

Design Learning 8 - (Woodwork)

OBJECTIVE

The main objective of these course is to introduce students to the following:

- Curricular competencies: applied design (understanding context, defining, ideating, prototyping, testing, making, and sharing), applied skills, & applied technologies.
- Basic woodwork
- Concept of "Big Ideas", which is essentially the big conceptual things that students should understand upon completion of the course.

• The course is a short sampler course. It will students with working in a shop environment allowing them to make more informed decisions about electives in future years. At familiarize the end of this course, students are expected to:

- Safely use a variety of machines and tools specific to her/his project
- Be familiar with both the Metric and Imperial measuring systems
- Be familiar with sketching, planning, and technical drawings as it relates to wood manufacturing
- Identify a variety of wood types as well as connection techniques
- Understand reclamation, repurposing and reuse of woods
- Understand historical, traditional, non-traditional and current contexts for woodworking
- Gain self confidence and experience working in an industrial setting

COURSE CONTENT (Woodwork)-(Hours are approximate)

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| • Shop rules and orientation | 2hrs |
| • Assignments and quizzes | 4hrs |
| • Measurement (Imperial/Metric) | 4hrs |
| • Planning, sketching, drawing techniques | 4hrs |
| • Machine and tool safety | 10hrs |
| • Skill building projects | 25hrs |

COURSE COSTS

As per the policy laid out by the Surrey School District, there is no course fee charged for this course. Students will be provided with basic materials and supplies in order to meet the Ministry's Prescribed Learning Outcomes. It must be emphasized that these materials are very basic in nature.

SKILL BUILDING PROJECTS

These skill building projects are designed to give students an opportunity to acquaint themselves with the wood shop machines and processes. Students are expected to demonstrate the safe use of the following machines: Band saws, scroll saws, power sanders (spindle, & disc), drill press. Students will also be able to use a variety of hand tools & portable power tools. This semester's skill building projects may include:

- Wooden Dice
- Gumball Machine
- Pinewood Derby Car
- West Coast Carving

ALL PROJECTS ARE DUE: Last day of rotation or as specified

EVALUATION

Students will be evaluated using the following break down:

Course Evaluation

Skill Building Projects -	70%
Active Learning & Safe Shop Procedures	20%
Assignments & Quizzes	10%

Project Evaluation

Evaluation differs from project to project. Students will be given an evaluation sheet with each project.

MATERIALS

Students should bring to each class:

- 1) 3-ring duo-tang or binder
- 2) Pencil and eraser

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Course Outline Design
Learning/Woodwork8

Course Overview: An introductory course focusing on basic woodworking skills, safety, and project development.

Key Topics:

- 1 Safety Protocols*
 - o Workshop rules and proper attire*
 - o Safe use of hand and power tools*
- 2. Design and Planning*
 - o Sketching and drafting project ideas*
 - o Creating material lists and step-by-step plans*
- 3. Material Knowledge*
 - o Identifying different types of wood and their uses*
 - o Understanding wood properties and selection*
- 4. Tool Proficiency*
 - o Proper use of hand tools (e.g., saws, chisels)*
 - o Introduction to basic power tools*
- 5. Measurement and Layout*
 - o Accurate measuring techniques*
 - o Marking and layout procedures for cutting*
- 6. Joinery Basics*
 - o Simple joints like butt and lap joints*
 - o Gluing and fastening methods*
- 7. Project/Construction*
 - o Building a simple project - Dice, Gum Dispenser*
 - o Applying finishing touches*

Materials Needed:

- Notebook and pencil for sketches and notes*
- Personal protective equipment (e.g., closed toed shoes)*

EVALUATION

Students will be evaluated and graded using the following breakdown:

A. Diagnostic assessment

- 1. Prior knowledge test - provides the teacher with information about what students already know and can do.*
- 2. Safety tests - the students must score at least 95% to pass and to begin working on their projects*
- 3. Self-assessment test - through this, students can identify their own skill gaps, revise their work, and track their own progress.*

B. Formative assessment - 40 points

- 1. Theory Work (Class Activities)*

- 2. Employable Skills (Shop conduct, safety habits, time on task, clean up habits)*

C. Summative assessment - 60 points

1 Practical Work (Projects) - each project is worth 30 points. Important note:

Points will be deducted for missing a deadline.

Shop Rules and Expectations

Food and Drinks

- No food or drinks in the shops, but water in a bottle is allowed. Absences*
- Attendance for demonstrations, discussions, and performing your skills is essential on a course like this. Absences can contribute to a failure of the course.*

Shop Clean-up

- Everyone is expected to fully participate in the daily clean-up tasks. Anyone who fails to do his or her share may lose their project building privileges.*

Projects

- Any personal extra projects worked on in the shops must have my approval before beginning, and all costs associated with those projects paid for*

Personal Electronics

- Personal electronics with video displays can only be used if permission is allowed. Using these electronics for schoolwork is fine, but game playing will not be tolerated. If you choose to bring a device to class, it may be taken away. Music players can be used, but only within the shop rules.*

Vandalism

- Will not be permitted to any tools, tables, or floor. It will NOT be tolerated and met with a phone call home and a referral to the office.*

Contact

Teacher: Mr. Bennett

District e-mail:

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