Wood Arts Honors - Unit 2 - Advanced Joinery Techniques

Content Area: **Arts**
Course(s): **Wood Arts Tech3**
Time Period: **Semester 1**
Length: **YR**
Status: **Published**

Student Learning Standards:

- Standard 9.3.8.B.1: Demonstrate knowledge of various woodworking materials and their properties.
- Standard 9.3.8.B.3: Apply appropriate techniques for cutting, shaping, and joining wood to create woodworking projects.
- Standard CS.K–12.3.2.1.A: Utilize computer-aided design (CAD) software to create detailed joinery plans for woodworking projects.
- Standard 1.1.8.C: Analyze and evaluate woodworking techniques and processes in the context of historical and contemporary art forms.

Enduring Understandings:

1. Students will understand that mastering various joinery techniques is crucial for constructing sturdy, durable, and visually appealing woodworking projects.
2. Students will understand that a deep knowledge of the properties and characteristics of different woodworking materials is essential for selecting and executing the most effective joinery methods.
3. Students will understand that successful joinery relies on the precise application of techniques, informed by material science, to achieve both structural integrity and aesthetic quality in finished pieces.

Essential Questions:

1. How do appropriate techniques for cutting, shaping, and joining wood contribute to the structural integrity and visual appeal of woodworking projects?
2. What are the key characteristics of various woodworking materials, and how do these properties dictate the most effective and durable joinery techniques?
3. In what ways does the precise application of joinery techniques, informed by an understanding of material properties, elevate a woodworking project from basic construction to a piece of quality craftsmanship?

Knowledge & Skills:

- Understanding of various woodworking materials and their properties.
- Proficiency in appropriate techniques for cutting, shaping, and joining wood.
- Competency in utilizing CAD software for creating detailed joinery plans.
- Analysis and evaluation of woodworking techniques and processes.

Resources:

- Reference materials on woodworking materials and their properties.
- Manuals and guides for various joinery techniques.
- CAD software for designing and creating joinery plans.
- Resources on woodworking techniques and processes in historical and contemporary art forms.

Transfer Goals:

1. Apply appropriate cutting, shaping, and joining techniques to create strong woodworking projects.
2. Utilize Digital Tools to develop detailed joinery plans for woodworking projects.

Assessments

Assessments

Modifications

Modifications