Course: Woodwork 12

Teacher Name: Gordon Muter

Contact Information: gmuter@sd44.ca

Course Description:

In Woodworking 12, students learn that design for the life cycle includes consideration of social and environmental impacts; that personal design interests require the evaluation and refinement of skills; and that tools and technologies can be adapted for specific purposes.

Carpentry and Joinery 12 expands upon concepts and skills introduced in woodworking 9 and 10 by requiring students to design their own projects. After leaning safe use of tools, cutting and joining methods, students begin the course by building a project of their own design using only a 2x4. After completion of the 2x4 design challenge, students may build whatever projects their skills allow, from fine furniture to guitars, with an emphasis on design. As well as practical skills, students learn transferable life-skills such as problem solving, work ethic, perseverance and the design process.

The overarching inquiry question of the course is “"How can we design and fabricate products to meet our needs?"

Course Expectations:

It is expected that students will:

- Abide by the student Code of Conduct
- Adhere to the Academic Honesty policy
- Respect yourself and others
- Attend every class and be punctual
- Inquire, think, and participate to the best of your individual ability
- Access technology in class for learning purposes only & only when instructed to do so
- Challenge yourself and have fun learning

Seycove Learning policies can be accessed at:
https://www.sd44.ca/school/seycove/About/agenda/Documents/Seycove%20Agenda%20Book%202018-2019%20(final).pdf

Learning Plan:

%	Evidence of Learning (Assessment)	Learning Plan
80%	Students will be assessed on the quality of production of their completed projects,	**What students will know:** complex woodworking and design creation and use of working pictorial and written plans wood-related materials selection of wood based on its characteristics and properties layout and use of materials to minimize waste and conserve material operation, maintenance, and adjustment of stationary power equipment types and purposes of joinery analysis and identification of defects in wood methods for preparing wood surfaces for application of finish identification and analysis of building codes for applicable projects sequence of steps when working with power equipment sharpening procedures

types, purposes, and application of finishes

design for the life cycle

ethics of cultural appropriation in design process

future career options and

opportunities in woodworking contexts

interpersonal and consultation skills to interact with clients

What the students will do:

Applied Design

Understanding context

- Engage in a period of user-centred research and empathetic observation to understand design opportunities

Defining

- Establish a point of view for a chosen design opportunity
- Identify potential users, intended impact, and possible unintended negative consequences
- Make decisions about premises and constraints that define the design space, and develop criteria for success
- Determine whether activity is collaborative or self-directed

Ideating

- Critically analyze how competing social, ethical, and sustainability considerations impact design

	• Generate ideas and add to others' ideas to create possibilities, and prioritize them for prototyping • Evaluate suitability of possibilities according to success criteria and constraints • Work with users throughout the design process *Prototyping* • Identify, critique, and use a variety of sources of inspiration • Choose an appropriate form, scale, and level of detail for prototyping, and plan procedures • Analyze the design for the life cycle and evaluate its impacts • Visualize and construct prototypes, making changes to tools, materials, and procedures as needed • Record iterations of prototyping *Testing* • Identify and communicate with sources of feedback • Develop an appropriate test of the prototype, conduct the test, and collect and compile data • Evaluate design according to critiques, testing results, and success criteria to make changes *Making* • Identify appropriate tools, technologies, materials, processes, cost implications, and time needed • Create design, incorporating feedback from self, others, and testing prototypes • Use materials in ways that minimize waste *Sharing* • Decide how and with whom to share or promote design, creativity, and processes • Share the product with users and critically evaluate its success

		• Critically reflect on their design thinking and processes, and identify new design goals • Identify and analyze new design possibilities, including how they or others might build on their concept **Applied Skills** Apply safety procedures for themselves, co-workers, and users in both physical and digital environments Identify and assess skills needed for design interests, and develop specific plans to learn or refine them over time Demonstrate competency and proficiency in skills at various levels involving manual dexterity and complex woodworking techniques
20%	**Summative Assessment** Students' finished projects will be assessed for accuracy, and quality of fabrication.	
100%		