

Teaching Portfolio

by Kaichuan Wang

Teaching & Learning in Art + Design Department

Teaching Philosophy

WHO AM I

师者，所以传道守夜解惑也

'A teacher is the man who passes on principles, instructs practices and dispel confusions.'

This is quoted from Han Yu, who lived back to 1300 years ago in ancient China. As a philosopher, he wrote articles explaining his own understanding of the essential of teaching. I like his definition in which a teacher is a bridge between generations, playing a role to guide the youngs. However, the educating model nowadays has been so different from the ancient times in which case an aged instructor would be much more knowledgeable and experienced than his students, whereas today, all professions got very much focused and a teacher's knowledge can hardly cover all students' interest, and interdisciplinary study is playing a vital role in boosting the progress.

三人行，必有我师焉

'Confucius said that among a group of three, there is always someone I can learn from.'

As a successful educator, Confucius established an outstanding system of educating and emphasized the correctness of social relationships. He pointed out that instead of a profession, teaching and learning should be a life-long practice, that we can always choose to follow the strengths of others, and use the shortcomings to reflect upon ourselves. I like this quote since it applies to everyone and encourages people keep humble and eager to learn.

Compared with being a teacher, I have been a student for a way longer time, but I don't see much difference between a teacher and a student, we are learning and teaching all the time. It's the experience of discovering, thinking and getting inspired by others that makes us better persons.

WHAT IS MY GOAL

A designer deals with materials, especially a furniture designer, the practice is based on the familiarity to the tangible materials which requires physical experience that both mind and hands are fully involved. Further more, besides to know how to manipulate the very materials, it is my belief that designer should be aware of the relationship between the designed object and the future user.

The key of the class will be to CONNECT, mind and hands, body and materials, human and objects, raw and fine, imagination and reality. In order to achieve that, students will be required and also encouraged to get fully engaged with the material world. This might sound a bit weird since we are engaging the material world all the time, but actually most of us are overlooking the physical experience that takes place every day, or ignoring the value of our knowledge gained from it. For instance, we all know that wood has grains, but have you ever considered that the grains give wood an important quality that glue works with grains on certain orientation, otherwise, the bond would be very fragile.

The first class will start with students playing with a bunch of random objects collected everywhere, and they will try to use given materials on the table to connect, split, file, smooth, scratch and crush each other. Random behavior and purpose will be encouraged. The hand-on experience will provide a brand new access to the material world since it goes beyond the boundary of imagination.

WHAT DO I DO

The sense and interest to materials will be a good jump-off point to think of a designed functional object. The function is not limited to be working as a regular furniture piece such as a chair or a desk, it's more about the essential aspect of an object, for example, the essence of designing a seat is to build up a supporting surface that bears a human's weight, and it also encourages people to sit and rest. I think it's vital to a designer to have a view of objects' essence, it's the base to address problems and make decisions.

The practice will probably start from a short stool or side table, which has a fairly small scale and simpler function. In the process, students will learn the skills to use basic hand tools and engage more problems with manipulating materials, which is great since they will learn a lot from choosing materials and processes, making structures and applying finishes. What's more important, the project will end up with a tangible object standing in front of them serving a given objective. It's incredibly rewarding to look back to the original purpose and look into the object at this point, that a critique will emerge naturally and reinforce the students' sense to this practice.

Thinking with hands, this sounds pretty metaphorical, but actually, it very much correctly describes the product design practice. The hands bridge between minds and the materials, imagination and the reality, between the chaos and order.

Course Descriptions

Introduction to furniture design & making
Living Furniture: Basic Design and Making

Undergrad, Fall 2016
Non Major Elective
3 Credits
Estimated Material Cost: \$ 200
Instructor Kaichuan Wang

We live with furniture pieces everyday, but we rarely think about how they were made. Furniture design is a practice involves tremendous factors such as material quality, fabricating processes, human behavior and hospitality. The course aims to give students access to furniture design principles through making, and enhance the students' understanding of furniture in a larger context.

The course will start with research of how furniture was constructed, and this will be a continuous study strategy throughout the whole course. Students will be instructed how to develop a design concept, and how to bring the ideas to reality by making maquettes, mock-ups, models and prototypes. Students will be taught basic training of woodworking skills, as the main approach to fabricate their upcoming projects in this course.

Throughout the course, students will be required to design and fabricate two fairly simple furniture pieces: a short stool and, for the final project, a self directed piece, which will be the final project. The function of second project could be various but the instructor will give practical suggestions.

Students will be encouraged to think, make and develop their projects in full scale in order to gain more sense of space and dimension, therefore to have better understanding how a piece of furniture affects daily life.

Get hands dirty with what?
A beginning program for furniture design and making

Undergrad, Fall 2016
Non Major Elective
3 Credits
Estimated Material Cost: \$ 250
Instructor Kaichuan Wang

Product design demands great understanding of materials, which can only be gained from the long-term immersion into a physical practice with the material world. The objective of the course is to lead material explorations mainly with wood, metal and plastic, so that students end up with a good sense of how to construct functional objects with these basic materials. The course encourages students to get their hands dirty, and fully immerse themselves into materials.

Students will by playing with a bunch of random raw materials those were collected from their daily life, and they will be asked to ignore the objects' original function and apply different behaviors to them such as splitting, scratching and combining, in order to get more sense of the material qualities that are overlooked.

Students will have three weeks to study wood, metal and plastic and make simple functional objects with one material in each week. The final project will require a combination between two of their favorite materials from three they have learned about. The Students will be instructed how to develop a design concept, and how to bring the ideas to reality by sketching, modeling and prototyping.

Parallely, students will be asked to collect intriguing objects(both tangible or imagery), to share with the whole class and talk about their thoughts on the objects in terms of their materialized qualities. This will be a regular session of every class to keep their habit of observing and critical thinking.

We look, barely see
An advanced course for furniture design major

Undergrad, Fall 2016
Furniture Major Elective
3 Credits
Estimated Material Cost: \$ 400
Instructor Kaichuan Wang

We are surrounded by all sorts of object, and most of them are designed and man-made. Design is a tool, and a medium, and has become a vital element in our life. But is design always making positive influence upon us? As furniture designers, students will be encouraged to look into the essence of man-made objects, read and critically think about the intention behind the design language, in order to enhance their sensibility to objects, push boundaries of their understandings to materials and benefit their own studio practice eventually.

The course will be a combination of seminar and hand-on practice, and reading texts (quoted from <super normal>, <The system of objects>, etc.) will be distributed to students and class discussion will cover the reading materials and ask students to observe all sort of designed objects and think about the original purpose behind all the details, and a practice of describing designed object will be required. In the practice part, students will be required to generate and develop a design idea of sitting, to fit into a given context, fictional or nonfictional. Students will start from concept and sketching, and develop the idea through making full scale mock-ups, models and prototypes. There will be midterm critique to ensure every project on track and urge students to address the potential problems. The final outcome will be critiqued in the given context, and students will be graded based on their overall performance through the whole class.

Students will eventually end up with a better understanding of design language and strong sense of expressing through studio practice.

Course Syllabus

GET HANDS DIRTY WITH WHAT?

A beginning program for furniture design and making

Faculty: Kaichuan Wang
kwang@risd.edu
401-323-7666

Class meeting times : A Schedule

MT - 1:00PM - 6:00PM; 1/05/16 - 2/03/16

W - 1:00PM - 6:00PM; 1/07/16; 1/21/16; 2/04/16

COURSE DESCRIPTION

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COURSE PURPOSE / AIMS

- To offer a new perspective to look at everyday objects and interpret them as a designer who will get involved into designing and making objects.
- To give an access to understand the process of bringing an idea to reality.
- To basically demonstrate the practice of product / furniture design.
- To help develop one's idea in a materialized manner and also on an abstract level.
- To give an opportunity to develop a body of work based on one's interest and thinking.
- To give an access to gain the skill to deal with three basic materials, wood, metal, and plastic.

COURSE OBJECTIVES

A body of work that includes:

- three objects made based on the weekly study on one particular material. 45%
- one objects made with two materials as the final project. 45%

Multiple factors and standards which will be evaluated on each projects.

1. Concept development.
2. Engagement with materials.
3. Creative experimentation on processes.
4. Fine craftsmanship (which comes from practice).

Through critiques and group discussions, students will have an ability to

- Present their ideas and concepts in a more effective way. 5%
- Time management and planning their time schedule in completion of assignments. 5%

CRITIQUE CRITERIA

- The critique will be great opportunities to present the essential of one's ideas, which will be more about the story and process behind the product itself. There will be multiple platforms for serving different purposes of the critiques, such as small group discussion, class talk and formal presentation.
- Students will be encouraged to present their concepts and works in a clear and comprehensive way, and they will receive inputs from both peers and instructors to review their own works in new perspectives. And also, students will be highly encouraged to give opinions to peers' works, such as rising up the most thing interesting she/he sees in the piece.
- The critique will focus on issues such as the creativity, concept development and methodology, engagement with materials and craftsmanship.

GRADING / ASSESSMENT

Short project 1	15%
Short project 2	15%
Short project 3	15%
Final project	30%
Process development	15%
Participation / engagement and attendance	10%

SCHEDULE OF INSTRUCTION

Week 1.

Monday(1/05): Go over the syllabus

Class protocol, introductions, & orientation to Metcalf shop.

Assignment 1st in-class assignment: collect found objects that interest yourself and try to construct and deconstruct them in a way to explore the form and materiality of objects. Students will be encouraged to disintegrate the collected objects and make new ones out of the parts and so forth, and such experiments enhances the understanding to materials.

Class outcomes have basic familiarity to the working environment, remember safety tips.

Tuesday(1/06): Demonstration demonstrate basic skills of woodworking, including saw, chisel, file, plainer and safety instructions.

Assignment practice on the skills introduced by making a half-lap joint
Class outcomes understanding of a half-lap joint and the quality of wood grains

Wednesday(1/08): Tour visit RISD museum furniture collection
Students will be visiting the furniture collection in RISD museum, trying to interpret the masterpieces in terms of their historical context, materialized quality, and so on.

In class, start working on the project 1: use wood and at most another material to make an object by using at least one half-lap joint. The object needs to function in a certain way which goes with the design.

Week 2.

Monday(1/12): Critique project 1

Short critique of the pieces made in the previous week. A guest critique will be invited.

Students will present their concept drawings, models, process experiments and everything related to their projects.

Demonstration demonstrate basic skills of metal cold cutting, welding, sheet folding, sheet, rod and tube bending.

Tuesday(1/13): Practice the skill introduced on Monday

Assignment Use metal and at most another material to make a object by using the skills introduced. The object needs to function in a certain way which goes with the design.

Class outcomes understanding of metal working and some basic processes of strengthen the construction.

Week 3

Monday(1/19): Critique project 2

Short critique of the pieces made in the previous week.

Students will present their concept drawings, models, process experiments and everything related to their projects.

Demonstration demonstrate on plastic cutting, drilling, bolting, heat bending

Tuesday(1/20): Practice on the skills introduced on Monday

Assignment use plastic and at most another material to make a object by using the skills introduced. The object needs to function in a certain way which goes with the design.

Wednesday(1/21): Tour visit materials resource library

Continue on Project 3

Assignment start brainstorming and sketching on FINAL PROJECT:

choose two materials among wood, metal and plastic to design and construct a free-standing stool. The stool is required to be designed in either a fictional or nonfictional context. It also has to be fully functional and strong enough for people to sit on.

Key question the design of the final project will be context oriented, which means that a particular environment will be considered in terms of where this design will be placed. Students will have to define this context and think why this object is needed or appreciated in this context. A fictional context is also encouraged which might be an even more interesting method to address design thinking.

Week 4

Monday(1/26): Critique project 3

Group review for final project sketch

Students have open class time to work on final project

One in one meeting in the class and demonstrations will be made based on each student's' particular project.

Tuesday(1/27): Students have open class time to work on projects

Final project progress review at the end of the day

Key question What stage is the project at? Are you executing the original ideas? Or have changes occurred? Is there any decisions you have to debate upon? What about the context? Do they still match?

Week 5

Monday(2/02): Students have open class time to work on final project

One in one meeting in the class and demonstrations will be made based on each student's particular project.

Tuesday(2/03): Students have open class time to work on final project

Demonstrations as per projects

Wednesday(2/04): Final project critique

A guest critique will be invited.

Students will present final project and also their previous 3 short projects as a small body of work during the course. Students will start with the introduction of their pieces. For the final project, students will give full description about their contexts and how their pieces work with these particular contexts.

Key questions may be addressing the functionality or character of the objects, the human behavior motivated by the objects, the intention of the designer and how that is interpreted by the users.

The instructor and guest critique will lead the discussion in general, and in order to encourage peers to pose their opinions and questions, students will be asked to engage the pieces and give a short description of their experience or thoughts.

The critique will also address criteria such as concept development, materials experiment, process exploration, and handicrafts.

Shop clean-up

General Course and Attendance Policies

Students must be in alert attendance for all lectures, demonstrations, open-studio work time, and both individual and group critique sessions.

Students are expected to arrive at class on time, sign in upon arrival and be present for the duration of the class. Due to the technical content of this course and safety issues, it is paramount that all students arrive promptly for instruction.

College attendance policy is as follows:

3 x tardy = 1 absence. Repeat tardiness and subsequent absences will result in the lowering of your grade.

Faculty may drop students from their courses after 2 unexcused absences.

Students with 2 unexcused absences will receive a W/F - or- if there are medical issues, a family emergency or other extenuating circumstances, the student may receive a W. There are three categories of excused absences: illness, religious holidays and family emergency. Absence from class due to illness is excused with a note from Health Services or a medical doctor.

CLASS PROJECT

- A context oriented design practice

Assignment & Aim	Choose two materials among wood, metal and plastic to design and construct a free-standing stool. The stool is required to be designed in either a fictional or nonfictional context. It also has to be fully functional and strong enough for people to sit on. The aim of this practice is to emphasize the importance of the habitat of a design and offer an opportunity to critically think about the decision making in object design.
Class outcomes	After the previous projects, students should have general knowledge and sense of three basic materials and new ideas will be generated based on these understandings. Students will refine designs with sketches and utilize their knowledge to inquiry the ideas.
Key question	The design of the final project will be context oriented, which means that a particular environment will be considered in terms of where this design will be placed. Students will have to define this context and think why this object is needed or appreciated in this context. A fictional context is also encouraged which might be an even more interesting method to address design thinking.
Objectives & Competency	
40%	Active idea development. - At least 5 brief ideas and 3 refinements are basic. Design researching will be considered as advanced.
30%	Eager to explore material qualities and techniques. - At least 2 different approaches of constructing are basic, more than 2 and original structure designs will be considered as advanced.
30%	Ability to translate personal sentiment to universal understanding. - A final design shows the consistency of thought is basic, and a well refined object or a product that can be produced will be considered as advanced.
Benchmarks	A - Excellent understanding of the concept of context, having great sense of how an object impacts on environment, and being able to manipulate the impact with clear conscious. Great story telling, considering the designed piece and the context as a whole. B - Good understanding of a context, being able to describe a specific habitat for an object, and have sense of the connection between them. C - Fair understanding of the key question, being able to provide a context in terms of placing an specific object. Have fair sense of how to bond a design to a related environment. F - Poor understanding of the key question, fail to provide a clear idea of a context. Have very limited sense of how a habitat and an object can be connected.

Mid-Term Feedback Form

Course: Get hands dirty with what?

Instructor: Kaichuan Wang

COURSE GOALS / AIMS

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- To basically demonstrate the practice of product / furniture design.
- To help develop one's idea in a materialized manner and also on an abstract level.
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- To give an access to gain the skill to deal with three basic materials, wood, metal, and plastic.

Here I listed the course goal and I would appreciate some feedback about the first half of the course. If you could complete the following. I will try to make changes to address some of your suggestions in the remaining weeks.

The following are the goals for the course as listed in the syllabus. How would you think we are doing with respect to each one. (4=very successful. 1= very unsuccessful)

- | | | | | |
|--|---|---|---|---|
| - Enhanced sense of everyday object and observation with more consciousness. | 1 | 2 | 3 | 4 |
| - Understanding of how to bring an idea to reality. | 1 | 2 | 3 | 4 |
| - Understanding of the practice of furniture / object design. | 1 | 2 | 3 | 4 |
| - Ability to materialize concepts and self expression. | 1 | 2 | 3 | 4 |
| - Basic skill to manipulate materials we engaged in class. | 1 | 2 | 3 | 4 |
| - How comfortable do you think of working in the shop environment? | 1 | 2 | 3 | 4 |
| - What aspect do you appreciate the most in this class? | | | | |

- What do you think that should be improved or addressed in the past weeks?

Grading Rubric

Short Project 1, 2, 3

	Excellent	Good	Average	Poor	Unacceptable
work quality and handicrafts	5	4	3	2	1
material engagement and exploration	5	4	3	2	1
process development	5	4	3	2	1
design creativity	5	4	3	2	1

Final Project

	Excellent	Good	Average	Poor	Unacceptable
work quality and handicrafts	10	8	6	4	2
material engagement and exploration	10	8	6	4	2
process development	10	8	6	4	2
design creativity	10	8	6	4	2

- Each short project and final project will be graded based on the standards above. There are 100 points in total, and the grade will be categorized based on the points a student gets.

- Participation will be considered while grading as well, and it will be measured during group exercise, group discussions, presentations and critiques.

A - 90 and above Excellent sense of object design, clear concept development with critical thinking and self inquiry. Fully engaged with materials and making processes, outstanding craftsmanship. Great storytelling, being able to present the concept in an interesting and comprehensive method.

B - 75-89 Good understanding of the design practice, being able to deliver assignment on time, and develop the concept with inquiry. Good attitude to engage materials and explore processes, fine craftsmanship. Being able to present and explain ideas clearly.

C - 60-74 Fair quality of the outcomes, poor engagement in class, fail to participate actively, limited engagement with making process.

F - Below 60 No outcomes, poor participation, absence for more than 3 times.