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**Instructor**

Mr. Scott Wassermann  
Instructor  
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Office Hours: MW 3-4  
TR 8-12

Or by appointment

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**Time and Location**

Class: MWF 9:00am – 9:50am  
Lab: MWF 10:00am – 10:50pm  
Industrial Technology Building rm 103

**-and-**

<http://sulross.blackboard.com>

**Course Description**

This course of study was designed to provide the student with an opportunity to acquire advanced knowledge and skills in the area of manufacturing technology. The focus of this course is in the area of wood production. Students will work with several different processes in this advanced wood course. Emphasis is placed on developing an understanding of larger and more complicated products constructed primarily out of wood. Studies will include furniture and cabinet styles, furniture and cabinet construction techniques and hardware, furniture and cabinet staining and finishing techniques, laminating for furniture and cabinets, and specialty tools for advanced woodworking.

**Course Objectives**

- Demonstrate an understanding of wood adhesives by correctly answering various types of worksheet and test questions.
- Select the proper adhesive and use it correctly.
- Demonstrate an understanding of how wood is joined with glue by correctly answering various types of worksheet and test questions.
- Successfully produce strong glue joints in practice projects and actual finished products.
- Demonstrate an understanding of the properties of various types of finishes by correctly answering various types of worksheet and questions on tests
- Select and apply appropriate finishes in completing practice projects and full finished pieces.
- Demonstrate an understanding of the principles of wood carving techniques by correctly answering various types of worksheet and test questions.
- Successfully perform surface carving on selected assignments.
- Correctly identify Demonstrate various recognizable furniture styles given in models or pictures.
- Demonstrate an understanding of how clamps are used to assemble furniture and assist in the gluing process by correctly answering various types of worksheet and test questions.
- Select proper clamps and clamping techniques while completing a piece of furniture.
- Demonstrate an understanding of mass production in furniture and cabinet by correctly answering various types of worksheet and test questions.
- Properly care for tools demonstrated by actions taken in the laboratory environment.
- Demonstrate an understanding of wood cutting tools by correctly identifying tools either in from photographs or actual tools
- Safely and successfully use wood cutting tools to build a piece practice assignments and project furniture or cabinets.

- Demonstrate an understanding of measurement as it applies to wood technology by correctly answering various types of worksheet and test questions.
- Demonstrate an understanding of how doors and drawers are constructed on cabinets and furniture by correctly answering various types of worksheet and test questions.
- Construct doors and drawers using proper construction techniques in practice assignments and in a piece of furniture.
- Demonstrate an understanding of common wood joints by identifying them on written tests and paperwork.
- Successfully construct several different types of wood joints on practice projects and on a project constructed during the course.

### **Reading**

The text is required for this course:

Modern Woodworking (11th edition) by Willis H. Wagner and Clois E. Kicklighter.

Published by Goodheart-Wilcox company, Inc. (2006)

You will also be given handouts with additional information or assignments. These are your responsibility.

### **Accessibility:**

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact the Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-171, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8203.

### **Attendance**

Attendance is necessary! Attendance will be taken each scheduled class period in accordance with University and Departmental Policy. Attendance will count as part of the daily work grade. Everyone starts with 400 points at the beginning of the semester for class attendance - each unexcused absence (regardless of the reason) will cost 10 of those points. After 9 hours of absences (9 days) the instructor will drop the student from the course. In accordance with the Student Handbook, the student will receive a grade of 'F'. Attendance will be taken at the beginning of each class period and once taken, will not be changed. If a student is tardy and misses the roll call they will be charged with one absence.

Because much of the learning in this course takes place in the form of laboratory activities, time spent, in the lab will also be considered in the final grade. Attendance in the labs will be taken on lab sign-in sheets which will be available every day in the appropriate labs. Labs will count for an additional 390 points in attendance (10 points per hour in the lab, with a maximum of 390 points for lab grade). Lab attendance will begin with the third week of class and will be monitored, as much as possible, throughout each day.

### **Class Structure**

This course is designed to be a guided study with practical application of the material studied. Class will be run in a lecture/discussion/lab format with demonstrations and extensive laboratory activity. Lectures will be minimal and may utilize overhead slides, power point projections, demonstrations, photo slides, and videos. The lectures will be given primarily to enhance and answer questions about the material that should have been studied prior to the class period, and in preparation for the activities that will be completed in the labs. There may be some step-by-step guided practice and individual assistance during the scheduled class time. Students are expected to study, read, practice, and use problem solving skills to discern and apply the information assigned. It is essential that everyone be in attendance for the scheduled meetings so questions are answered and the shared information and demonstrations are not missed. Several of the scheduled class times may be reserved as research and/or lab time. It is also important that plans are made to work in the lab outside scheduled class time.

## **Time Commitment – Successful completion of this course requires a significant time investment.**

Students should be prepared to spend at least 4-6 hours per week outside of class on assignments that will include: Homework, Reading Assignments, Lab work and studying for tests and quizzes.

## **Phones & Electronic Devices**

No electronic devices other than calculators are allowed in the class or lab.

## **Assignments**

Daily work will consist of reading, worksheet pages, practice photos (portfolio building) emphasizing various camera-handling techniques, and lab record sheets. It is essential that everyone be in attendance for the scheduled meetings because that is where the demonstrations, explanation, and assignments will be given. Some days may be used to work together on laboratory assignments, field experiences, or demonstrations. It is important to keep up with the assignments because the order in which they are completed is important.

**Due dates** - All assignments and projects will be given due dates which must be met. All assignments will be due by 5:00 pm on the assigned day. Assignments and projects will still be accepted if they are turned in late. However, late assignments will lose 10 points per calendar day. Students are responsible for meeting the deadlines even if classes are missed.

## **Grades**

Final grades will be determined in the following manner:

- 10% Quizzes and Unit Tests
- 10% Final Exam (comprehensive)
- 70% Daily Work
  - 10% Practice Joint Display
  - 10% Workbook pages
  - 10% Other paperwork; Sketching, Journaling, Plans-of-Procedure
  - 10% Class Project - Cabinet
  - 10% Personal Project
  - 10% Bill Of materials
  - 10% Attendance
- 10% lab activity attitude and professionalism

In the event one of the above categories is not completed during the course, that percentage will automatically be divided between the other categories at the same level.

All assignment points will be converted to percentages for individual assignment letter grades.

A=100-90; B=89-80; C=79-70; D=69-60; F= 59-0

Grades will be earned on the basis that "C" is average work, "B" is above average work, and "A" is well above average work. Barring unusual circumstances, there will be **NO INCOMPLETES** given at the end of this semester.

## **Grading**

All work will be graded on specific criteria using the following guidelines. Any worksheets will be graded on a points-per-answer basis. Any sketches and drawings assigned will be graded on a 100 point (percentage) scale. Criteria for grading will include: accuracy of content, appropriateness of content for assignment, presentation, clarity. Projects in the lab will be graded on accuracy, neatness, content, adherence to standards, adherence to assignment, and workmanship. Graded items will be broken into specific categories and presented on grade sheets given at the time the assignments are given.

## **Academic Honesty**

All students are expected to do their own work at all times. Any dishonest conduct will be promptly rewarded with an "F".

## **Lab Time**

There will be required lab work in this course. In a normal long semester, a minimum of 6 hours outside of scheduled class time each week for researching, reading, and lab work is normally expected for college level work. Because of the compressed schedule during the summer, that amount is doubled. Obviously all of the required research and lab work, and practice will not be able to be completed within the scheduled class time. There may be some release time from class to complete some of the work. For any extra time needed, the lab will be scheduled to fit students' needs as much as possible. Some of the lab work may be group work or work done in pairs, so plan time will also have to be scheduled around the schedules of other people. The lab will be open for use during open building hours (usually 8 - 5 daily). The lab may be open some evenings as well when the lab assistant schedules are complete. Those working during the evenings will be required to leave when the lab assistant leaves. No one will be left in the building without a lab assistant. Be advised that there may not be a knowledgeable lab assistant available at all times. No weekend hours are planned at this time.

**NOTE:** You should expect to be in the lab during your scheduled lab time. It will help you keep on top of your assignments. The labs will also be run as open labs so you will be able to schedule time on your own within the framework of the building hours.

## **Equipment and Supplies**

Most of the equipment needed for this course and lab work will be supplied through the department. However, the equipment will have to be shared by many other students. The school equipment will NOT be allowed out of the lab, which means you must find time to be in the lab. If you don't like our tools and equipment you may bring your own to use but you will be responsible for its use. You will be responsible for supplying finishing gloves (if you wish to use them), brushes, finishes, and fasteners. You will also be responsible for supplying safety glasses for use in the lab.

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- Safety glasses or safety goggles
- Gloves (if desired)
- Lab coat or apron if you want one (if desired)

NOTE: Safety glasses are required any time you are working in the lab.

**Supplies** – Supplies – The supplies you need will be provided through the department but not by the department. You will be required to purchase the wood you use for the projects you make. You may purchase the materials through the IT Store Account or you can pick it up on your own. Everyone will be given material for the required practice projects from the Department Store Account. This will be handled in the form of a materials fee.

**Materials Fee** - The materials fee is set at \$20.00 for Fall 2015. This is the fee for the assigned projects, practice, and tooling. If you wish to do more than the assigned work, or have to repeat a project you will be responsible for paying for the extra material you use, before you begin. The material fee only covers the assigned projects completed once. The fee may be paid in the departmental office if paid by cash or check; Cashier's office if paid by credit card. (You will be required to obtain the account number before you pay your fee at the cashier's office. If you pay at the cashier's office you will be required to show the receipt to the instructor prior to beginning any lab work.)

## **Storage**

The lockers in the hallway may be checked out and used for storing your equipment and supplies. These lockers must be signed out in the IT main office. You must supply your own lock. Do not leave projects or equipment out on the tables in the lab. You will lose them (and if they belong to the

University, you will be financially responsible for them).

### **Quizzes**

Everything discussed in class and contained in the assigned reading, including laboratory material is fair game for quizzes. You will not be given notice for quizzes. They will be primarily written in nature, but may include practical components. There will be no make-up quizzes.

### **Tests**

Everything discussed in class and contained in the assigned reading, including laboratory material is fair game for tests. You will be given notice for all unit tests. They will be primarily written in nature covering terminology, but you can expect some practical exercise portions on each exam. You must be in attendance for the tests. Makeup tests will not be given. The total number of tests will be determined as the course progresses. There are 6 Unit tests scheduled for this semester.

### **Midterm Exam**

There will be no midterm exam given.

### **Final Exam**

The final exam is scheduled for Wednesday December 9 at 8 am. The test will include written, practical, and analytical portions, and will be comprehensive of the entire semester. It will be a combination of various style questions including calculations. The exam will be given only on the day it is scheduled so **DO NOT** make any other plans for that day and time.

### **Final Project**

Everyone will be required to select or design at least one substantial piece of furniture for construction in this course. Whether the project is designed by the student, or simply selected from a project book, students will be required to draw (or sketch) the plans for the project. The drawings will be part of the grade for the entire project. A project journal will be required for all projects submitted for grading. Any sketches and drawings done during construction must be submitted as part of the journal for the project. Grade will be based on functionality, planning, journaling, workmanship, quality, and aesthetics.

IT 3315 Techniques in Furniture and Cabinetmaking  
Fall 2015

**Tentative Reading & Test Schedule**

The following is a tentative reading & Test schedule for the semester. The dates provided are the dates the reading is assigned and the reading is to be completed by the following class day.

<b>Date</b>	<b>Reading</b>	<b>Test Date</b>
Mon, 8/24 (1)	Chapter 1: Planning and Designing in Woodworking Chapter 3: Woodshop Safety (review) Chapter 4: Measurement, Layout, and Rough-out (review)	
Monday, August 31 (3/4)	Chapter 13: Planing Machines (review) Chapter 14: Circular Saws (review) Chapter 15: Band Saw, Scroll Saw, and Saber Saw (review) Chapter 16: Drill Press, Mortiser, and Tenoner (review) Chapter 18: Router, Shaper, and Molder (review)	
Monday, September 14 (6/9)	Chapter 7: Wood Joints Chapter 35: Wood Technology	
Monday, September 21 (8/12)	Chapter 2: Selecting and Identifying Materials Chapter 21: Furniture and Cabinetwork	
Monday, September 28 (10/15)	Chapter 9: Adhesives, Gluing, and Clamping Chapter 10: Mechanical Fasteners and Assembly	
Wednesday, October 14 (15/22)	Chapter 22: Drawer and Door Construction	
Monday, October 26 (18/27)	Chapter 11: Sanding and Preparing for Finish Chapter 12: Finishes and Finishing	
Monday, November 2 (20/30)	Chapter 24: Synthetic Surface materials	
Monday, November 9 (22/33)	Chapter 33: Tool Selection and Care	
Monday, November 16 (24/36)	Chapter 34: Mass Production	
	<b>Final Exam</b>	<b>Wednesday December 9 @ 8am</b>