

Course: *Woodworking 2*
Unit # 1: *Safety and Machine Maintenance*

Year of Implementation: 2024-2025

Curriculum Team Members {*Michael Johnston* mjohnston1@lrhsd.org, *Jim Scott* jscott@lrhsd.org, *Mike Robinson* mrobinson@lrhsd.org, *Kevin Dybalski* kdybalski@lrhsd.org}

Stage One - Desired Results

Link(s) to New Jersey Student Learning Standards for this course:

{provide all applicable links to standards here}

<https://www.state.nj.us/education/cccs/2020/>

- **Unit Standards:** *(keep each of the following headings in place)*
 - **Content Standards**
 - List all content-specific standards that apply to this unit here
 - **21st Century Life & Career Standards**
 - 9.3.12.AC-CST.9 Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.
 - 9.3.MN-PRO.2 Manage safe and healthy production working conditions and environmental risks
 - 9.3.MN-PPD.3 Monitor, promote and maintain a safe and productive workplace using techniques and solutions that ensure safe production of products.
 - 9.3.MN.3 Comply with federal, state and local regulations to ensure worker safety and health and environmental work practices.
 - 9.3.MN-MIR.3 Diagnose equipment problems and effectively repair manufacturing equipment.
 - 9.3.MN-MIR.6 Implement an effective, predictive and preventive manufacturing equipment maintenance program.
<https://www.state.nj.us/education/cccs/2020/2020%20NJSLS-CLKS.pdf>
 - **English Companion Standards**
- Grade 9-10 Companion Standards:
 - RI.9-10.7. Analyze various perspectives as presented in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
 - NJSLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content

- Grade 11-12 Companion Standards:
 - NJSLSA.R1. Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
 - NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience
 - ***Interdisciplinary Content Standards***
 - List any standards from other content areas that apply to this unit.
 - ***NJ Statutes:*** NJ State law mandates the inclusion of the following topics in lesson design and instruction as aligned to elementary and secondary curriculum.

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocides in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35 A board of education shall include instruction on the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people, in an appropriate place in the curriculum of middle school and high school students as part of the district's implementation of the New Jersey Student Learning Standards (N.J.S.A. 18A:35-4.36) A board of education shall have policies and procedures in place pertaining to the selection of instructional materials to implement the requirements of N.J.S.A. 18A:35-4.35.

Diversity and Inclusion (N.J.S.A. 18A:35-4.36a) A board of education shall incorporate instruction on diversity and inclusion in an appropriate place in the curriculum of students in grades kindergarten through 12 as part of the district's implementation of the New Jersey Student Learning Standards.

Asian American and Pacific Islanders (AAPI) P.L.2021, c.410 Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416)

For additional information, see

NJ Amistad Curriculum: <https://www.nj.gov/education/amistad/about/>

Diversity and Inclusion: <https://www.nj.gov/education/standards/dei/index.shtml>

- (Sample Activities/ Lessons): <https://www.nj.gov/education/standards/dei/samples/index.shtml>

Asian American and Pacific Islanders:

- [Asian American and Pacific Islander Heritage and History in the U.S.](#)

A Teacher's Guide from EDSITEment offering a collection of lessons and resources for K-12 social studies, literature and arts classrooms that center around the experiences, achievements and perspectives of Asian Americans and Pacific Islanders across U.S. history.

Transfer Goal: Students will be able to independently use their learning to safely use tools and equipment in a shop setting

As aligned with LRHSD Long Term Learning Goal(s):<https://www.lrhdsd.org/Page/6163>

- *acquire, integrate, and apply design processes and essential technical skills to solve problems, create products, and improve the quality of life for our local and global community*

Enduring Understandings {use Arial 11 font}

Students will understand that. . .

EU 1

Essential Questions {use Arial 11 font}

]

<ul style="list-style-type: none"> the implementation of proper safety procedures and maintaining equipment in the shop will minimize potential hazards. <p><i>EU 2</i></p> <ul style="list-style-type: none"> Each tool or piece of equipment has specific set of operations 	<ul style="list-style-type: none"> Why is safety important? What can you do to keep yourself and others safe in the workspace? How does behavior and mindset affect safety? <ul style="list-style-type: none"> How does the condition of tools impact safety? Are there times you should use a hand tool instead of a power tool?
<p><u>Knowledge</u> Students will know . . .</p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> proper classroom procedures.(9.3.MN-PRO.2, 9.3.MN-PPD.3, 9.3.MN.3) proper personal protective equipment.(9.3.MN-PRO.2, 9.3.MN-PPD.3, 9.3.MN.3) proper classroom behavior.(9.3.MN-PRO.2, 9.3.MN-PPD.3) <p><i>EU 2</i></p> <ul style="list-style-type: none"> how to diagnose factors that indicate a need for a tool or machine to receive maintenance. (9.3.12.AC-CST.9) 	<p><u>Skills</u> Students will be able to. . .</p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> demonstrate proper general lab safety.(9.3.MN-PRO.2, 9.3.MN-PPD.3, 9.3.MN.3) select and use personal protective equipment. (9.3.MN-PRO.2, 9.3.MN-PPD.3, 9.3.MN.3) identify potential hazards within the shop. (9.3.MN-PRO.2, 9.3.MN-PPD.3) <p><i>EU 2</i></p> <ul style="list-style-type: none"> diagnose factors in their work processes for lack of performance in the equipment they are using to signal a need for maintenance.(9.3.12.AC-CST.9)

- How to demonstrate the ability to apply maintenance techniques for a tool or machine. (9.3.12.AC-CST.9)

- inspect, clean, sharpen, lubricate, and adjust equipment (9.3.12.AC-CST.9)

Stage Two - Assessment

Stage Three - Instruction

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. {place A, M and/or T along with the applicable EU number in parentheses after each statement} All knowledge and skills must be addressed in this section with a corresponding lesson/activity which teaches each concept. The following color codes are used to notate activities that correspond with interdisciplinary connections and 21st Century Life & Career Connections (which involves Technology Literacy): **Red = Interdisciplinary Connection; Purple = 21st Century Life & Career Connection**

For example:

- Teacher led discussions on shop safety and hand/power tool usage (A EU1,2)
- Demonstrations on hand/power tool usage.(A,M, EU2)
- Student note taking on safety(A, EU1,2)
- Reverse engineer a simple machine (M, T EU3)
- Practice new skill sets on hand and power tools (M, EU1,2)
- Create a safety and operations worksheet outlining the function of given tools (M,T EU2)
- Demonstrate proper tool usage (M,T EU1,2)
- Student journaling (M,T EU1,2)

Pacing Guide

{This chart will be identical in all of the units for this course.}

Unit #	Title of Unit	Approximate # of teaching days
1	<i>Safety and Machine Maintenance</i>	30
2	<i>The Assembly Process</i>	40
3	<i>Furniture Making and Cabinetry</i>	80
4	<i>Finishing Process</i>	30

Instructional Materials

{Provide a list of all instructional materials used for this curriculum here. Items such as chromebooks and teaching tools such as Peardeck, EdPuzzle, etc... should NOT be listed.}

Tablesaw
 Bandsaw
 Planer
 Jointer
 Drill Press
 Radial Arm Saw
 Handsaws
 Chisels
 Files
 Clamps
 Vises
 Safety Glasses
 Hearing Protection

Aprons
Compressed Air

Accommodations

Special Education: The curriculum will be modified as per the Individualized Education Plan (IEP). Students will be accommodated based on specific accommodations listed in the IEP.

Students with 504 Plans: Students will be accommodated based on specific accommodations listed in the 504 Plan.

English Language Learners: Students will be accommodated based on individual need and in consultation with the ELL teacher.

Students at Risk of School Failure: Students will be accommodated based on individual need and provided various structural supports through their school.

Gifted and Talented Students: Students will be challenged to enhance their knowledge and skills through acceleration and additional independent research on the subject matter.