MATERIALS, FORM, AND ARCHITECTONIC STRUCTURE

Geraldine Ondrizek  ondrizeg@reed.edu

The smell of the rain-wet dirt, the texture merged with the color and the fragrance of orange rinds, and the steel-iced fusion of cold hard: these shape the haptic realm. The essence of material, smell, textures, temperature, and touch vitalize everyday existence. Phenomenology is a discipline that puts essences into experience. The complete perception of architecture depends on the material and detail of the haptic realm, as the taste of a meal depends on the flavors of its ingredients.

– Steven Holl, Chemistry of Matter, Parallax

To Craft an Idea:
Craft is another way of saying means. I think it’s a question of conscious intention and personal gifts or giftedness. It seems that in art there is a primacy of idea over both means or craft and function. Idea has to transcend both.

– Martin Puryear

This course introduces you to the structural principles and communicative possibilities of sculpture and architecture. We will explore the haptic qualities and structural possibilities of material as well as the historical precedents and poetics of forms in space. The course covers technically the fundamentals of wood fabrication. You will learn to use a variety of hand and power tools as well as digital drawing tools and the laser. The assignments relate to 20th century sculpture and architecture from the industrial revolution to the present with a focus on works which cross between the discipline of art, science and technology. Readings and lectures will expose you to artworks and philosophical ideas relating to postmodern and contemporary society wrestling with ethics and innovation.

Objectives:
• Introduce the structural principles and communicative possibilities of materials; primarily wood & aluminum
• Develop your ability to apply the formal visual principles – balance, sequence, weight, and structural dynamics and special relationships – in sculpture and architecture.
• Expose you to the content and context of art forms
• Application of the three scales of sculpture:
  The intimate, which relates to the hand or head;
  The human body scale, to which the body directly relates;
  The architectural, into which the body fits.
• To give you experience conceiving, designing and fabricating sculptural and architectural forms with conceptual underpinnings.
• To make phenomenological spaces, whose function is to alter perception.

Assignments:
MATERIALS AND STRUCTURES (In class)
A formal exercise in structural dynamics.

BIOLOGICAL STRUCTURES
The architecture of molecular or skeletal forms, the architecture that holds bodies.

OBJECTS AND SPACES FOR LIVING, DWELLING, THINKING
Architectural models/designs for creative uses.

PLEASE NOTE-THIS IS A 100 LEVEL CLASS THAT REQUIRES YOU COME TO WORKSHOPS TO LEARN TO USE TOOLS AND MATERIALS FOR WOOD WORKING. ADDITIONALLY, TO MAKE YOUR WORK YOU WILL NEED TO SPEND ATLEAST 3 HOURS OUT SIDE OF CLASS. WORKSHOPS WILL BE ON FRIDAYS AND OR THURSDAY AFTERNOON. THE STUDIO SHOPS ARE OPEN 9-5 M-F. THE STUDIO AND HAND TOOLS ARE OPEN TO YOU ANY TIME 24/7.
READINGS:
Intro: MATERIALS AND STRUCTURES
Nature, Imagination and Matter Bachelard
Sculpture Now, Design and the Handmade, Moszynska
The Preliminary Course, Albers
Bauhaus, Workshops for Modernity, Diekman

BIOLOGICAL STRUCTURES
Martin Puryear Artistan- Michael Auping
Passages in Modern Sculpture, Analytic Space Futurism and Constructivism, Krauss
Materiality Making Culture and Weaving the World Tim Ingold
The Devices of Mona Hatoum Anna C. Chave
Martin Puryear Multiple Dimensions
https://www.themorgan.org/exhibitions/martin-puryear

SPACES FOR LIVING, DWELLING, THINKING
Home Delivery: Viscidities of a Modernist Dream, Barry Bergdoll
Allan Wexler Absurd Thinking Assignments in Purpose, Process is Performance Patricia Phillips
https://www.youtube.com/watch?v=NyQHEbTAO
The Poetics of Space Drawer, Chests and Wardrobes, Gaston Bachelard
Doris Salcedo https://art21.org/artist/doris-salcedo/
Siah Armajani Anarchist Contributions
Andrea Zittel https://art21.org/artist/andrea-zittel
Theaster Gates Every Thing and The Durden is Beautiful Lisa Yun Lee
Theaster Gates TED https://www.ted.com/talks/theaster_gates_how_to_revive_a_neighborhood_with_imagination_beauty_and_art
ARCHITECTONIC STRUCTURES
Fall 2018

WEEK 1
AUGUST
27. Introduction to the course. Requirements/Attendance.
   Discussion of wood and hand tools.
   Read in class- *Nature, Imagination and Matter*, Bachelard
   Introduce in class assignment: MATERIALS AND STRUCTURES

29. Read: The Preliminary Course, Albers, Bauhaus Workshops for Modernity, Diekman
   Lecture/Discussion- Bauhaus/Design and the Handmade.
   Hand tool training, demo handsaws, chisels and how to join wood without glue.

31 Friday Workshop: Hand tools/ Electric Hand Tools

WEEK 2
SEPTEMBER
3. No Class, Labor Day

   In class workshop on formal structures and structural principles.
   Work time --Hand tools MATERIALS AND STRUCTURES

7. Friday Workshop: Electric Hand Tools

WEEK 3
10. Work time- Hand and electric tools MATERIALS AND STRUCTURES

12. Read: Passages in Modern Sculpture, "Analytic Space Futurism and Constructivism,"
    Materiality, "Making Culture and Weaving the World," Tim Ingold
    Introduce assignment: BIOLOGICAL STRUCTURES

14. Friday Workshop: Woodshop Training 10-5pm. Please sign up for a 1-hour session.
WEEK 4
17. **Read/View**: Martin Puryear Artistan - Michael Auping
   [Martin Puryear](https://art21.org/artist/martin-puryear/)
   Art 21+ Video Screening
   **BIOLOGICAL STRUCTURES** - Introduction to forms and materials, steam bending, lamination, pop riveting

19. **Read/View**: The Devices of Mona Hatoum - Anna C. Chave
   [Mona Hatoum](https://www.tate.org.uk/whats-on/tate-modern/exhibition/mona-hatoum)
   Steam bending. Sketches and models + Individual meeting with Gerri
   Work time, **BIOLOGICAL STRUCTURES**

21. **Friday Workshop**: Lamination, steam bending, build model for projects.

WEEK 5
24. Work time, **BIOLOGICAL STRUCTURES**

26. Work time, **BIOLOGICAL STRUCTURES**

28. **Friday Workshop**: Building final work **BIOLOGICAL STRUCTURES**

WEEK 6
1. Work time **BIOLOGICAL STRUCTURES**

3. Work time **BIOLOGICAL STRUCTURES**

5. **Friday Workshop**: Building final work **BIOLOGICAL STRUCTURES**

WEEK 7
8. **Crit** **BIOLOGICAL STRUCTURES**

10. **Crit** **BIOLOGICAL STRUCTURES**

WEEK 8
~FALL BREAK~

WEEK 9
22. **INTRO**: OBJECTS AND SPACES FOR LIVING
   **Read**: Home Delivery: *Viscidities of a Modernist Dream*, Barry Bergdoll
   [Allan Wexler Absurd Thinking](https://art21.org/artist/allan-wexler/)
   *Assignments in Purpose, Process is Performance* Patrica Phillips
   Drawing and Google Sketch up work shop, Box building

24. **Read**: The Poetics of Space, Drawer, Chests and Wardrobes, Gaston Bachelard
   [Doris Salgado](https://art21.org/artist/doris-salgado/)
   Drawing and Google Sketch up work shop, Box building

26. **Friday Workshop**: Box building 1- Miter, lap and finger joints; Nail gun
   Drawing and Google Sketch up work shop

WEEK 10
29. **Read/View**: Siah Armajani Anarchist Contributions
    Working time OBJECTS AND SPACES FOR LIVING

31. **Read/View**: Theaster Gates *Every Thing and The Durden is Beautiful* Lisa Yun Lee
    [Theaster Gates](https://art21.org/artist/theaster-gates/)
    Art 21
    TED [Theaster Gates](https://www.ted.com/talks/theaster_gates_how_to_revive_a_neighborhood_with_imagination_beauty_and_art)
    Dorchester Projects

2. **Friday Workshop** Laser training

WEEK 11
5. **Class Meeting**: discussion of models + draft plans due
   Work time OBJECTS AND SPACES FOR LIVING

7. Work time OBJECTS AND SPACES FOR LIVING

9. **Friday Workshop**: OBJECTS AND SPACES FOR LIVING
WEEK 12
12. Work time OBJECTS AND SPACES FOR LIVING
14. Work time OBJECTS AND SPACES FOR LIVING
Friday Workshop: OBJECTS AND SPACES FOR LIVING

WEEK 13
19. Work time OBJECTS AND SPACES FOR LIVING
21. Work time OBJECTS AND SPACES FOR LIVING
THANKSGIVING

WEEK 14
26. Work time OBJECTS AND SPACES FOR LIVING
28. Work time OBJECTS AND SPACES FOR LIVING

WEEK 15
DECEMBER
3. Final Crit
5. Final Crit
MATERIALS YOU MUST HAVE

3-ring binder for readings
Sketch book/notebook
Drawing pencils
Grid paper
Tracing paper
I will provide wood, aluminum, and plaster for the projects.
Please see us for the resource list if you need other materials.
Intro: MATERIALS AND STRUCTURE

"Only after studying forms and attributing each to its proper matter will it be possible to visualize a complete doctrine on human imagination, then one can appreciate the fact that an image is a plant – which needs earth and sky, substance and form. Images discovered by men evolve slowly, painfully, hence Jacques Bouquet’s profound remark: “A new image cost humanity as much labor as a new characteristic cost a plant.”

Many attempted images cannot survive because they are merely formal play, not truly adapted to the matter they should adorn. Therefore, I believe that a philosophic doctrine of the imagination must, above all, study the relationship between material and formal causality."

--Gaston Bachelard, Water and Dreams; An Essay on the Imagination of Matter, 1942

“To experiment is at first more valuable than to produce; free play in the beginning develops courage. Therefore, we do not begin with theoretical introduction; we start directly with the material…”

--Josef Albers, Preliminary Course

An introduction to the formal visual language and the Bauhaus concept “form and function” of materials. In-class discussion of formal principles and the physical dynamic of forms will demonstrate sculptural issues. Reading from Josef Albers will outline formal issues such as tension and compression, symmetry and asymmetry. The Bauhaus focus on economy of form, the use of industrial “flat” materials created at the turn of the century such as paper, steel, cloth, plywood and plexi and the contrast with the natural materials will be looked at. One structure will be hand-built from scrap wood using a Japanese saw, mat knife and carving tools. Techniques using non-adhesive joinery will be employed.

Assignment:
Make one hand-built structure after learning to use these materials, tools and process:
Materials – scrap wood, natural, ply and milled lumber, scrap plexi, plastics and cardboard
Tools – Japanese saw, mat knife and chisel
Electric hand tools
Process – Lap joints, finger joints, notching, strapping, pining and wiring (no glue allowed)

The work must address two of these Formal Visual Principles:
Balance/weight/counterweight
Numbers in form and/or pattern
Symmetry/asymmetry
Texture

The work should explore materials:
How does the direction of the wood grain affect the piece visually and structurally?
Does one type of wood hold a cut better than another?
How does the density of wood affect the work?
Is the piece more stable when made of one material than of another?
What happens when you put materials with various textures beside each other?
What is the difference between industrial materials vs. natural materials?
How can you join materials with different properties?

Formal qualities to consider:
Vertical vs. horizontal
The dynamism of the angle
Numbers and forms, a singular form versus a pair, 3 versus 4
Why 5 has rhythm
“Structural Intrigue,” or a work that seems to defy gravity
Basic geometric solids: cube, sphere, pyramid, cone and cylinder
**Reading: Bauhaus: Preliminary course: Albers**

Albers taught an introductory course in fundamentals of design for those studying industrial design, crafts and fine art and architecture. He believed that all students needed to know the fundamental characteristics of materials. He believed in and enforced the “Economy of Form,” or how to make a piece with minimal fabrication. The Bauhaus is a school born out of the industrial revolution. Its philosophy embraced the new materials of the day and trained students to use them with craftsmanship and formal qualities. The Bauhaus also promoted both a new social and political structure that believed there was no hierarchy in the arts and crafts and that crafted objects that functioned for the body could be made available for all, both rich and poor. The Bauhaus system of education was duplicated in American art schools as teachers such as Albers and Gropios fled the National Socialists.

The aftermath of WWII and the codification of art has lead us to the present point in which we reconsider the ideal of “form follows function” as a part of a relational aesthetics. The movement in the last 30 years to consider the viewer as user, viewer as producer of meaning, and the need for social and political interaction, and the undeniable need for housing has spurred artist such Wexner, Kawamata, Armajani to make a hybrid set of sculptural forms that craft materials for both concept and function.

**Readings:**
- Bauhaus Workshop for Modernity, Bauhaus Fundamentals, Dickerman
- Modern Sculpture Reader, New Bauhaus and Space Relationship, Laszlo Moholy-Nagy
- Sculpture Now, Design and the Handmade, Moszynska

**Resources:**
Please look at these resources to understand how this lesson has played a vital role in the formation of modern and postmodern thinking.

- Allan Wexler [http://www.allanwexlerstudio.com](http://www.allanwexlerstudio.com)
- Olafur Eliasson [http://olafureliasson.net/archive/artwork](http://olafureliasson.net/archive/artwork)

BIOLOGICAL STRUCTURES:
The architecture of cellular, molecular and skeletal forms,
Architecture that holds bodies.

“If we have to be connected with climate, bacteria, atoms and DNA, it would be great to learn how those connections could be represented.”
-Bruno Latour, Some Experiments in Art and Politics 2011

“.... The logic of the form is carried by the surface, and the notion of a dualistic split between inside and outside is resolved through a visual unification of meaning of the external structure and the experimental center of the work.”
-Rosalind Krauss on Vladimir Tatlin’s, Monument to the Third International, Analytic Space: futurism and constructivism. Passages in Modern Sculpture

Project:
For this assignment, you will explore the skeletal structure of architecture, machinery, or organic forms. Formally the work will express the dynamics of a self-supporting structure, showing patterning, movement, rhythm, and progression. Both the structure and the negative space it defines will be perceived and inhabited mentally and physically. The material of the sculpture is as much a part of its subject as are the techniques used to craft it. You will learn fabrication methods such as wood bending and lamination; learn to understand the basic structural possibilities of wood, and how to use all eclectic hand tools and the shop equipment. Various fasteners and joinery methods will be demonstrated.

You will begin your exploration on paper and by building models. In a one-on-one conference with me, we will discuss the methods of fabrication, the materials that could be used, the scale and other issues. The process and materials will be carefully discussed and chosen so to specifically respond to the forms you wish to create.

Demonstrations and workshops in class and on Fridays on bentwood lamination, lashing, pop riveting, joining wood, bending and riveting aluminum will inform your fabrication. Stretched cloth, plastic sheeting, wire, and rope may be used.

The scale of the work should be at least 2’ and no bigger than 6’ so that it relates to the body on an architectural scale. The work must be installed in the gallery and play off of the architecture, the light and the shadow available in the space.

Historical issues to consider when designing the work:
How did the early modernists embrace and use industrial materials?
How does the X-ray influence this early work?
What does it mean to “mirror mental space”?
What does he gain from vernacular cultures?
Design and mechanical issues to consider:

How does the work look and act if we see all of the joints?
Can you evoke this rather than illustrate underlying forms? (i.e., ribs, interiors of buildings, etc.)
How does the piece relate to your body?
What happens when light is projected on the work?
Which material is best for your work? For example, how does paper and wood behave versus cloth and metal?

Tools:
All wood hand tools
Metal roller
Steam bender
Molds for lamination
Jigsaw
Chop saw
Band saw
Drill
Pop riveter
Nail gun

Readings/Viewings
Project 2.
Martin Puryear Artistian: Michael Auping
Passages in Modern Sculpture, Analytic Space Futurism and Constructivism, Krauss
Materiality Making Culture and Weaving the World Tim Ingold
The Devices of Mona Hatoum Anna C. Chave
Martin Puryear: Multiple Dimensions https://www.themorgan.org/exhibitions/martin-puryear

Passages in Modern Sculpture Rosalind Krauss Chapter 2 Analytic Space: Futurism and Constructions
Social political issues relating to industrial revolution are at the heart of the work made by the Futurist, the Constructivist, the Bauhaus school, as well as the Dadaists to follow. New formal visual issues emerged via a desire for a new type of art, a new art school, and a new art audience which formed various aspects of modernist art fabrication and display. This chapter points out the new vision artists had via optics, film, photography, and the X-ray machine and the new materials including sheets of plastic, metal, laminated wood, and industrial cardboard that gave their work new form and meaning.

Many of the works featured in the article embrace both time and space, activating the architecture, and giving one multiple visions of the form as one moves around it. Concepts such as installation, metaphysical space, and simultaneous readings come forth. These artists blurred the boundary between sculpture and architecture. Their works were research-based investigations.

References:
MAYA LIN Between Art and Architecture https://www.youtube.com/watch?v=UvLNOakf1Rs
Eva Hesse https://www.nytimes.com/2006/05/12/arts/design/12hess.html
Cini Boeri http://www.ciniboeriarchitetti.com/architettura.html
Wendy Maruyama https://wendymaruyama.com/home.html
Carol Colet http://thisisalive.com/biolace/
Sonja Baumei- http://www.sonjabaumei.at/
Sarah Sze http://www.sarahsze.com/
Ellen Driscoll http://www.elliendriscoll.net/project_info/installations/33
Olafur Eliasson http://olafureliasson.net/archive/artwork
http://www.moma.org/interactives/exhibitions/2008/olafureliasson/#/intro/
Sol LeWitt https://www.sfmoma.org/artist/Sol_LeWitt
Tadashi Kawamata http://www.tadashikawamata.com/index.html
Los Carpinteros http://loscarpinteros.net/
Siah Armajani http://www.alexandermenne.com/artists/siah-armajani
Tomás Saraceno http://tomassaraceno.com/
Enst Heackel https://www.youtube.com/watch?v=6XQ2z9GERtl

General Reference:
Shaker furniture, Japanese construction, Gothic Architecture, Eiffel Tower, Macintosh Furniture, Ethiopian Bamboo Hut, Horuji Temple in Japan, Green Houses. Look at crystallization, DNA helix, cellar division, Japanese joinery, window blinds, fans, wheels, rib cages, birdcages, and support beams.

Materials:
Cedar strips for steam bending
Birch ply for bending
Various pre-cut wood strips
Canvas/cloth
Papers/paper machine
Plexi and plastic sheeting
Aluminum strips

Construction Methods Covered:
Lap joints, mortise and tendon joints
Glue lamination
Steam bending
Pop riveting
Bolts & screws
The spaces and objects for living we build have many uses. They do not just hold us or take care of our physical needs, they give us rest, a mental space, allow us to feed our heads and bodies. A space or objects materials, forms, scale, color and light effect how we can be with in them.

Due dates - Drawing/ Ideas/ Final

Humans have adapted to their environment by using their higher cognitive ability, tool making skills, observation, and creativity. They observe animal adaptations and adopt these strategies. Native peoples use the available materials from the environment to create shelter. In an era concerned with ecological footprints, as well as homelessness, how much shelter does each human need?

What does shelter mean?

Shelter: (A) A structure that provides privacy and protection from danger.
(B) Protective covering that provides protection from the weather.
Adaptation: A process whereby a "population becomes better suited" to its habitat.
(C) to take shelter from a storm, to give shelter to others seeking refuge

Assignment
OBJECTS AND SPACES FOR LIVING,
Dwelling and Thinking

Questions:
What does shelter mean?
Who gets a comfortable space to sit/sleep/eat in that housing?
Who makes our houses and chairs?
What materials are used to make them? Where are they from?
Where are our dwellings located?
When does a dwelling become a space of thinking?

You may design a model of a building or object for or a prototype of your project.
For example, if choosing to make an object, like a closet, a chair or table, you may build this full scale.
You are welcome to use readymade spaces, objects and materials of any kind.

You choose the function. This can be an outdoor space for dwelling, a space for meditation, a temporary shelter a gathering space, a shed, a green house, or an art space. However, it must engage us in living and be usable.

**Final Presentation**
If designing a dwelling; drawings/sketches ideas + a model to scale 1” =1’
Or
If designing an object for living, you can choose to make this full scale.

**Tools/Materials**
Drafting boards, drawing materials, Google sketch up
Balsa and model building materials
Laser to cut elevations + all
Tools- and materials you used all semester

**Readings/Films**
*Home Delivery: Viscidities of a Modernist Dream,* Barry Bergdoll
Allan Wexler *Absurd Thinking* Assignments in Purpose, *Process is Performance* Patrica Phillips
https://www.youtube.com/watch?v=NVyQHEbTAO

*The Poetics of Space* Drawer, Chests and Wardrobes, Gaston Bachelard
Doris Salsado https://art21.org/artist/doris-salcedo/
Andrea Zittel https://art21.org/artist/andrea-zittel
Theaster Gates *Every Thing and The Durden is Beautiful* Lisa Yun Lee
A-Z Andrea Zittle High Desert Sites/ +A-Z and everything in Between
Theaster Gates TED https://www.ted.com/talks/theaster_gates_how_to_revive_a_neighborhood_with_imagination_beauty_and_art

**Artists Links:**
**Artist/Architects:**
Maya Lin http://www.mayalin.com/
Mary Miss http://marymiss.com
Kazuyo Sejima -https://www.archdaily.com/tag/kazuyo-sejima
Allan Wexler http://www.allanwexlerstudio.com
Siah Armajani http://www.alexandergray.com/exhibitions/siah-armajani
Psycho-Buildings https://www.dezeen.com/2008/05/31/psycho-buildings-at-the-hayward/
SIMPARCH http://www.simparch.org/
James Turrell: http://jamesturneill.com/
Theaster Gates

**Installation Artist:**
Alison Kudla: http://alisonkudla.com/
Alfredo Jaar: http://www.alfredojaar.net/index1.html
Amish Kapoor: http://www.anishkapoor.com/
Ann Hamilton: http://www.annhamiltonstudio.com/
Anthony McCall: http://www.anthonymccall.com/
David Willison and the Museum of Jurassic Technology: http://www.mitgiftshop.org
Diane Thater: http://www.thaterstudio.com/
Krzysztof Wodiczko: https://art21.org/artist/krzysztof-wodiczko/
Marlene Oliver: http://marlèneoliver.com/exhibitions/presentfuture
Michal Rovner: https://www.youtube.com/watch?v=kC3m5sRnq0
Yayoi Kusama: https://whitney.org/Exhibitions/YayoiKusama
American vernacular architecture has been a consistent visual motif in Armajani’s practice, and is embodied in his public works, including bridges, gardens, and outdoor structures. In Armajani’s words: “I am interested in the nobility of usefulness. My intention is to build open, available, useful, common, public gathering places—gathering places that are neighborly.” These are thoughtful modulations of space and things, emblematic of distinctive and extensive oeuvre that has primarily engaged with politics and philosophy at a formal level.
When closed, a simple pitched roof building. The building opens to reveal a complexity of functions. The interior provides a chair and its own storage place, a sliding writing surface, cubby holes for pencils and letters, shelves for supplies and pegs for hanging. Each quadrant was built independently from each other and without measuring. When brought together the white colored pieces of wood were used to fit the parts together snugly to create the whole.

Little Office Building #2, Allan Wexler

Evaluation:
All students are required to follow the following guidelines for full course credit:

* Attend all scheduled class meetings.
* Work efficiently and attentively in class.
* Contribute to critiques and discussions.
* Do the readings, review the artists, and take notes.
* Make models and drawings for each project.
* Complete all assignments.
* Follow safety regulations and clean up work area before leaving.

I keep a record of each student’s work, his or her progress, strengths and weaknesses. I will dialogue with each of you in class daily while working. We will have individual meetings/conferences to plan each project. This occurs 4 times during the semester by appointment. We will have group critiques after each project is complete. I will make a point of giving you feedback on the final work during the group crit. I keep a record of critiques for each assignment and I photograph the finished work for my records.

Please note that, my response to your work will mainly come in verbal form. I will respond in written form to the peer-review and your self-evaluation forms after each assignment. If at any time while making the project or when the project is complete you want an individual conference, I am available outside of class, Monday from 9-12, Tuesday/Thursday 1-4.

I use the following criteria in evaluating student work:

**Attendance 50%**
The strength of a group studio art course comes from the interaction of ideas and observation of others. In missing the class, a student undermines the effectiveness of the course and the educational experience of all. Each student must arrive prepared to work with appropriate materials for the assignment, project, exercise, critique, discussion, or demonstration for that particular class day. Unprepared students may receive an absence for the day.

Attendance and active participation in critiques is critical to learning in the studio classroom. All students are expected to contribute verbally by commenting or questioning aspects of the work being critiqued. Attendance at critiques is mandatory. Any student who knows they will be absent from a critique must contact the instructor prior to the critique.

A verbal self-critique and or a peer review will be done for each project. This includes information on the technical skills you learned, the conceptual idea you worked with, and the artists and readings we covered. You will be asked to take notes in your sketchbook and on a classmate's work.

1. You must be in the studio by 1:15 p.m. We will begin the class with a discussion and or presentation. It is vital that you are here for the beginning of the class. If you are more than 30 min. late for a class without a reasonable excuse, you will be marked absent.
2. Participation in the classes includes contributing to dialogue, taking notes on technical skills or artist presented.
3. Come prepared to work on projects in class.

**Assignments 40%**
Students should expect to spend 6 hours per week in class and approximately 4 hours outside of class working on assignments. The studio classroom is open for student use Tuesday, Thursday, and Friday afternoons.

All assignments will have a short reading and a list of artists to be read/reviewed prior to the introductory lecture. The readings will guide the conceptual framework and content of your work.

For each assignment the class will go over a series of technical skills.

We will have individual conferences discussing preliminary sketches and models for the assigned projects.
1. Turn in projects on time. Your grade will be lowered 10% for each week the project is late.
2. Generation of basic ideas and exploration of solutions. This includes drawings, models, and exploration of materials.
3. Visual organization of your forms. Your ability to follow a system of design.
4. Conceptual thought process put into visual forms. Your ability to convey the ideas covered in the assignment, the readings and artist referenced.

Safety and Etiquette 10%
Your safety is of primary importance to us. We will train you to use all equipment and the shop properly. You must attend safety training for all hand tools, electric tools, and the shop equipment at the beginning of the semester. If you do not attend the training session, you will not be allowed to use the tools. Laura will check and evaluate your ability to use tools properly. This is a communal studio. You may not leave any materials out on tables or on the floor after classes. If you are working on a large-scale project, make sure Laura and I are notified and we will help you to find the proper placement and storage of the work. Chronic failure to clean up your work area and properly store materials will result in a 10% drop in your grade. Failure to follow our safety regulations will result in a 10% drop in your grade and/or dismissal. Unsafe practices with equipment, removal of equipment from the studio, allowing others not in the course to use the equipment, or using the equipment under the influence of alcohol or drugs will result in your dismissal from the course.

1. Keep the studio and shop clean and clear of obstruction.
2. Sweep up and throw away excess materials from your area when finished working.
3. Put away tools.
4. Store your work properly.
5. Do not dispose of flammables, wax, paint or plaster in the sink!

SHOP AND STUDIO USE
Choose an area of the studio and a table space to use on a regular basis. Put your name on a shelf and use it for small storage. Put your name on a locker and use it for large storage (both may be shared). You are responsible for all tools and materials you get out so put them away when you are finished. Use the electrical plug closest to your table; do not have extension cords running on the floor. Use loud and messy tools such as sanders & girders outside.

WOOD SHOP
You may only use the wood shop when wood shop tech is present. Louise’s hours are 9-5 weekdays. You may only use the shop after you have been trained. Training will take place on Fridays beginning in September.

STUDIO ACCESS
You may have card access to the art building and use the studio when you wish. The tool cabinet in the corner of the studio has tools for your use. Make sure you lock up the cabinet after getting tools.