

Building Trades - Exploratory
Level I Unit Outline

Unit 1: Agenda Book Review/Classroom Rules

- Class discussion of student agenda book
- Review of classroom rules and expectations
- 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 Building Trades Tools

- Identify, list, and name the cutting, sawing, and drilling tools used most often
- Demonstrate how to safely use each of the hand tools
- Identify, list, and name the fasteners, fastening tools, and forming tools used most often
- Demonstrate how to safely use each of the fasteners, fastening tools, and forming tools properly
- Explain the markings on coated abrasives
- Identify safety features of machine tools
- Introduction to measurement and layout tools

Unit 4: Introduction to Wood Types

- Identify, list, and name the various types of wood and wood products which can be used for various projects in Building Trades.
- Discuss 'Going Green' Substitutes whenever and wherever possible
- Identify/explain construction materials and purpose
- Understand and practice safety and handling of materials being used

Unit 5: Introduction to Measurements

- Identify, list, and name the various types of measurement and layout tools used most often
- Identify the English Ruler System
- Use of basic torpedo level

Unit 6: Introduction to Wood Joinery and Miter Cuts

- Use of miter box and back saw
- Identify/demonstrate biscuit joint

Unit 7: Introduction to Exploratory Project

- Learn about the type of wood and materials 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 8: Other Construction Occupations

- Residential vs. commercial carpenters
- Interior systems carpentry
- Mill cabinet makers
- Vocabulary related to occupations

Unit 9: Career Exploration

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

Building Trades
New Jersey Student Learning Standards (NJSLS)

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)
PATHWAY:	MAINTENANCE/OPERATIONS (AC-MO)
9.3.12.AC-MO.1	Recognize and employ universal construction signs and symbols to function safely in the workplace.
9.3.12.AC-MO.2	Use troubleshooting procedures when solving a maintenance problem in buildings.
9.3.12.AC-MO.3	Apply construction skills when repairing, restoring or renovating existing buildings.
9.3.12.AC-MO.4	Determine work required to repair or renovate an existing building.
9.3.12.AC-MO.5	Plan and practice preventative maintenance activities to service existing buildings.
9.3.12.AC-MO.6	Maintain and inspect building systems to achieve safe and efficient operation of buildings.