

Art 121- Three Dimensional Design:

- CRN: 22610
- Instructor: Teraoka, Adam Z.
- Section Co-requisites: NONE

Meeting Time			
F	08:10am - 10:15am	08/20/16	12/10/16
F	10:25am - 02:35pm	08/20/16	12/10/16

This course introduces the fundamentals of three dimensional design, techniques, and materials. The emphasis is on the translation of concepts and designs into actual forms, the development of skill sin a variety of media, and on the understanding of design elements and principles as they apply in three dimensions.

Three dimensional elements in design:

- a. Volume / Shape
- b. Space / Proximity
- c. Plane
- d. Texture
- e. Color
- f. Line
- g. Form
- h. Value

Visual organization concepts such as:

- a. Integration / disintegration
- b. Repetition, proximity, and continuance
- c. Contrast,
- d. Visual balance
- e. Emphasis
- f. Pattern
- g. Movement
- h. Rhythm

Student Learning Outcomes:

By the completion of the course, students will be able to:

- Convert a two dimensional design into a three dimensional spatial construction.
- Construct forms using beginning design techniques such as: additive, subtractive, and cross-contour techniques.
- Use a variety of materials and media to produce three-dimensional compositions, full size and scale representations, of both objects and spaces.
- Critique artwork as it relates to spatial compositions, including formulating an evaluation of their own work; observe, analyze, and comment on the work of others; listen to the comments on the work of others and apply them to their own work. Use notes to increase their understanding and reinforce concepts.
- Design and make displays that enhance the presentation of three-dimensional spatial constructions.
- To have a fundamental understanding of the elements and principles of design.

Course Expectations:

In order to fulfill the requirements of the class, you will be expected to:

- Arrive on time, ready to work, with appropriate materials, and remain throughout.
- Be an active participant, using the materials and processes described.
- Participate in discussions and critiques, by submitting your own work for discussion, engaging in the discussion of other students' project and by applying those discussions to your work.
- Conduct yourself in a manner appropriate to a professional design studio at all times.
- Cell phones and other electronic devices are not to be used in class.
- Homework and projects must be turned in at the beginning of the critique in order to be considered "on time." Projects not ready at the beginning of the critique will be considered late, may not be reviewed in the critique, and will be graded down.

Grading: Your final grade will be an average of your project grades and your participation grade.

Project Grading: Once a project has been turned in it will be subject to a grade based on design concept, execution and craftsmanship. You may be able to evaluate your work based on these questions:

Did you address the intent of the project?

- Did you spend the appropriate amount of time and thought?
- Were you flexible and open to suggestions?
- Did you approach the project in a variety of ways?
- Were you willing to explore unfamiliar techniques and processes?
- Were you willing to explore new subject matter and unfamiliar themes?
- Did your work live up to the original design?
- Have you satisfied the requirements of the project?
- Did you go beyond just following instructions?
- Are you satisfied with the presentation of your work?

Each project will be graded on a scale from 1 to 12. An A+ being a 12 and an F being a zero.

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
12	11	10	9	8	7	6	5	4	3	2	1	0

Participation Grading: Over the course of the semester you will receive a participation grade. Missing classes and tardiness will adversely effect this grade. Also, you will be expected to participate in class discussions and most importantly, class critiques.

Extra Credit:

There is a variety of extra credit opportunities listed in the class schedule as well as in the specific project descriptions. The amount of credit given is dependent on the quality of the work produced.

Note:

Student projects will be held for a maximum of 1 semester for exhibition. The instructor reserves the right to modify the course content, schedule, grading procedures, and assignments as the situation dictates. The instructor will inform the students of any such changes via e-mail and/or class announcements.

From the college policy on ACADEMIC INTEGRITY:

“Probation for Unsatisfactory Citizenship”

“Each student should be thoroughly familiar with the Standards of Conduct and with regulations of the College. Students attending the College are expected to maintain satisfactory standards of citizenship at all times on the campus and in the community. Satisfactory citizenship includes conduct, which, respects the rights of all individuals, which avoids actions disruptive to the ongoing education program and which does not violate specific prohibitions outlines in the Education Code.

When it is indicated that citizenship is unsatisfactory, the student may be subject to the following: reprimand, disciplinary probation, administrative class withdrawal, suspension or expulsion, as conditions warrant. Unsatisfactory citizenship includes, among other things, cheating, plagiarism, hazing and conduct disruptive to the teaching-learning process. In addition, falsification of information provided to the admissions Office is basis for the dismissal from a class or from the College. Individuals engaged in destructive activities involving any kind of physical or psychological mistreatment of students are subject to prosecution under the California State Law banning hazing and to dismissal from the College. Penalties for individuals, organizations and institutions can be severe.”

References:

There is no required text. The following are books that I have found useful. They include discussions of basic design principles and elements, color theory, and/or design theory. Inexpensive used copies of older editions are frequently available through Amazon.com or other book suppliers.

Art and Visual Perception

Rudolph Arnheim

Art Fundamentals: Theory and Practice

Ocvirk and others

Architecture: Form, Space, & Order

Francis Ching

Graphic Design Solutions

Robin Landa

Design Basics

Lauer & Pentak

Foundations of Art and Design

Fichner-Rathus

Principles of Two-Dimensional Design

Wucius Wong

STUDIO CLEAN UP:

You are responsible for cleaning up after yourself and your classmates every day. That includes the following:

1. All materials on your table top and that of your immediate neighbors should be swept into dustpan and discarded.
2. All materials on the floor under or around your table should be swept into dustpan and discarded.
3. Dust and scraps on equipment and floor in shop should be swept into dustpan and discarded.
4. Clean and return of all equipment used to the appropriate place.
 - a. Tools used for uncured Sculpy (soft) should be scraped and wiped with rubbing alcohol
 - b. Files should be carded over the trash.
 - c. Saw frames, bench pins, vises should be wiped and returned to storage.
5. Clean around drill press and return equipment to cage:
 - a. Cord should be unplugged and locked in lock box.
 - b. Wood blocks, drill bits, round anvil, center punches should be stowed underneath drill press.
 - c. Flex shafts should be returned and stowed securely.

Project 1 – Low Relief

A light-responsive surface constructed of foam board

Materials:

White foam-core board (appx. ¼" thick)
Glue stick or tacky glue
A metal straight edge (18" to 24")
A #1 Exacto knife and #11 blades (100)
Self-healing cutting mat (appx. 16" x 24")
Sketchbook with 8 ½ x 11" pages (make sure pages can be removed)
Soft (3b) drawing pencils and white plastic eraser

Optional:

An ellipse template or French curve
A compass or circle cutter

This project is intended to introduce the student to **essential design elements such as volume, space, plane, texture and movement and visual organization concepts such as integration, repetition, proximity, contrast and balance.**

Before we start our first project we will do a few exercises to familiarize ourselves with some of the basic vocabulary of design. It is important to get your materials as soon as possible for this project. Since this class meets once a week, it is imperative that you have all your supplies by the start of the second week. In addition to the exercises you will be asked to draw several "idea sketches" before you begin.

The project will be a non-figurative / non-representational design arranged from shapes and patterns of white foam-board. The finished size of the project should be 1' x 1' with a maximum thickness of 1 1/2". Successful designs will address light and shadow as well as volume. Creating clean edges with the material is a must and at the beginning of the project we will practice cutting with the Exacto knife.

Some of the design terms related to this project:

Symmetry	Asymmetry	Negative Space	Repetition
Proximity	Closure	Integration	Disintegration
Dynamic	Static	Complexity	Balance
Non-figurative	Figurative		

Project 2

Implied Volume: Wire Drawing in 3D

Materials:

Ordinary bailing wire. Also called tie-wire or rebar wire
Pliers
Diagonal cutters / wire cutters
White art board (appx. 18" x 24")
Gloves

This project is designed to create an implied volume from an essentially linear material. An implied volume is one that suggests a solid form but is actually material arranged with a system of visual tools (convergence / divergence, proximity, repetition) A repetition of shapes may suggest a line:

This project should be figurative. It will probably be described using nouns instead of adjectives: A hat, a shoe, a car, a head, a body etc. We will discuss the figurative / non-figurative relationship quite a bit over the course of the first two projects. There is no limitation to the size but just remember working very small can be a disadvantage and may not be the easiest way to solve the problems you encounter. The project itself should have no other material other than wire.

Before we begin the assignment, I will ask you to do a couple of exercises. First, we will make a few basic shapes from wire. (Pyramid, cube and sphere) Then, you will connect the shapes together concentrating on the strength of the structure rather than the form. Finally, you will draw the form you just constructed in your sketchbook. The goal of this exercise is to practice the transformation of a 3D object to a 2D drawing.

To begin the assignment you will work in the opposite order (from the exercise). You will draw your design and use the drawing as a blueprint for your project.

Vocabulary related to this project:

Representational	Non-representational	Anthropomorphic	Biomorphic
Proximity	Symmetry	Asymmetry	Balance
Armature	Maquette	Bilateral-symmetry	Convergence
Contour line			

Project 3

Enclosed Volume: A Personal Container

Materials: Open – I am encouraging students to use found or free materials for this project. In addition to exploring space and volume, I would like the student to be resourceful and design a professional, finished piece with little or no money.

This project is intended to create a volumetric space which is enclosed but accessible. A successful project will be more than just a box with a door. (Although, even that may not be as easy as it sounds). Try to make this container a finished, presentable piece of art. Make it reflect your tastes and personality. The only requirements are that the piece be small enough to fit in your locker and that the container must open and securely close. Also, all hinges, locks and hasps must be made by you. Make the container using methods learned in exercises, demonstrations and previous projects or experiment with joinery ideas that you create.

Ultimately this project will be an exercise in form and function. Will you be able to make something functional, yet keep it coherent with the intent of the design?

I strongly recommend making a maquette. This is a sample or practice model that will help in the design of your piece. I will accept a maquette as a substitute for preliminary drawings. It may help you to make the maquette out of something other than what you are using for the container. In other words, you may use clay, Sculpey or carved foam for the maquette and use cardboard for the project. Or vice-versa.

This project may be small; it may contain something as small as a paper document. The project may be a free-standing piece or it may have a base. It may also hang or be mounted to a wall.

Design vocabulary related to this project:

Maquette
Integration

Transition
Narrative

Space
Found-art

Transparency
Organic

Project 4

Product Design: Chindogu

“**Chindogu**” is a Japanese word that means “weird tool” or “strange tool” A Chindogu is a product, faux-product or invention that has a purpose so esoteric that it renders itself useless. Or the purpose works against itself for example: A solar-powered flashlight.

Materials: The materials, of course, will be project specific. Keep in mind that a 3D printer is available so parts of your project (perhaps the entire project) can be created in plastic. Also, the metal casting facility is available so you might consider a project constructed from metal or cast metal.

It is imperative that you have an idea and the necessary materials at the beginning of the project!

The focus of this project is to introduce the student to product design. Although a Chindogu is essentially a non-product and mocks consumerism, a successful project will be a finished, working model or prototype and professionally packaged / displayed. Your project may be packed, boxed or wrapped in the same way as a product from Target or Home Depot. Unboxing, unpacking and presenting you product will be part of the final critique.

I will require a short research paper on Chindogu. It is to be two pages double-spaced. It is meant to gain a better understanding of the topic but I would also like you to make it a proposal for your own project. I will assign the written part of this project at the beginning of the term so you will have plenty of time to plan and design.

Vocabulary related to this project:

Chindogu
Function

Product design

Consumerism

Integration