

Words to live by:

RESPECT ~ HONESTY ~ INTEGRITY ~ DISCOVERY ~ CREATIVITY ~ PLAY
3D DESIGN- ART 5 M & W, 9-Noon, Room 760

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COURSE CONCEPT (topics and outline)

What is Three Dimensional Design? It is the art of understanding volume, space, and form. We explore the three-dimensional world. Our mission is to study form (the shape of things) from many points of view.

Unlike most other art concepts, 3D is in the round. We will examine issues such as scale, structure, volume, spatial relationships, and transformation of form through time.

All physical art forms are 3-dimensional. A painting has thickness, texture, and mechanics keeping it taut. Even etchings have depth, the controlling of which determines the quality of the work.

Even before taking this class you know plenty about the physical world. How and why we understand physicality relates directly to our real-life experiences in space. When we touch something smooth, we react differently than when we touch something sharp or jagged. We know how to move through space so thoroughly that we often forget the huge brainpower dedicated to the task. Our eyes are stereoscopic instruments by which we determine our relationship to the 3D world using perspective and visual differences between our eyes. Our ears tell us amazing things about our volumetric space: we can hear the difference between textured and smooth surfaces: hard and soft, thick and thin! We do all this subconsciously. Imagine what you can do once you become conscious of our 3D world.

When working large or small, physical attributes of materials change. The smaller something is the “grainier” it seems. The larger it becomes, a greater role is played by weight and stresses.

How do things hold together? What are the defining elements that give it strength, surface, and mass? Everything has structure, which is informed by material characteristics. This in turn influences function and form. There is a famous quote: “form follows function”. This means that the shape of a thing is determined by what it does.

3-D thinkers must learn how to play. They must also be curious and adventuresome. Failure comes only to those who do not learn from mistakes. Thomas Edison said this after finally making a working light, “ now I know 10,000 ways not to make a light bulb!”

In our class, we make physical things. This is an introduction to sculptural thinking. We may work with paper, clay, plaster, foam board, cardboard, hardware, wood, paint, metal, and more (and the tools to manipulate them).

IMPORTANT NOTICES:

IMPORTANT NOTICE 1: My philosophy in teaching and learning is that everyone is an individual, with different learning speeds, styles, and needs. “Learning Differences” are real, and must be recognized. Further, I feel that it is important for a group to understand and complete a project, even if this means extending it a bit if necessary, as opposed to simply moving on to another concept that relies on knowledge of its predecessor before this knowledge has been attained. That said, projects would not be extended if the majority of a class has completed it, and ultimately, all projects must be completed by critique time.

IMPORTANT NOTICE 2: Although there are specific learning outcomes in this class, they can be accomplished in a variety of ways. I believe in out-of-the-box thinking and creative solutions. Therefore, I will approach this class with

an eye towards flexibility in regard to defining class projects. I expect you, as artistic thinkers to take the challenge of not knowing exactly what may come next. I will assess the needs of the group in assigning the order and type of projects as time goes on. As a lesson in life, it is very important to allow yourself to try new things.

You are provided with a fill-in-able calendar. This is your official calendar of projects. Bring it with you every day, along with your sketchbook and pencil. Fill this calendar in each time I announce a new project. It is your responsibility to be aware of project timeframes, materials lists, and parameters.

IMPORTANT NOTICE 3: For this class, MIDTERM is simply a date somewhere in the middle of the calendar. There is no Midterm project or test. Also, the FINAL is simply the last critique and debriefing of the class. It is of equal weight to all projects, and thus is important to attend (as are all class times and critiques). The final day is of great importance; especially since it is the last time you can present a project to me for a grade. If, at the end of the final class I have not recorded each of your grades and acknowledged this with you, your grade will suffer.

DHR REQUIREMENT:

DHR: You will be required to make visits to the SRJC Art Gallery as part of this class at times other than our class meetings. This time is called DHR, and amounts to 4.38 hours (exactly 4 hours, 22 minutes, 48 seconds) over the course of the semester. You will be responsible for doing physical analyses of three distinctly different pieces in the Faculty Show during the second half of the semester. Your investigation will result in a thorough description of the properties of these three works:

Define: volume, structure, material, luminescence, reflectance, texture, smell, sound, flexibility, rigidity, weight; what elements contain and do not contain these properties; what can you ascertain without physically touching the artwork? How is it put together, what holds the elements together, how do media bind with substrates, if any? Is it fragile? Will it deteriorate quickly or slowly? What supplies, tools and processes were necessary in its creation? What are the environmental impacts? Is any part of the material development toxic or low impact, and are any of the materials themselves toxic or inert? Does it contain minerals, organics, liquids, fluids, or solids? What do you believe each piece cost in dollars and resources to produce, and how much time do you think it took to make? Other classes will require you to do formal aesthetic analysis, which is why we are not.

I AM NOT YOUR DHR INSTRUCTOR. Questions regarding the completion of this project should be directed to the DHR instructors, who are only available in the gallery during certain hours outside of class time. There is a timekeeper computer in the gallery keeping track of your visits.

CALENDAR: 32 class meetings plus final (96 hours)

Day 1- Introduction to class. Discuss this sheet, and the fill-in-able calendar.

Projects to mix and match-

A. (Typically 12 hours or 4 class periods): TGF (Transforming Geometric Forms)- Starting from 2-D paper learn to visualize, invent patterns for, and physically create new and complex 3-D geometric forms. This is accomplished through 6 simple successive transformations from a basic 3-D form described in lecture.

B. (Typically 9 hours or 3 class periods): PAPER BRIDGE- Students are put into groups, and with only one package of typing paper and pins, staples, paperclips, or brads, build a bridge spanning a 15 foot gap. The strongest 15' span supported 75 LBS! (An earlier 10' span supported 175 LBS.)

C. (Typically 12 hours or 4 class periods): CONSTRUCTIVIST PROJECT- Work with aluminum flashing and simple tools to make a full-sized human bust, an animal, or larger than life insect. A full-scale model must first be made from paper.

D. (Typically 15 hours or 5 class periods): PLASTER, ADDITIVE & SUBTRACTIVE- As the name implies, we will be studying the additive and subtractive processes of sculptural creation using casting plaster. This project is 3-fold. You are to create one mold/casting from your hand, a detailed carving of an actual object (actual size) using the subtractive process, and another carving of a sculpturally complex abstract non-objective form, using the additive and subtractive process. A relief carving?

E. (Typically 18 hours or 6 class periods): LEARNING FROM CALDER- A little Art History combined with an introduction to kinetics. There are two components to this project. The **Wire Portrait** (life-sized facial study), and the **Mobile**. The Wire Portrait reveals how line in 3-D can be used to create the illusion of volume and motion. The Mobile project is a simple way to introduce true motion and variation of form through time. You will be working with metal, found objects, and paint.

F. (Untested hours or class periods): MYSTERY PROJECT- Let's try something new and untested.

G. (Typically 9 hours or 3 class periods): ARCHITECTURAL SCALE: - Teams make lightweight simple structures that students can walk or climb through. This really opens your eyes to space and volume. It may be made of cardboard, Styrofoam, inflatable plastic sheeting, or other options.

H. (Typically 12 hours or 4 class periods): STUD TOWERS- Each person gets one 2 x 4 stud and builds a tall, freestanding tower. No other materials are allowed in building your tower. The record so far: 35' high.

I. (Typically 18 hours or 6 class periods): SELF PORTRAIT MARIONETTE- Make a walking, talking, "mini-me" who can let loose your alter ego on the stage. Learn to make a scale reduction, carve wood, create mechanical joinery, and even clothes. This is a major project in the study of human form that takes lots of time.

J. (Typically 18 hours or 6 class periods): POP-UP BOOK- You will be combining the skills of fine artist, designer, mechanic, and storyteller into one fabulous 6-page book, fully illustrated, bound, and paper-engineered to reveal 3-dimensional forms of different mechanical design on each page. The goal is to create a portfolio-quality work of art and engineering. Many professional books will be studied.

K. (Typically 12 hours or 4 class periods): WORD AS IMAGE (homage to Max Hein)- Think of a word. How can you make that word physical? An example: "PIPE", constructed from threaded conduit & fittings. Another: "WRAP", made of string and paper formed over soft foam. "MOLD", spelled out in damp pieces of bread a month old.

L. (Typically 18 hours or 6 class periods): LAMP PROJECT- Use one of the five basic Platonic Solids, as well as their truncated counterparts, as the basis for a hanging lamp. Take the basic planar element(s) of the volume, transform and extend it (them) onto unique, joinable modules, which are linear, curvilinear, or organic in their design. The end result is a visually complex and cohesive light-emitting object.

M. (Due by the date of the Regatta): HANDCAR REGATTA (Fall class only)- Build and race a handcar along the railroad tracks at courthouse square. In the Fall 2008, our class won a prize, with 10,000 people in attendance.

CLASS RULES & REGULATIONS

Class format: lecture/lab with homework when necessary. Because of the nature of the classroom experience, attendance and participation are essential. There will be individual and group projects that will be critiqued, in a group setting. This is a "fundamental" class so there will be little time to perfect your craftsmanship in any given area. We will be exploring a wide variety of materials and ideas. As in any studio class, you will be doing a lot of work in the classroom so be prepared and on time. Being persistently late or leaving early will lower your grade.

ROLL is taken at the beginning of class. You are considered tardy if you come after roll is taken, and you will need to **ask that I mark you present, or the day may be counted as an absence.**

NO CELL PHONES are allowed to ring in class. If yours rings, you may be asked to leave the classroom. •••No

talking on cell phones in class (this is extremely rude) and if you do so, you may be asked to leave (which counts as an absence). •••Don't text-message or check for messages during class time. STAY PRESENT and STAY FOCUSED. If you break this trust, you may be asked to leave for the day.

WORK ON CLASS PROJECTS ONLY. Doing homework for another class will count as an absence, and yes, people have been known to do this!

NO MUSIC/LISTENING DEVICES during lecture (rude), or when operating machinery (unsafe), or when in a room with operating machinery (very unsafe).

NO CHITCHAT DURING LECTURE. Instead, be attentive, take notes, and ask questions.

DO NOT CALL MY VOICEMAIL TO TELL ME YOU WILL MISS ONE CLASS OR FOR INFORMATION ABOUT AN ASSIGNMENT. Ask other students about assignments so you can be caught up (and borrow their notes), or ask me about assignments upon return. Projects are far too complex to describe by telephone.

CLASS BREAKS ARE ALLOWED. You are given 10 minutes per hour of class time, totaling 30 minutes per day. Take them as needed, but not during lecture, or the beginning/end of class.

Grading Policy

(From AFA ARTICLE 9)

9.05 GRADING: *Every faculty member shall maintain the exclusive right and responsibility to determine grades based upon professional judgment. The determination of the student's grade shall be made by the course instructor and — in the absence of mistake, fraud, bad faith, unlawful discrimination, or incompetence — shall be final.*

My grading policy is simple. After completion of each assignment, an assessment will be made to determine your class grade up to that point, determined by three criteria:

- 1) A project that is completed on time and within the guidelines and expectations defined at the beginning of the project shall receive an "A" grade for the project. A missed assignment is an "F". All other specific project grade valuations will be discussed at the beginning of, and during, the project work time.
- 2) Attendance and tardiness will be examined over the project time frame as well. For each day you are absent, your project will drop one letter grade. For tardiness and leaving early, 1/2 grade per offense. (School Policy: students, who miss 10% of the semester, can be dropped. This equates to 3.5 total classes. I will make an attempt to discuss your personal issues before I implement this policy.)
- 3) The individual project grade determined by 1 and 2 above will be averaged with each earlier project grade to determine your current semester grade. Barring your missing the final, you will leave the class already knowing your final grade. There are no tests, just projects.