

Course Title – Woodworking 3

Implement start year – 2015-2016

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Unit #1 – Safety

Transfer Goal –

Students will be able to independently use their learning to operate tools and machines safely.

Stage 1 – Desired Results

Established Goals

2009 NJCCC Standard(s), Strand(s)/CPI #
(<http://www.nj.gov/education/cccs/2009/final.htm>)

Common Core Curriculum Standards for Math and English
(<http://www.corestandards.org/>)

8.2 Technology Education, Engineering, and Design

All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.

G. The Designed World: The designed world is the product of a design process that provides the means to convert resources into products and systems.

- 8.2.12.G.1 Analyze the interactions among various technologies and collaborate to create a product or system demonstrating their interactivity.

21st Century Themes

(www.21stcenturyskills.org)

- Global Awareness
- Financial, Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy

21st Century Skills

Learning and Innovation Skills:

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration

Information, Media and Technology Skills:

- Information Literacy
- Media Literacy
- ICT (Information, Communications and Technology) Literacy

<p><u>CCSS.ELA-LITERACY.RST.9-10.3</u> Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.</p> <p><u>CCSS.ELA-LITERACY.WHST.9-10.2.F</u> Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p><u>9.1 21st-Century Life & Career Skills</u> All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.</p> <p>9.1.12.A.1 Apply critical thinking and problem-solving strategies during structured learning experiences.</p>	<p><i>Life and Career Skills:</i> <input type="checkbox"/> Flexibility and Adaptability <input type="checkbox"/> Initiative and Self-Direction <input type="checkbox"/> Social and Cross-Cultural Skills <input type="checkbox"/> Productivity and Accountability <input type="checkbox"/> Leadership and Responsibility</p>
<p><u>Enduring Understandings:</u> <i>Students will understand that . . .</i></p> <p><i>EU 1</i></p> <p>the implementation of proper safety procedures will minimize potential hazards.</p>	<p><u>Essential Questions:</u></p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> • Why is safety important? • How does behavior affect safety? • How does the maintenance of tools and machines impact safety? • How does classroom environment influence safety?
<p><u>Knowledge:</u> <i>Students will know . . .</i></p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> • proper classroom expectations (attire, behavior, procedures, etc.). • the form, function, and safe application of hand tools. 	<p><u>Skills:</u> <i>Students will be able to . . .</i></p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> • demonstrate proper general lab safety. • demonstrate the proper safety, form and function of hand tools.

- the form, function, and safe application of power tools.

- demonstrate the proper safety, form and function of power tools.
- select the appropriate tool for a required task.

Stage 2 – Assessment Evidence

Recommended Performance Tasks:

Other Recommended Evidence: *Tests, Quizzes, Prompts, Self-assessment, Observations, Dialogues, etc.*

- Quiz/Test on hand tools, power tools, general lab safety
- Students demonstrate setup, safety, and operation of hand/power tools
- Student presentations on safety, form and function of hand/power tools
- Group discussions on proper safety practices

Stage 3 – Learning Plan

Suggested Learning Activities to Include Differentiated Instruction and Interdisciplinary Connections: *Each learning activity listed must be accompanied by a learning goal of A= Acquiring basic knowledge and skills, M= Making meaning and/or a T= Transfer.*

- Research faceturning on the wood lathe (A)
- Observe technicians using proper procedures (A)
- Teacher led discussions on safety and hand/power tool usage (A)
- Practice new skillsets on hand and power tools (M)
- Create a safety and operations worksheet outlining the function of given tools (M,T)
- Demonstrate proper tool usage (M,T)
- Create a safety assessment as a training consultant for manufacturing facility (M,T)
- Student presentations and modeling of hand/power tool usage (M,T)
- Student journaling and self reflection (T)