

San José State University
Department of Art & Art History
Art 168, Topics in Woodworking: Furniture Construction

Section 1, Spring, 2020

Instructor:	Shannon Wright
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Office Hours:	Tues 1:300-2.30 PM Thurs 11.00 AM to noon and by appointment
Class Days/Time:	Friday 9.30 AM to 3.30 PM
Classroom:	Art 108
Prerequisites:	Art 13 or instructor consent

Course Description

This course is an introduction to the physical structure of wood and to the design and construction of solid wood furniture. It is also an introduction to the historical use of wood joinery in furniture and other man-made objects. Class time will be divided between classroom lectures, wood shop demonstrations and supervised work time. Students will complete two projects: a museum-quality frame with splined mitres, and a small piece of furniture (some years it is a table, other years it is a bench.)
Three units.

Course Goals and Student Learning Objectives

Upon successful completion of this course, students will be able to:

CLO1 Use traditional joinery techniques to accommodate the unique structure of wood and its properties of expansion and contraction.

CLO2 Design furniture and objects using joints appropriate to the visual and functional goals of the piece.

CLO3 Read and utilize measured drawings

CLO4 Assess and purchase lumber and safely and efficiently “mill” it using the jointer, the thickness planer and the table saw.

CLO5 Mark and measure your stock, and cut a variety of joints using power tools and hand tools.

CLO6 Glue and clamp up furniture and other woodworking projects

CLO7 Sand and finish furniture and other woodworking projects

CLO8 Recognize a variety of furniture styles and identify their stylistic and structural characteristics

CLO9 Consider the relationship of handmade objects to mass-produced objects, through course readings.

CLO10 Engage in safe practices concerning hazardous materials, respiratory and eye safety, and awareness of Material Safety Data Sheets.

Required Texts/Readings

A selection of excerpted course readings will be available online in PDF form for you download and print, through the class Canvas site. Students will consider the role of hand-craftsmanship in the digital era, in a 450 word reading response.

1) Excerpt from Matthew B. Crawford, *Shop Class as Soulcraft*, 2009.

2) Excerpt from Richard Sennet, *The Craftsman*, 2008, pp. 81-84,

3) *A Place of My Own: The education of an amateur builder*, Michael Pollan, 1997, pp.3-8

Recommended Reading:

Understanding Wood, R. Bruce Hoadley
Hand Tools, Their Ways and Workings, Aldren A. Watson
Understanding Wood Finishing, Bob Flexner

The Woodworker's Guide to Making Jigs, Fixtures and Setups, David Schiff and Kenneth S. Burton, Jr.
Fine Woodworking Magazine

Sources of Traditional Furniture Plans:

Mission Furniture: How to Make It, Popular Mechanics Company
Making Authentic Shaker Furniture, John G. Shea
Fine Woodworking magazine online

Resources for Researching Contemporary Furniture Design:

Abitare magazine
<http://www.dezeen.com/> DeZeen online design magazine

Classroom Omnilock Code: Will be announced in class. Do not pass out to others.

Library Liaison

Gareth Scott

email: gareth.scott@sjsu.edu

phone: (408) 808-2094

Dr. Martin Luther King, Jr. Library

4th Floor Administration Offices

Art and Art History Resources: <https://libguides.sjsu.edu/Art>

Materials and Tools Needed

Clothing:

Dress for working in the Shop— No open-toed shoes (sandals), no loose clothing or jewelry, long hair must be tied back securely. EVERY class period, including the first class period.

THE SHOP SAFETY TEST

Students who use the shop facilities will be required to pay a \$20 fee to take the Shop Safety Test before they can use the facility. The fee must be paid prior to the student taking the Shop Safety Test.

Students must pay at the Bursar's Office, located in the Student Services Center, directly into Fund 62089 with cash or check.

The test and fee are required only once a calendar year, so if your students took the test during the Fall 2019 semester, they will not be required to pay this fee again until Fall 2020. If students paid the fee in Spring 2019, they must pay the fee again for Spring 2020. The shop test is valid for one (1) calendar year.

In order for students to take the Shop Safety Test and use the School of Art & Design Shop Facilities, they must:

- Bring a receipt for the fee paid at the Bursar's Office into Fund 62089. The Bursar's Office

ONLY accepts cash and checks.

- Be enrolled in at least one 3-unit Art or Design studio course during the Spring 2020 semester.

If any of the courses you teach will require your students to use the school's shop facilities, or borrow tools this semester, please make an appointment for your class to view the shop safety orientation video. Following the video, students are required to take a short safety test. The safety test is administered in room ART 104 by the shop technicians and is required annually. Allow at least an hour and a half for the video and test.

Returning students who passed the safety test last semester need only show proof of their enrollment in a 3-unit Art or Design course in order to have their shop access reactivated. If a student fails to take or pass the safety test (or the second-chance safety test), you must be present in the shop while the student uses the shop facilities.

Safety tests for Spring 2020 will ONLY be given between January 23rd and February 14th.

REMEMBER:

The safety orientation and test are given only during the first 3 weeks of the semester, from January 23rd to February 14th.

If a student misses more than three (3) questions on the safety test, or fails the Second Chance Test, your presence is required in the shop at all times while that student is working in the facilities.

All students who wish to use the shop facilities must pass the shop safety test, no exceptions.

ADDITIONAL INFORMATION:

~PLEASE INCLUDE THIS INFORMATION ON YOUR GREEN SHEET FOR THE Spring 2020 SEMESTER~

Material Data Safety Sheets (MSDS) must be on file for all potentially hazardous materials before

they can be used in any of the Art & Design facilities. Submit one copy of the material's MSDS to the department in Room 104 and a second copy to the faculty member responsible for the class in which the material will be used. Please explain this to the students in your classes. This is a commonly missed question on the shop safety test and should be discussed with your class prior to the shop orientation.

DATES AND HOURS OF OPERATION- Spring 2020

January 23rd to May 11th.

NOTE: the operating hours below are based on historic allocations and do not reflect the impact(s) of any budget cuts that may occur. Check the posted schedule outside the shop for updated hours of operation. Please be aware that clean-up starts 30 minutes before closing.

Passing the Shop Safety Test is mandatory in order to remain in this class.

We will watch the Shop Safety Video online at:

<http://www.sjsu.edu/at/atn/webcasting/events/shopysafety/> The test is an open-notes test. I suggest writing EVERYTHING down that you can as you watch the video. When you have finished, answer the questions in the Shop Test review handout you were given on the first day of class. In our next class meeting we will go around the room and each student will give their answer for several questions, and we will discuss the answers.

Shop Hours:

MONDAY 8:30 AM – 5:00 PM

TUESDAY 8:30 AM – 7:30 PM

WEDNESDAY 8:30 AM – 5:00 PM

THURSDAY 8:30 AM – 7:30 PM

FRIDAY 8:30 AM – 5:00 PM

Classroom Protocol

You must attend all equipment demonstrations in order to be allowed to use the equipment in the Wood Shop. If you did not see my demonstration on how to use a particular machine or perform a particular process, you must request a repeat demonstration from the TA. There will be a sign-in sheet for each class's demonstration.

Do not perform any process for this class if you did not see a safety demonstration on that process, or if you have forgotten any detail of the demonstration.

Lectures and slideshows will occur at the very beginning of class.
Cell phones and laptops must be put away during all lectures and videos.
No headphones or earbuds may be worn in class or in the Wood Shop.

Hazardous Materials: I cannot stress enough the importance of not applying polyurethane finish in an enclosed, unventilated space. This includes taking your project home too soon after applying the finish. You need to wait a few days to let the piece offgas, before spending time in a room with it. Under no circumstances should you ever apply a finish in your home. This is what the spray booth is for.
You will be quizzed on this!

Email addresses:

Faculty can email a whole class at once through MySJSU and also through Canvas. Make sure the University has your correct email address, or you won't receive my or other instructor's emails about class-related issues.

Questions:

It is important that you ask any and all questions you have as we go along. If you are confused about an assignment, or if I haven't made something clear, please ask me in class or stop by during my office hours. I will be happy to discuss a project at any stage with you.

Emergency Phone Numbers:

Emergency: dial 911 (IDEALLY FROM A SCHOOL PHONE, NOT A CELLPHONE!)
Escort Service: dial 924-2222

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in [University Policy S12-3](http://www.sjsu.edu/senate/docs/S12-3.pdf) at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

Projects

Hardwood Picture Frame

30 % 2/28

450 word discussion of three short readings on Canvas 15% 2/21
(On issues surrounding the relationship of craft to mass-production)

Woodworking vocabulary quiz 1	5%	3/20
Woodworking vocabulary quiz 2	5%	4/17
Bench	35%	5/8
Class Participation (daily check-ins on Canvas)	10%	each class

Involvement in lectures, safety and technique demonstrations, videos, field trips and supervised work time in the wood shop, cleaning up after yourself in shop, helping with glue-ups, etc. **Technical demonstrations are not something to be passively watched.** Students should be taking close-up photos or making their own drawings, and taking copious notes. Whatever I show you, you will be *doing* later that class period! I recommend working with a partner whenever possible. This is one reason it is unacceptable to be late or miss classes without significant reasons. If you have multiple events to attend on Fridays this semester, this is not a good class to enroll in. Having access to your own shop does not entitle you to interpret the class projects from afar without attending my demonstrations. Furthermore, the chances that another shop has the same equipment, is very slim. Arriving at your own methods, off-site, to complete the assignments in this class, will not earn you credit based on my grading rubrics.

Hazardous Materials information:

<http://www.sjsu.edu/fdo/docs/hazmatandlabsafetyguidance.pdf>

NOTE that [University policy F69-24](http://www.sjsu.edu/senate/docs/F69-24.pdf) at <http://www.sjsu.edu/senate/docs/F69-24.pdf> states that "Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading."

<http://www.sjsu.edu/gup/syllabusinfo/>

Grading Policy

(Instructor reserves the right to change an assignment or due date with adequate advance notice.)

Grades will be assigned according to University policy from A to F as outlined in the SJSU catalog. All work must be finished and turned in according to ascribed deadlines and instructions.

I will assign you a numerical grade for each of your projects in this class, as follows:

97-100 = A+

93-96 = A

90-92 = A-

87-89 = B+

83-86 = B

80-82 = B-

77-79 = C+

73-76 = C

70-72 = C-

67-69 = D+

63-66 = D

60-62 = D-

59 and below = F

A= Excellent work

B= Above average work

C= Average work

D= Below average work

F= Unsatisfactory work

Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See [University Policy F13-1](http://www.sjsu.edu/senate/docs/F13-1.pdf) at <http://www.sjsu.edu/senate/docs/F13-1.pdf> for more details.

Attention!!!

Recycling projects already turned in in another class counts as cheating. All work made in this class must be new work—a “customized” response to each assignment. It is essential that I see your work in progress in the weeks prior to

each critique, for your piece to receive credit. Work that appears completely out of the blue will be considered highly suspect. I will invite other instructors from the department to view photographs from our class critiques in Dropbox, in order to make sure no project is recurring from another class.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>

Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	1/24 AM	Class intro. Shop Safety Video. Fill out review form.
1	PM	Pay for shop test at the Bursar's office. 2: Shop Safety Test Figure out car pool plan for field trip next week!
2	1/31 AM	Field trip to Berkeley! Tim Holton Frameworks, then MacBeath Hardwood.
2	PM	Put away wood in the classroom
3	2/7	Demos.
3		Begin milling and cutting cherry. Homework: get your wood ripped.
4	2/14	Cut rabbet on long lengths. Then mitre on the Brevetti saw.
4		Glue up frames
5	2/21 AM	Cut splines, glue in. Reading Response due midnight.
5	PM	Sanding and finishing demos.
6	2/28 AM	Frames are due at 9.30 AM.
6	PM	Discussion of how to determine how much wood you need, how board-feet are calculated, how to buy wood.
7	3/6 AM	Field trip to Aura Hardwood to pull and purchase boards.
7	PM	Put away boards. Demo: milling your boards over-thickness, ripping and edge-gluing into wide boards. Homework: mill boards over-thickness.
8	3/13 AM	Demo: re-milling glued-up boards, ripping to width. Work time for this.

Week	Date	Topics, Readings, Assignments, Deadlines
8	PM	Demo on marking out mortises, drilling, and routing. Boards need to be milled and ripped to width for next class period.
9	3/20 AM	Demo: sharpening chisels, squaring up mortises. Students rout and square-up mortises. Vocab quiz #1
9	PM	Supervised work time on mortises. Mortises must be done for next class.
10	3/27 AM	Demo: bandsawing the tenons, and following with a router and jig.
10	PM	Demo: bandsawing and routing custom curves, angles, etc., on bench components. Video: Martin Puryear's sculpture.
11	4/3 AM	SPRING BREAK
11		SPRING BREAK
12	4/10 AM	Demo: sanding bench parts and fitting bench together.
12	PM	Supervised work time.
13	4/17 AM	Demo: final sanding and finishing. Vocab quiz #2
13	PM	Supervised work time.
14	4/24 AM	Supervised work time.
14	PM	Supervised work time.
15	5/1 AM	Last work day for sanding and finishing
15	PM	Last work day.
16	5/8 AM	Final Critique and photo shoot.
16	PM	
Final Exam	Wed, May 13	7.15- 9.30 AM Classroom cleanup