Argyle Secondary School
Carpentry and Joinery 12 Course Outline
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https://curriculum.gov.bc.ca/curriculum/adst/12/woodwork

Course Description

Carpentry and Joinery 12 is an advanced course in woodwork that builds on skills learned in Carpentry and Joinery 11. Students will learn to design and build their own projects using a variety of milling and joining methods.

Topics that will be covered are: design process, joinery, finishing, health and safety, project management, mathematical applications, materials, hand tools, power tools, stationary equipment, careers and education.

The goal of the Carpentry and Joinery program is to impart respect, awareness, and theoretical knowledge of the various tools, materials and techniques specific to this subject. Active participation in the development of specific skill sets will enable students to gain confidence, understanding, and achieve success in the Carpentry and Joinery program.

BIG IDEAS

Design for the life cycle includes consideration of social and **environmental impacts**.	Personal design interests require the evaluation and refinement of skills.	Tools and technologies can be adapted for specific purposes.

Learning Standards

Curricular Competencies	Content
Students are expected to be able to do the following: **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	*Students are expected to know the following:* • 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

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	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 **finishe**s • **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

Curricular Competencies

- 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

Applied Technologies

- Explore existing, new, and emerging tools, technologies, and systems to evaluate suitability for their design interests
- Evaluate impacts, including unintended negative consequences, of choices made about technology use
- Examine and analyze the role that changing technologies play in woodworking contexts

Assessment & Evaluation Breakdown

Through individual and class discussions students will have the opportunity to discuss their own progress and work daily.
Individual requirements for each assignment will be outlined at the beginning of each project, including the criteria for evaluation that is in the format of a rubric.
You will be asked to hand in your projects and theory work during the term on specific dates. Marks will be deducted for late submissions (30%)

The following allocation will be used to calculate term marks:

Class Projects (practical)	60%
Theory work, quizzes and tests	20%
Classroom Participation; energy, focus, cooperation	20%

Resource Materials and Equipment Required

Students will be supplied with all materials and literature necessary for course participation. A respect for equipment and supplies within the classroom is demanded and will be diligently enforced.

Extra Help/ Tutorials

Students will be encouraged to use tutorial times provided for extra instruction and or practice and learning.

Expectations

It is imperative that students conduct themselves in a mature manor that reflects respect toward the class environment, members of the class and themselves.

It is expected that students:

- Attend each class and be on time
- Bring their personal supplies to each class
- Ensure projects are completed and submitted on time
- Ensure their notes and assignments are neat, organized, and up to date
- Respect the materials and equipment of the department
- Be respectful of other's personal space and equipment
- Use class time productively and safely
- Participate in classroom organization and clean-up on a continual bases
- Be open to new ideas, share your ideas and opinions while respecting those of others

Please refer to the Student Agenda for additional information pertaining to student conduct.