

Carpentry - Exploratory
Level I Unit Outline

Unit 1: Agenda Book Review/Classroom Rules

- Class discussion of student agenda book
- Discussion of classroom rules
- School safety protocols, district drills and emergency evacuations, behavior and meeting locations
- Review expectations and school policies for electronic devices

Unit 2: Safety, First Aid, Personal Protective Equipment and Shop Attire

- Identify, discuss, locate first aid and blood borne kits
- Identify, locate and demonstrate function and purpose of the Emergency Eye Station
- Identify, discuss, locate fire extinguisher
- Identify, distribute and discuss function and uses of protective eyewear, appropriate personal protective equipment (PPE) required in shop, and acceptable shop attire
- Identify, show location and discuss function and uses of the SDS (Safety Data Sheets) and how to interpret the information about paints and aerosols, content precautions, material labeling
- Equipment safety protocols
- Identify, demonstrate shop ventilation systems where applicable
- Identify locate and discuss function of shop flammable cabinet where applicable
- Discuss and demonstrate shop housekeeping of supplies, work stations and room maintenance
- Discuss and identify electrical safety considerations in the shop area
- Compile a safety section in the student shop notebook
- Identify, demonstrate air gauge function and operation where applicable
- Completion of online safety course and successful passing of safety test(s)

Unit 3: Introduction to Cabinetmaking

- Learning the basic fundamentals of design and reading plans
- Learn to create cabinetmaking joints
- Learn about proportion, balance and detail
- Learn about various wood types and materials, softwood and hardwood

Unit 4: Introduction to Exploratory Project

- Learn about materials and fasteners used in the selected project
- Creating and fabricating drawings for project(s)
- Identify component dimensions and developing a cut list
- Students will apply calculations, measuring, marking, safety and procedure to create a project
- Projects will be assessed by rubric

Unit 5: Introduction to Hand Tools

- Learn about different types of hand tools
- Learn about cutting tools, shaping tools, striking tools, fastening tools
- Developing skills, safety and appropriate use of the tools
- Introduction to cordless battery tools

Unit 6: Introduction to Power Tools

- Learn about different types of power tools
- Learn about portable tools, power supply
- Developing skills, safety and appropriate use of the tools

Unit 7: Tools and Machines

- Learn the fundamentals and safe usage of different types of cutting devices
- Learn how to layout, measure, and use devices to check a design
- Learn the use of sawing, edge-cutting, drilling, boring, and metalworking tools
- Learn how to maintain stationary and portable tools used in the shop area as it pertains to a specific project

Unit 8: Finishing Work

- Learn basic finishing preparations
- Learn different types of finishes and their applications
- Learn hand-applied finishes
- Learn the procedure for applying different finishes as it relates to a specific project.

Unit 9: Career Exploration

- Career exploration related to the program
- Establishing short and long-term goals
- Starting the CTE portfolio and basic resume

Carpentry
New Jersey Student Learning Standards

NJ Learning Standards: CTE.9.3

| | |
|---|--|
| CONTENT AREA: | STANDARD 9.3 CAREER AND TECHNICAL EDUCATION |
| ARCHITECTURE & CONSTRUCTION CAREER CLUSTER® | |
| Number | Standard statement |
| <i>By the end of Grade 12, Career and Technical Education Program completers will be able to:</i> | |
| CAREER CLUSTER®: | ARCHITECTURE & CONSTRUCTION (AC) |
| 9.3.12.AC.1 | Use vocabulary, symbols and formulas common to architecture and construction. |
| 9.3.12.AC.2 | Use architecture and construction skills to create and manage a project. |
| 9.3.12.AC.3 | Comply with regulations and applicable codes to establish and manage a legal and safe workplace. |
| 9.3.12.AC.4 | Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy. |
| 9.3.12.AC.5 | Describe the roles, responsibilities, and relationships found in the architecture and construction trades and professions, including labor/management relationships. |
| 9.3.12.AC.6 | Read, interpret and use technical drawings, documents and specifications to plan a project. |
| 9.3.12.AC.7 | Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction Career Pathways. |
| | |