

Course: *Woodworking*
Unit # 2: *The Assembly Process*

Year of Implementation: 2024-2025

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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**
 - All curriculum writers/revisionists need to include standards that apply to “Career Readiness, Life Literacies, and Key Skills”. This should include a brief description of the standard and the standard number. Document only those standards and practices that apply to each unit. Use the following link to assist you [see pages of 31-36; 41-42; 53-56 for specific standard #'s and strands]
<https://www.state.nj.us/education/cccs/2020/2020%20NJSLs-CLKS.pdf>
 - **English Companion Standards**
 - List grade-level appropriate companion standards for History, Social Studies, Science and Technical Subjects (CTE/Arts) 9-12. English Companion Standards are required only in these subject/content areas. This section can be deleted for all other content areas.
 - Grade 9-10 Companion Standards:
https://www.nj.gov/education/standards/ela/Docs/2016NJSLS-ELA_Companion9-10.pdf
 - Grade 11-12 Companion Standards:
https://www.nj.gov/education/standards/ela/Docs/2016NJSLS-ELA_Companion11-12.pdf
 - **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 (NJSL) 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 identify, select, and use the appropriate fasteners to safely and accurately construct a given project.

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

- *each wood joint has a specific set of uses.*

EU 2

- mechanical fasteners can be used in many different ways in furniture making.

Essential Questions {use Arial 11 font}

- What factors influence wood joint selection?
- What joints are best suited based on the design and application of the project?

- Why are there a variety of fasteners that can be used in woodworking?

<p>EU3</p> <ul style="list-style-type: none"> • Glues and adhesives have advantages and disadvantages. 	<ul style="list-style-type: none"> • What are the best adhesives a woodworker can use that will give the desired results?
<p><u>Knowledge</u> Students will know . . .</p> <p>EU 1</p> <ul style="list-style-type: none"> • When to use each specific wood joint • The set of uses for each wood joint • The advantages and disadvantages of each wood joint <p>EU 2</p> <ul style="list-style-type: none"> • The applications for each fastener • Which fastener is more structurally sound <p>EU 3</p> <ul style="list-style-type: none"> • The various types of laminates • The advantages and disadvantages of using laminates 	<p><u>Skills</u> Students will be able to . . .</p> <p>EU 1</p> <ul style="list-style-type: none"> • Determine which wood joint use based on structural strength • Construct the wood joint <p>EU 2</p> <ul style="list-style-type: none"> • Choose the most advantageous fastener for a given project • Determine when it is improper to use a given fastener <p>EU 3</p> <ul style="list-style-type: none"> • Describe the properties of different types of laminates • Choose the proper laminate for the job
<p>Stage Two - Assessment</p>	

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 discussion on wood joints/fasteners (A, EU 1, EU 2)*
- *Demonstrations on wood joint construction (A, M, EU 1)*
- *Student note taking on laminating boards together (A, EU 3)*
- *Layout, cut, and assemble wood joints using hand tools (M, T, EU 1, EU 3)*
- *Create a operations worksheet outlining gluing procedures (M, T, EU 3)*
- *Student Journaling (M, T, EU 1, EU 2, EU 3)*

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.}

- Glue
- Nails
- Screws
- Hand saws
- Chisels
- Clamps
- Scrap wood
- Sample projects
- Mallets

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.