
Instructor

Mr. Scott Wassermann
Instructor
Office: IT 101
Phone: 837-8137

email: jwassermann@sulross.edu
Office Hours: MW 11-12
TR 8-12
Or by appointment

Time and Location

Class: MWF 2:00-2:50 pm
Lab: MWF 3:00-3:50 pm
Industrial Technology Bldg. Room 103

Course Description

The course is a beginning-to-intermediate level course designed to introduce the processes, tools and materials utilized in industrial woodworking. Students will learn to safely use the hand and machine tools associated with wood production, as well as wood characteristics. At the end of this course students will understand several production processes associated with woodworking. Students will be able to select the proper process order, machines and tools, joinery, fasteners, and finishes. They will gain an understanding of the knowledge requirements, equipment requirements, physical requirements, safety requirements, and special skill requirements in the various processes of the woods industry through research, lecture, reading, and practical laboratory exercises.

Course Objectives

Upon completion of this course the student will be able to:

- Describe in writing, the safety rules associated with the hand tools, hand held power tools, milling and turning machines, and materials used in the woods industry.
- Recognize and name hand tools relating to wood processing.
- Discuss and demonstrate the correct care and use of hand tools relating to wood processing.
- Describe the most commonly used hardwoods.
- Identify selected hardwoods by their appearance and weight.
- Select correct tools for a particular process and use it safely.
- Use measuring tools to correctly layout design on wood in preparation for tooling.
- Recognize and name hand held and floor model power equipment relating to wood processing.
- Demonstrate the correct care and safe use of power tools relating to wood processing.
- Discuss safety equipment related to power tools used in wood processing.
- Prepare a piece of rough lumber for lay-out and completion of a project.
- Describe in writing and physically construct several basic joints in wood construction.
- Describe the most common wood finishes and how they are applied.
- Select appropriate finishes for projects completed and apply them safely and correctly.
- Evaluate a project and develop a plan of procedure for its completion.
- Calculate an amount of lumber using board-foot measures.
- Correctly lay-out and make rough cuts for an assigned project.
- Evaluate a project and assess its quality.

Reading

The text is required for this course is:

Modern Woodworking by Wagner and Kicklighter. Published by The Goodheart-Wilcox Company, Inc. (2000)

There will also be some reading material in the form of handouts that contain additional information. You will be responsible for that information at test and quiz time.

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! Missing six hours of class is considered excessive. 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 absence will cost 10 of those points. In accordance with the Student Handbook, after 9 hours of absences (9 days) the student will be dropped from the course with an '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. Lab attendance will be taken and a lab sign-in sheet will be available every day. Lab attendance will worth up to 390 points (10 points per hour in the lab). 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 and not just dissemination of information. It will be run on a lecture\discussion\activity format. Lectures will utilize overheads, power points, demonstrations, videos, and visits to the internet. Lectures will be given primarily to enhance and answer questions about the material that should have been studied prior to the class period. There may be some step-by-step guided practice, individual assistance, and demonstrations during the scheduled class time in areas where there seems to be a need. A great deal of the study will be left to the student to accomplish on their own. It is essential that everyone be in attendance for the scheduled meetings for sharing information, demonstrations, activities, and so questions are answered. Lectures and demonstrations will not be conducted on an individual basis because of missed classes.

Time Commitment

Students should be prepared to spend 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, written assignments, drawings, metalworking projects, project record sheets, and equipment proficiency demonstrations. There will be several laboratory assignments required for this course. Some of the laboratory exercises and projects will be completed together during the scheduled class time. Several of the lab assignments will require written reports, sketches, and drawings pertaining to the projects being made. Instructions regarding the format of the written material will be distributed at the time of assignment.

Due dates: All assignments and projects will be given due dates which must be met. All assignments

will be due by 4:30 pm on the assigned day. Assignments and projects will be accepted if they are turned in late. Late assignments will lose ten points per calendar day. Students are responsible for meeting the deadlines even if classes are missed.

Grading: All work will be graded on specific criteria given at the time of the assignment during class. Daily work and laboratory projects will be graded on a point per answer basis, a percentage basis, or simply points for completion. All worksheets or workbook assignments will be graded on a points-per-answer basis with the use of an answer key. Rubrics will be given for all projects with a breakdown of graded criteria. Project grade sheets will be broken into these general categories: accuracy, neatness, content, adherence to standards, safety procedures followed, teamwork (if applicable), and workmanship. All grades are converted to a percentage in the grade book. Percentages will be tallied in the grade book resulting in a final percentage for each of the graded areas of the course. Any other papers and drawings assigned will be graded subjectively on a percentage basis which will include content, presentation, accuracy in style, grammar, format, and clarity.

Grades

Final grades will be determined on a point basis in the following manner:

10% quizzes and tests

10% final exam (comprehensive)

60% laboratory assignments and any daily work including attendance.

70% projects

5% Hand Project

10% Shelf with Appliqué

10% Glued Box with Corner Joints and Lid

10% Band-saw Box

10% Turning Project (Between Centers)

10% Turning Project (Face Plate)

30% Student Choice Project

10% Finishing Project

5% Biscuit Project (picture frame)

10% other paper work, reports, and sketches

20% attendance

10% Instructor's discretion, work attitude, shop and tool care

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 immediate "F".

Lab Time

As with all the Industrial Technology classes, there will be a substantial amount of lab work to be done. Normally 6 hours outside of scheduled class time each week for researching, reading, and general homework is expected for college level work. All of the required research, 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. There will also be some group work students will have to schedule on their own. The lab will be open for use during open building hours (usually 8 - 5 daily). The lab may occasionally be open other evenings and 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 regular weekend hours are planned at this time.

Equipment and Supplies

Most of the equipment needed for this course and lab work will be supplied through the department. However, there is not enough equipment for everyone to use at the same time so some work may have to be done in pairs or groups. The equipment will have to be shared. The school equipment will **NOT** be allowed out of the lab, which means all students must find time to be in the lab if the scheduled lab time is not enough to finish the work.

Items you will be required to purchase for the lab include:

Safety glasses or goggles (some safety glasses may be purchased through the department)

Gloves (if desired)

Lab coat or apron (if desired)

Any other special tools you wish to use that we do not have in the lab

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

Supplies - Students will be responsible for purchasing the supplies they will use beyond the assigned projects in this course. If the issued materials are damaged, the student will be responsible for purchasing the additional material. If anyone wishes to do more than the assigned work they will be responsible for paying for the additional material. Some supplies may be purchased from the department and others must be found elsewhere.

Materials Fee - The materials fee will cover the metals used for assigned projects in this course. However, it only covers the material for one of each project. It is set at **\$35.00** for the Spring 2015 semester based on the average usage and cost of materials. The fee may be paid in the departmental office if paid with cash or check. If a credit card or debit card is used it must be paid in the cashiers' office. You will be required to obtain the account number before you pay your fee 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 with the secretary in the IT main office. You must supply your own lock. Do not leave any of your work or equipment lying around in the lab!

Quizzes

You will not be given notice for quizzes. They will be primarily written in nature. There will be no make-up quizzes.

Tests

Everything discussed and everything in the assigned reading, including laboratory material, is fair game for tests and quizzes. I will try to announce the Unit Tests the day before they will be given. You will have a test schedule to follow so it will be your responsibility to be in attendance the day of scheduled exams. Tests will be written in nature using various styles of questions covering terminology, equipment, processes, and other items discussed. There may also be some practical exercise portions on each exam. Attendance for the tests is mandatory; no makeup tests will be given.

Midterm Exam

There will be no midterm exam given.

Final Exam

The final exam will be Wednesday, May 13 @ 3:00 pm. The exam will include written, practical, and analytical portions, and will be comprehensive of the entire semester. Do not make any other plans for that day and time.

IT 2305 Machine Woodworking
Spring 2015
Tentative Reading Schedule

The following is a tentative reading 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.

Date	Reading
Wednesday January 21 (1)	Chapter 1: Planning and Designing in Woodworking
Monday January 26 (3)	Chapter 3: Woodshop Safety
Monday February 2 (6)	Chapter 2: Selecting and Identifying Materials Chapter 35: Wood Technology
Friday February 6 (8)	Chapter 4: Measurement, Layout, and Rough-out
Friday February 13 (11)	Chapter 5: Planing and Sawing Safety Chapter 13: Planing Machines
Monday February 23 (15)	Chapter 8: Cutting Curves, Irregular Shapes, Bevels, and Chamfers Chapter 14: Circular Saws Chapter 15: Band Saw, Scroll Saw, and Saber Saw
Monday March 2 (18)	Chapter 7: Wood Joints Chapter 9: Adhesives, Gluing, and Clamping Chapter 10: Mechanical Fasteners and Assembly
Monday March 23 (24)	Chapter 6: Drilling and Boring Chapter 16: Drill Press, Mortiser, and Tenoner
Monday March 30 (27)	Chapter 17: Lathe Chapter 18: Router, Shaper, Molder Chapter 19: Sanding Machines
Monday April 6 (30)	Chapter 11: Sanding and Preparing for Finish Chapter 12: Finishes and Finishing
Monday April 20 (36)	Chapter 33: Tool Selection and Care Chapter 34: Mass Production Chapter 36: Career Opportunities

IT 2305 Machine Woodworking
Spring 2015
Tentative Test Schedule

The following is a tentative test schedule for the semester. The dates provided are the dates the test will be given. You should have all the associated lab work completed by that date because it will be included on the test.

Date	
Test 1 Monday February 2 (6)	Chapter 1: Planning and Designing in Woodworking Chapter 3: Woodshop Safety
Test 2 Monday February 16 (12)	Chapter 2: Selecting and Identifying Materials Chapter 35: Wood Technology Chapter 4: Measurement, Layout, and Rough-out
Test 3 Monday March 2 (18)	Chapter 5: Planing and Sawing Safety Chapter 8: Cutting Curves, Irregular Shapes, Bevels, and Chamfers Chapter 13: Planing Machines Chapter 14: Circular Saws Chapter 15: Band Saw, Scroll Saw, and Saber Saw
Test 4 Wednesday April 1 (28)	Chapter 6: Drilling and Boring Chapter 7: Wood Joints Chapter 9: Adhesives, Gluing, and Clamping Chapter 10: Mechanical Fasteners and Assembly Chapter 16: Drill Press, Mortiser, and Tenoner
Test 5 Wednesday April 15 (34)	Chapter 11: Sanding and Preparing for Finish Chapter 12: Finishes and Finishing
Test 6 Wednesday April 29 (40)	Chapter 33: Tool Selection and Care Chapter 34: Mass Production Chapter 36: Career Opportunities
FINAL EXAM	Wednesday, May 13 @ 3:00 pm
Total number of class days (43)	

http://glencoe.com/sites/international/teacher/trade_ind_edu/assets/wood.html