

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

**Section 1, Fall, 2017**

<b>Instructor:</b>	Shannon Wright Teaching Assistant:
<b>Office Location:</b>	Art 119
<b>Telephone:</b>	Use email
<b>Email:</b>	shannon.wright@sjsu.edu
<b>Office Hours:</b>	Tuesday 12.45-2.45
<b>Class Days/Time:</b>	Friday 9.30 AM to 3.30 PM
<b>Classroom:</b>	Art 108
<b>Prerequisites:</b>	Art 13 or instructor consent
<b>Department Office:</b>	Art 116
<b>Department Contact:</b>	Website: <a href="http://www.sjsu.edu/art">www.sjsu.edu/art</a> Email: <a href="mailto:art@sjsu.edu">art@sjsu.edu</a>

**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 bench with through-tenon joinery  
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 an 800 word essay.

- 1) Excerpt from William Morris, *The Revival of Handicraft, 1884*.
- 2) Donald Judd, *It's Hard To Find A Good Lamp*. 1993, Judd Foundation.
- 3) Excerpt from Matthew B. Crawford, *Shop Class as Soulcraft*., 2009.
- 4) Excerpt from Richard Sennet, *The Craftsman*, 2008, pp. 81-84,

### **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**

Elisabeth Thomas, She can be reached via email at

[elisabeth.thomas@sjsu.edu](mailto:elisabeth.thomas@sjsu.edu) and by phone at (408) 808-2193

**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 may pay at the Bursar's Office, located in the Student Services Center, directly into Fund 62089 with cash, check, or ATM debit card. The test and fee are required only once a calendar year, so if you took the test during the Fall 2016 semester, you will not be required to pay this fee again until Fall 2017. If you paid the fee in Spring 2017, you must pay the fee again for Spring 2018. The shop test is valid for one (1) calendar year.

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

- Bring a receipt for the fee paid at the Bursar's Office into Fund 62089. The Bursar's Office accepts cash, check, or ATM debit card payments.
- Be enrolled in at least one 3-unit Art or Design course during the Fall, 2017 semester.

We will watch the Shop Safety Test 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.

### **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.

### **How to Email Your Professors**

If you need to email me, here is an example of how to do it:

Dear Professor Wright,

I am enrolled in your Art 13 class. I am emailing to request a meeting during your office hours, to discuss a problem I am having with my second project. If it's available, I would like to sign up for the 1.30 PM slot on Tuesday.

Thank you,

(Your name.)

**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 or technician responsible for the facility where 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 2017**

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.

Shop Hours Fall, 2017: Mon-Thurs 8.30AM to 7.30 PM, Fri 8.30-5.30.

The safety orientation and test are given only during the first 3 weeks of the semester, from August 23rd to September 15th.

If a student misses more than three (3) questions on the safety test, and 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.

### **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 42222

## **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) at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

### **Projects**

#### **Grading:**

**Safety and Hazardous Materials Quiz**

**5% 9/1**

**Hardwood Picture Frame**

**25 % 9/29**

<b>Woodworking vocabulary quiz</b>	<b>10%</b>	<b>9/19</b>
<b>800 word discussion of four short readings on Canvas</b>	<b>15%</b>	<b>TBA*</b>
<b>(On issues surrounding the relationship of craft to mass-production)</b>		
<b>Bench with through-tenons</b>	<b>30%</b>	<b>12/8</b>
<b>Class Participation:</b>	<b>15%</b>	

**\* Due date is awaiting the announcement of the Friday date for a required faculty retreat (on campus.)**

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) 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.”

### **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 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/>"

## ART 168, 01/Topics in Woodworking: Furniture Construction, Fall 2017

### Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	8/25 AM	Class intro. Slide lecture: George Nakashima; Shaker furniture; Arts and Crafts furniture. Milling demo, then shop video.
1	PM	1.00 PM Shop video review, students pay for shop test at the Bursar's office.
2	9/1 AM	Shop Test 9.45 AM. Do not be late. Supervised milling of 2 x 4s. Demo on table saw and Brevetti saw.
2	PM	Begin milling African Mahogany for frames.
3	9/8	Supervised time on the table saw making molding, then on the Brevetti saw.
3		Glue-up demo.
4	9/15	Last class period for gluing up frames. Demo on splining and trimming
4		Sanding demo.
5	9/22 AM	Last class period for splining, trimming, sanding frames
5	PM	Finishing demo. Work time
6	9/29 AM	Frames are due at 9.30 AM. Slide show towards bench project.
6	PM	Discussion of how to determine how much wood you need, how board-feet are calculated, how to buy wood.
7	10/6 AM	<b>Field trip to MacBeath Hardwood to pull and purchase boards.</b>
7	PM	Put away boards. Demo: milling your boards over-thickness, ripping and edge-gluing into wide boards. Homework: mill boards over-thickness.
8	10/13 AM	Demo: re-milling glued-up boards, ripping to width. Work time for this.
8	PM	Demo on marking out mortises, drilling, and routing. Boards need to be milled and ripped to width for next class period.
9	10/25 AM	Demo: sharpening chisels, squaring up mortises. Students rout and square-up mortises.
9	PM	Supervised work time on mortises. Mortises must be done for next class.
10	10/27 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	11/3 AM	Demo: sanding bench parts and fitting bench together.
11	PM	Supervised work time. Sanding should be done by next class period.
12	11/10	Demo: gluing up bench.
12		Supervised work time. Gluing-up needs to be done with a partner by next class period.
13	11/17	Demo: final sanding and finishing.
13		Supervised work time.
14	11/24	<b>THANKSGIVING BREAK</b>
14		
15	12/1	Last work day for sanding and finishing
15		Last work day.
16 16	12/8	Final Critique and photo shoot.
Final Exam	12/13	Wed 7.15- 9.30 AM Classroom cleanup