

ADST-WOODWORK 10

COURSE OUTLINE

Instructor: D. Bouwman
September-June 2020/21

Welcome to ADST-Woodwork 10. This course is designed to introduce students to the safe and proper use of power and hand tools commonly found in a woodwork shop. Planning, design, measurement, technical/graphic communication, the orderly development of projects and safe work habits are an integral part of this course. By the end of this course, students will be competent and more confident in a variety of woodworking hand and machine processes and be able to apply the steps in a “design process”. In addition, all students will participate in clean-up/maintenance routines and be encouraged to create a safe workshop environment. Students will be assigned a number of skill builder projects designed to increase their knowledge and competency. The following Term #1 mandatory projects are chosen from the list below:

* **Puzzle** * **Sign** * **Decorative Boxes** * **Cutting Board** * **Lathe Projects**
* **Chop sticks** * **Wine bottle holder**

As time permits in Term #2, students will be allowed to design/build self-directed projects.

OBJECTIVES

A. THEORY and PRACTICAL

On successful completion of this course students will be able to apply knowledge and display skills necessary to complete the following:

- *Identify wood species
- *Identify veneer/composite products
- *Project planning/design (basic drawings)
- *Break out/Dress stock
- *Fasten with adhesives, screws, nails etc.
- *Identify/use power hand tools and machines
- *Identify/discuss career opportunities
- *Accurately measure (Imperial and Metric)
- *Calculate Board Foot measure
- *Identify common woodworking joints
- *Laminate
- *Apply surface protection/finishing processes
- *Identify/use hand tools
- *Create/maintain a safe workshop

B. APPLIED DESIGN

On the successful completion of this course students will be able to:

1. Apply the following steps and concepts in the Design Process:

- *Understand Context
- *Defining
- *Ideating
- *Prototyping
- *Testing
- *Making
- *Sharing

C. SAFETY

On the successful completion of this course students will be able to:

1. Safely use the following power tools and machines:

- | | | |
|-------------|-------------------|------------------------------|
| *Hand drill | *Drill press | * Oscillating spindle sander |
| *Band saw | *Radial arm saw | *Pneumatic carving tools |
| *Lathe | *Disc/belt sander | *Orbital palm sander |
| *Router | *Scroll saw | *Compound mitre saw |
| *Jointer | *Table saw | *Thickness planer |

2. Safely use and maintain a number of hand tools such as:

- | | | |
|--------------|----------------|-------------------------|
| *Saws | *Chisels | * Hammers/mallets |
| *Hand planes | *Clamps | *Measuring/layout tools |
| *Scrapers | *Screw drivers | |

3. Safely handle/store chemicals utilized in the woodwork shop.

EVALUATION

A variety of methods will be employed to assess, evaluate and identify the mastery of content, knowledge and skills related to this course. Student achievement will be evaluated in the following manner using formative (on-going) and summative (periodic) assessment:

(25%) A. Safety tests and theory quizzes

(15%) B. In-progress project assessment for machine/hand tool operations/processes and safety.

(50%) C. Final project assessment which demonstrates quality/skill/proper application of processes

(10%) D. Participation in maintenance and clean up procedures.

EFFORT

NOTE: See effort rubric located on the NKSS website. Student effort will be evaluated using the following format:

- | | |
|-----|-------------------|
| (G) | GOOD |
| (S) | SATISFACTORY |
| (N) | NEEDS IMPROVEMENT |

COURSE FEES

Course Enhancement Fee is \$25.00

This fee partially covers the cost of the mandatory projects (\$10) and the following consumables:

- Fasteners (screws, nails etc.)
- Adhesives (glue, epoxy, cyanoacrylate)
- Sandpaper (for hand and machine sanding)
- Finishing materials (oils, wax, primers, paint, rags, brushes, steel wool)
- Misc. wood and materials used for testing/jigs/demo/practice and set-up

Project Fees

There will be an additional charge for any changes made to mandatory projects.

Additional projects (approx. \$15-\$30)

After the mandatory/assigned projects are complete, students will be given the opportunity to design/build additional (self-directed) projects. The costs of these projects will vary dependent on the size/type of project(s) and materials used.

Dear Parent and/or Guardian

Please sign below to acknowledge that you have seen and understand this course outline. Please provide a contact number(s) and an email address (optional) so that I may keep you informed of your son/daughter's progress in this course. Please do not hesitate to contact me at the school if you have any questions or concerns. I look forward to meeting you at our first parent/teacher/student interview.

Please enclose \$25.00 at this time to cover the Course Enhancement Fee. Thank you

Name:(please print): _____ Signature:

Date:

Phone #: _____ Email: