ART 212 THREE DIMENSIONAL DESIGN

COURSE ASSIGNMENTS

Week one:

EGG DROP

LEARNING OBJECTIVE:

The objective of this project is to offer the student an experience which is based on solving a problem. The design challenge is to be met given the limitations of materials.

The activity will provide for an understanding of the strength of materials, meeting design criteria, trial and error (if any) and the introduction of how “form follows function” (Louis Sullivan).

MATERIALS:

One chicken egg

One box wooden tooth picks

Glue (hot glue sticks)

ACTIVITY:

The student will construct a three dimensional form (structure) which will allow an egg contained in the structure to be dropped from an elevation of 10 feet to a concrete surface (studio floor) without breaking the egg.

EVALUATION (outcomes) STANDARD

The desired effect – no crack or breakage of egg.

There is no grade assigned to this introductory assignment. Successful projects will be given a + for extra credit or – for no effort. A plus will be offered at the discretion of the instructor. It is not contingent on the breakage of the egg. A minus is entered in the grade book as student making a minimal effort to resolve the problem.
Week two:

**TRANSITIONS – part I (surface as relief)**

**LEARNING OBJECTIVE:**

This activity is designed to provide the “bridge” between two dimensional and three dimensional design. Some shared design principals are:

- Form
- Line
- Repetition, emphasis, balance
- Space
- Content – image
- Value – tonality
- Scale and proportion
- Composition

Some 3D design principals NOT (typically) shared with 2D:

- Texture
- Motion
- Time
- Volume
- Ambient light and illumination

**MATERIALS:**

¼ inch foam core

Glue (hot glue gun)

Paint (black or white)

paper

**ACTIVITY:**

Preliminary – line drawings entered in journal and evaluated by instructor and student. Ultra Fine Sharpy felt tip pen is recommended.

The student will create a “RELIEF” on board using glue and/or paper which is “raised” from the surface. The resulting design will be an exercise in some design principles shared with 2D. The design may be
considered an extension of drawing by using glue “trailed” from a glue gun to create a unique surface. In this case, the resulting “texture” offers a distinct contribution to the design.

The design(s) are to be painted black or white. By doing this, the design will then have a distinct reaction to light which will be experienced and examined.

Note: scale of work to be presented by instructor.

EVALUATION STANDARD:

The successful design will engage the viewer through an experience of line and surface that is both drawing and relief sculpture. Design principles presented during class time by the instructor should be apparent and referenced in the journal.

Week three:

**TRANSITIONS – PART II (line in space)**

LEANING OBJECTIVE:

This activity is designed to allow the student to experience line which exists in three dimensional space. Think of the trail of a jet airplane in the sky or the ripple on water left by a thrown stone. Then expand this idea to a bird nest made of twigs or a crack in ice on a frozen pond.

*REFERENCE: Alexander Calder’s wire “circus” and jewelry*

MATERIALS:

Soft iron wire - may be painted, hung, or mounted at discretion or as recommended by instructor.

Additional materials may be introduced by the instructor.

ACTIVITY:

Preliminary – Line drawings in journal to develop concept, form, and feeling for line.

Student will cut, bend, and assemble lines with wire that create a form and space.

There is an opportunity to introduce IMAGARY in the work. Scale to be determined by the instructor.
EVALUATION STANDARD:

The successful design or sculpture should invite the viewer to experience the finished work IN THE ROUND. The finished work should not be “frontal” or flat.

Week four:

3D COMPOSITION (working in the round con’t.) – part I (construction)

LEARNING OBJECTIVE:

This activity is designed to offer the student a better understanding of the three dimensional form through the construction of individual components (or parts) to create a structure or form. Some design principals may be shared with 2D design such as:

- Shape
- Repetition
- Balance
- Emphasis
- Focal point
- Variation
- Rhythm
- Movement (implied)
- Positive/negative relationships

Reference: David Smith, Anthony Caro, William King, Donald Judd, Louise Nevelson

MATERIALS:

One - 1”x6”x24” white pine board
Source: Lowes or Home Depot

Staples, glue, screws, dowels (studio provided)
Paint

ACTIVITY:
Preliminary – Explore shape by drawings in journal.

NOTE: Wood studio training required. Follow all safety instructions for use of tools and equipment

The student will cut the board into a minimum of ten pieces (shapes) and assemble into a new form using all of the original material – no scrap. Paint the form black, white, or color.
Q.: How does the paint contribute to the form?
Week five:

**3D COMPOSITION CON’T.**

**EVALUATION STANDARD**

The final composition should allow the viewer to experience a form which is the result of positive/negative relationships that “occupy” and “activate” the new space created. This space should be as dynamic as possible. The choice of color should be a specific response to spacial relationships.

Week six:

**FORM AND VOLUME BY SUBTRACTION**

**LEARNING OBJECTIVE:**

The student will experience the creation of form by the “subtractive” process through the carving of a block of plaster. An “internal” space may be incorporated. More than one form may be used to create a singular form or to demonstrate spacial relationships.

**MATERIAL:**

Pottery plaster No. 1

**ACTIVITY:**

Preliminary – mix plaster with water, pour into a “flask” and allow to dry.

Note: a small scale “model” of the form in clay is required and analyzed prior to carving.

Using common hand tools the student will experience volume and surface by carving into the plaster block. “Variation” or “contrast” in the surface may be experienced through the introduction of texture. In order to provide for this (to the greatest extent) the form will be left plaster white.

Emphasis will be on “biomorphic” shape.
Week seven:

**FORM AND VOLUME CON’T.**

**EVALUATION STANDARD:**

The form should evoke an experience of visual interest and fascination with surface and volume. The form should only be “grounded” to support its own weight or to hold a particular position in space. No “base” is to be used. The experience may also be a “tactile” one.

Week eight:

**KINETICS (light, shape, and composition)**

**LEARNING OBJECTIVE:**

This activity explores LIGHT in a 3D composition through the discovery of reflection and refraction which are unique characteristics to glass. The concept of “layering” and the development of a 3D image is applied.

**MATERIALS:**

Float glass and wood and/or steel. 
Process(s) employed: cutting, masking, etching by sandblasting and assembly.

**ACTIVITY:**

A “graphic” is developed by drawing in the journal. Sheet glass is cut and masked with tape which acts as a “resist” to sand blasting. Glass pieces are then sand blasted – tape removed – positioned on a base made of wood or metal as instructed.

Scale will be determined by the instructor.
Week nine:

**KINETICS CON’T.**

EVALUATION STANDARD:

The successful work will take advantage of the opportunity to apply light as a medium. In addition, this process of layering several translucent plates should offer a sensation of “depth of field” in the space created the composition.

Weeks ten trough thirteen:

**SUSTAINABLE DESIGN (part I)**

LEARNING OBJECTIVE:

Through this activity, the student will develop an awareness of the application of “found objects” and/or “repurposed” materials for product design design and sculpture. This work will extend to a heightened awareness of environmental stewardship and social responsibility of the artist and designer.

The found object is an additional source of meaning and content. It can be an important creative tool for the artist.

**TYPICAL MATERIALS CONSIDERED** (as introduced by instructor):

Bottle and window glass

Plastic bottles

Aluminum cans

Scrap metal

Paint

Glue
**ACTIVITY:**

During week ten, eleven, and twelve, and thirteen, the Instructor will offer demonstrations and presentations according to his/her individual area of expertise and in response to the level of advancement of the class to date.

These weeks of activity will include aspects of previous principles explored and applied by the student. This may include (but is not limited to) one or more of the following (at the INTRODUCTORY level) at the discretion of the instructor:

- Mold making and casting of metals or glass
- Making of books as an art form
- Ceramic or glassware
- Jewelry or other forms of adornment
- Kiln slumping or fusing (glass)
- Metal fabrication
- Furniture design
- Fibers

The instructor will determine which activity to be most appropriate in consideration and response to the following:

- Depth and breadth of dialog during previous reviews of projects
- Amount and level of individual research of students performed independently
- Confidence of instructor in students response to instruction and demonstrated enthusiasm for the class
- Availability of materials and studio resources.

**EVALUATION STANDARD:**

These weeks of selected activity will represent a proportional amount of the final grade. It is anticipated that the work will reflect an appropriate level of individual development of sophistication based on the material presented and responded to during the previous weeks of the semester.
Weeks Fourteen/fifteen:

**FINAL PRESENTATION AND EVALUATION**

During the last days of the semester the student will prepare for the final review and submission of the journal for evaluation. The instructor will inform students of expectations as related to the last (or all) previous reviews.

At the end of the semester, the student should emerge fully prepared for the next level of course work. The final grade will reflect the level of commitment as well as contributions to the class demonstrated by the student. The instructor may offer more specific considerations for grading as established by the standards of the Department of Art, the College of Creative and Performing Arts, and Marywood University.