights the importance of looking back at and beyond surfaces to the internal properties of materials, whether traditional or non-traditional.

Vocabulary: mass, density, weight, gravity, form, simulation, surface, tactile, traditional, non-traditional, subtractive, synthetic, darting, whip-stitch, armature.

Artists/Cultural References: Claes Oldenburg (Sweden), Louise Bourgeois (France), Sheila Hicks (United States), Meret Oppenheim (Switzerland), John Chamberlain (United States), Dahlov Ipcar (United States), Sam Borkson and Arturo Sandoval (United States), Hans Haacke (Germany), Judith Scott (United States), Ken Lum (Canada), Christo (Bulgaria), Robert Morris (United States), Eva Hesse (Germany/United States), Ritzi and Peter Jacobi (Romania), Norma Minkowitz (United States), Ai Weiwei (China)

Procedure: Students begin by studying stuffed 3D forms and the materials used for the stuffing or armature. Next, students must choose a hard, inanimate object (hammer, chair, mug) and design it into a stuffed, soft sculpture. This is not simply covering a box with soft material – the entire form must be malleable, squeezable and forgiving to the touch. Not all stuffing acts the same, and students will discover the differences in how cotton and wool react to being stuffed. Cotton fabrics tend to stretch far and wide, whereas wool is a tightly woven and does not have much give. The choice of fabric and stuffing is vital to the learning process. Students will not only learn how to create the form but also will discover how certain materials will enhance their art and some will hinder it. It is not all about vision; it is the execution of the materials that matters, as well. Students will also play with scale and proportion. If the hard object is small, like a metal key, then it has to be enlarged. If the hard object is large like a truck, they can make it smaller. Replicating the object true to size is unacceptable.

Presentation: Upon completion of the soft sculpture, each student will give a five-minute presentation on the soft sculpture artist that influenced them during the project. This



presentation will include, but not limited to: biographical information, artistic movement, style, materials used, size of the work, and cultural relevance. Students will be encouraged to discuss whether or not they enjoyed the process of making a stuffed soft sculpture.

Sketchbook Entry: Students will write personal reflections addressing:

- What would you do differently if you had to start this project over from the beginning?
- What do you feel were the most and least successful aspects of your work?
- What (if any) insights did you gain throughout the process of this project?
- What would you do differently if you had unlimited time and access to resources?

Assessment: Students will receive:

- 10 points for the Sketchbook Entry
- 20 points for the Artist Presentation
- 70 points for the Soft Sculpture
= 100 points possible

Specific criteria (size, materials, tools) and critical feedback will be provided by the instructor. Students will be given a four-week period to complete the unit in a fifteen-week course.

Activity 4: Repetition

Objective: To develop the concepts of "repetition" and part-whole relationships through the application of modular principles to construct a three-dimensional form

Discussion: Most of what we encounter in contemporary culture is manufactured and designed for convenience. To-go cups are designed to stack in order to save space and facilitate transport. Frozen waffles are designed to be efficiently packed into box and slipped into toaster slots. Products, buildings, and foods are designed to fit into a variety of other structures and machines. Designers usually have functionality and aesthetics on their minds when making multiples. The goal of this unit is to make a series of identical or nearly identical objects that are displayed as one installation. Each student will make an original prototype and then produce at least five or more works, creating an expansive 3D form that is either displayed in a large pedestal, or as a kinetic mobile. Students will problem-solve with their materials to discover the best methods to replicate their prototypes.

Vocabulary: module, part-to-whole, repetition, rhythm, connections, prototype, maquette, patterns, template, production, unity, multiples, mass-produced, molds, slip cast

Artists/Cultural References: Walter De Maria (United States), Richard Long (United Kingdom), Christo and Jean- Claude (Bulgaria/Morocco), Louise Nevelson (United States), Ai Weiwei (China), Chartres Cathedral (France), Kenneth Snelson (United States), Haj Terminal (Saudi Arabia), Massimo and Lella Vignelli (Italy), Frank Lloyd Wright (United States), Ursula Von Rydingsvard, (Germany), Doris Salcedo (Colombia) Moshe Safdie (Israel), Sol Lewitt (United States), Hannah Wilke (United States) Easter Island (Chile), Egg package, Erwin Hauer (United States), Carl Andre (United States), George Rickey (United States), Kiki Smith (United States), Dan Flavin (United States), Marcel Duchamp (France), Jackie Winsor (Canada), Eva Hesse (Germany/United States), Donald Judd (United States), Andy Goldsworthy (United Kingdom)

Procedure: Students begin by studying the materials and techniques utilized in repetitive 3D forms. After generating some ideas as to what they want to duplicate, students are tasked with designing a small prototype or maquette. Subject matter, materials, size and final display mode are all decisions made by the student. Each student must produce at least five forms to achieve the look of repetition. However, there is no maximum. Problem-solving, engineering, gravity, and time constraints are all issues designers face with each new concept. Artists, designers, and architects all deal with deadlines and unforeseen problems in the developing stages. This project highlights those real-world issues and the theory of strength in numbers.

Presentation: Upon completion of the repetition art, each student will give a five-minute presentation on an artist utilizing repetition that influenced them during the project. This presentation will include, but not be limited to: biographical information, artistic movement/style, materials used, size of the work, and cultural relevance. Students will be encouraged to discuss whether or not they enjoyed the process of making a stuffed Soft Sculpture.

Sketchbook Entry: Students Will Write Personal Reflections Addressing:

- What would you do differently if you had to start this project over from the beginning?
- What do you feel were the most and least successful aspects of your work?
- What (if any) insights did you gain throughout the process of this project?
- What would you do differently if you had unlimited time and access to resources?

Assessment: Students will receive:

- 10 points for the Sketchbook Entry

- 20 points for the Artist Presentation
- 70 points for the Repetition Art
= 100 points possible

Specific criteria (size, materials, tools) and critical feedback will be provided by the instructor. Students will be given a four-week period to complete the unit.

Resources and references used in the creation of the module (e.g., books, articles, etc.)

RESOURCES for the semester: No textbook is required as students are expected to conduct research online and at their local or school libraries. However, this list is provided as a starting point.

Art21

- <https://art21.org/>

Getty Images

- <https://www.gettyimages.com/>

Hyperallergic

- <https://hyperallergic.com/>

Colossal

- <https://www.thisiscolossal.com/>

Art Forum

- <https://www.artforum.com/>

Art News

- <https://www.artnews.com/>

Getty Images

- <https://www.gettyimages.com/>

Sculpture Magazine

- <https://www.sculpture.org/sculpturemagazine/>

MoMA

- <https://www.moma.org>

The Met

- <https://www.metmuseum.org/>

National Gallery of Art

- <https://www.nga.gov/collection.html>

deCordova Sculpture Park and Museum

- <https://decordova.org/>

Hirshhorn Museum and Sculpture Garden

- <https://hirshhorn.si.edu/>

North Carolina Museum of Art

- <https://ncartmuseum.org/>

The Contemporary Austin

- <https://thecontemporaryaustin.org/>

Nasher Museum of Art

- <https://nasher.duke.edu/>

TED Talks for/about artists

- https://www.ted.com/playlists/694/ted_talks_to_inspire_you_to_make_art

Artsy

- <https://www.artsy.net/>