Wood 9 / 10
Course Overview

Teacher: Mr. J. Pinto

The Wood 9/10 course covers the basic concepts of woodworking as prescribed by British Columbia's Ministry of Education Curriculum Guide – Technology Education 8 to10. The main focus is to develop the students' practical skills and understanding of various wood joinery processes as well as safe and responsible use of hand and power tools found in common carpentry environments.

Competencies:

Students are expected to be able to do the following:

Applied Design

Understanding context

- Engage in a period of **research** and **empathetic observation** in order to understand design opportunities

Defining

- Choose a design opportunity
- Identify potential users and relevant contextual factors
- Identify criteria for success, intended impact, and any **constraints**

Ideating

- Take creative risks in generating ideas and add to others' ideas in ways that enhance them
- Screen ideas against criteria and constraints
- Critically analyze and prioritize competing factors, including social, ethical, and sustainability considerations, to meet community needs for preferred futures
- Choose an idea to pursue, keeping other potentially viable ideas open

Prototyping

- Identify and use **sources of inspiration** and information
- Choose a form for prototyping and develop a **plan** that includes key stages and resources
- Evaluate a variety of materials for effective use and potential for reuse, recycling, and biodegradability
- Prototype, making changes to tools, materials, and procedures as needed
- Record **iterations** of prototyping

Testing

- Identify **sources of feedback**
- Develop an **appropriate test** of the prototype
- Conduct the test, collect and compile data, evaluate data, and decide on changes
- Iterate the prototype or abandon the design idea

Making

- Identify and use appropriate tools, **technologies**, materials, and processes for production
- Make a step-by-step plan for production and carry it out, making changes as needed
- Use materials in ways that minimize waste

Sharing
- Decide on how and with whom to **share** their **product** and processes
- Demonstrate their product to potential users, providing a rationale for the selected solution, modifications, and procedures, using appropriate terminology
- Critically evaluate the success of their product, and explain how their design ideas contribute to the individual, family, community, and/or environment
- Critically reflect on their design thinking and processes, and evaluate their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain an efficient co-operative work space
- Identify new design issues

Applied Skills

- Demonstrate an awareness of precautionary and emergency safety procedures in both physical and digital environments
- Identify the skills and skill levels needed, individually or as a group, in relation to specific projects, and develop and refine them as needed
- Choose, adapt, and if necessary learn about appropriate tools and technologies to use for tasks
- Evaluate the personal, social, and environmental impacts, including unintended negative consequences, of the choices they make about technology use
- Evaluate how the land, natural resources, and culture influence the development and use of tools and technologies

Student input is essential in order to make this course fun, interesting and relevant. Therefore, your participation and ideas for projects or just ways to make this class more relevant are always welcome.

Content:

Students are expected to know the following:
- importance of woodwork in historical and cultural contexts, locally and throughout Canada
- identification, characteristics, properties, and uses of wood from various tree species
- techniques for adjusting plans and drawings
- woodworking **techniques** and **traditional** and **non-traditional** joinery using a variety of tools and equipment, including **stationary power equipment**
- the relationship between First Peoples culturally modified trees and the sustainable use of wood
- **issues** in the sustainable use of wood

SUPPLIES

Each student will be required to bring the following supplies to each class:
- Binder / Duo-Tang with lined paper
- Pen (red and blue)
- Pencil
- Eraser (white)

SAFETY:

Safety is an essential part of this course as well as a lifelong learning process. Students should be able to work safely and cooperatively with other students. As

well, students will be expected to know how to conduct themselves in a safe manner and to use all equipment in a safe manner. Safety lectures, demonstrations and tests must be completed before using any portable power tools or stationary equipment.

CLASS POLICY:

1. Individual Learning – Student learning is directly influenced by the choice of projects, desire to learn, and effort put forth. Therefore, it is expected that students are present and ready to work every class, participate in class and vigorously pursue completion of their own projects.
2. Material Overruns – Each student will be given an allotment of material for each project for the duration of the course as the course progresses through the semester. If your project exceeds this limit, you will be responsible for paying the difference of the cost of the material.
3. Self-Directed Projects – All independent/Self-Directed projects need to be presented with a plan or rough sketch (including dimensions) and a Bill of Materials, and submitted for teacher approval. Once approved, students must pay for the material: *Payment should be by cheque made payable to* "**North Surrey Secondary**' before work begins.
4. Waste – All material must be accounted for. Therefore students are required to maintain an accurate log of material used.
5. Material Choice – If you wish to use a material that is not available in the shop, you are responsible for purchasing the material independently.
6. Wood Enhancement Material - A Wood Enhancement Material fee may be collected for upgraded or independent projects. This applies to projects if you want to upgrade, enlarge, or just build a different project.

ASSESSMENT:

To successfully complete the course, students must:
*   complete **All** safety tests achieving mastery (100% correct…before use of the appropriate equipment)

*   complete **All** Directed or Self-Directed projecs to an acceptable quality – finished and functional (Based on the assessment rubric outlined in class)
*   submit **All** assignments prior to the last defined class due date.

The course assessment will be based on *Assessment for Learning* in three categories:

*   **Communication**
*   **Thinking**
*   **Personal and Social**

Note: Assessment for each of the above categories is based on 4 classifications:

- **(N)** – **Not Meeting Expectations**: Have not met design specifications. (*Incomplete – many flaws, quality not evident*)

- **(A) - Approaching Expectations**: Most project components meet the design specifications. (*Incomplete/Complete, some flaws, quality evident*)

- **(M)** - **Meeting Expectations**: Completed to design specification (*Complete - some flaws, high quality*)

- **(E)** - **Exceeding Expectations**: Completed to design specification. Student has gone above and beyond project or course requirements. (*Complete - no flaws, extremely high quality*)

Each project will have an assessment rubric or evaluation guide, with clear definitions of each category. At the time of completion and the project is submitted to the teacher and Assessment will be given (N, A, M, or E). There will be no (%) percentage mark given.

At the end of the semester each student will be given a final mark (letter grade or %) based on their accumulated (Communication, Thinking, and Personal and Social) Assessment.

Individual and group learning can be extended to include additional project(s) and / or extra-curricular effort.

Have Fun!

Mr. Pinto Email: pinto_j@surreyschools.ca