

# Unit 2: Personal Safety in Construction Technology Laboratory

Content Area: **Industrial Technology**  
Course(s): **Construction Technology I**  
Time Period: **1 week**  
Length: **Weeks**  
Status: **Published**

## Unit Overview

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Students will be able to Safely Work in the Construction Technology Laboratory without being hurt or creating an accident.

## Transfer

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Students will be able to independently use their learning to...

Students will be able to identify how they could possible be injured in a shop or jobsite by not following the important safety rules that are taught in this lesson.

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For more information, read the following article by Grant Wiggins.

[http://www.authenticeducation.org/ae\\_bigideas/article.lasso?artid=60](http://www.authenticeducation.org/ae_bigideas/article.lasso?artid=60)

## Meaning

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Students will be able to work safely in the Construction Technology Lab.

## Understandings

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Students will understand that...

-They are responsible for their own safety when working in the Construction Technology Laboratory or on a Job Site.

-They can prevent injury or accidents that could harm them, or other students or co workers if they don't follow the instructions taught in this lesson.

### **Essential Questions**

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Students will keep considering...

How can I prevent myself from being injured in the Construction Technology Laboratory?

How can I prevent injury to another student in the Construction Technology Laboratory?

### **Application of Knowledge and Skill**

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Students will be able to safely work in the Construction Technology Laboratory without being injured.

### **Students will know...**

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Students will know..

How to properly dress in the Construction Technology Laboratory to prevent injury.

To keep their fingers, hands and body out of the line of cut to prevent injury.

To maintain a clean and uncluttered work area to avoid injury.

How to properly lift any object to avoid a back injury.

To always wear Safety Glasses when any type of work is going on in the Construction Technology Lab.

To wear proper Personal Protective Equipment when performing different tasks in the Construction

Technology Lab ie: Hearing Protection, Gloves for applying finishes, dust masks, aprons.

What causes attribute to accidents in the Construction Laboratory.

### **Students will be skilled at...**

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Students will be skilled at...

Wearing Personal Protective Equipment at all times when hands on work is taking place in the Construction Technology Laboratory.

To come dressed appropriately to work safely in the Construction Technology Laboratory.

Preventing accidents in the Construction Technology Laboratory by recognizing unsafe areas or potential unsafe work practices.

### **Academic Vocabulary**

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Safety Hazards, Machine hazards, Point of operation, Rotary and reciprocating movements, In-running nip points (pinch points), Kickbacks, Flying chips, material, Tool projection, Fire and explosion hazards, Electrical hazards. Health Hazards, Noise Vibration, Wood dust,carcinogens, Chemical hazards—from exposure to coatings,,finishings, adhesives, solvent vapors.

### **Learning Goal 1**

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SWBAT wear proper clothing and PPE in the Construction Technology Lab to avoid injury.

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-CST.5	Apply practices and procedures required to maintain jobsite safety.
9.3.12.AC-CST.9	Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.
9.3.12.AC-DES.2	Use effective communication skills and strategies (listening, speaking, reading, writing and graphic communications) to work with clients and colleagues.
9.3.12.AC-MO.1	Recognize and employ universal construction signs and symbols to function safely in the workplace.

## **Target 1**

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SWBAT identify the proper personal dress including footwear to avoid an accident or injury.

## **Target 2**

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SWBAT identify the proper Personal Protective Equipment that must be worn at all times or when working with certain equipment or materials. ie: Safety Glasses or Safety Goggles at all times, Hearing Protection, Dust Masks. Nitrile Gloves for Staining or Finishes, Aprons, Face Shields.

## **Learning Goal 2**

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Students will identify the Governmental Groups that are responsible for Safety in Public Agency and Construction Worksites.

9.3.12.AC.1	Use vocabulary, symbols and formulas common to architecture and construction.
9.3.12.AC.3	Comply with regulations and applicable codes to establish and manage a legal and safe workplace.
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.7	Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction Career Pathways.
9.3.12.AC-CST.5	Apply practices and procedures required to maintain jobsite safety.
9.3.12.AC-CST.9	Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.

## **Target 1**

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SWBAT identify the Governmental and Private Groups that are responsible for safety factors in the work place. OSHA, NIOSHA, PEOSHA, NJDOH.

## **Target 2**

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SWBAT identify the role of the New Jersey Right to Know program and its policies, along with proper storage of Hazardous Chemicals in School and at a Work Place.

## **Formative Assessment and Performance Opportunities**

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Students are responsible follow safety procedures in the classroom. Failure to follow these rules will penalize their grades or discipline actions will be followed if the student is unsafe.

## **Summative Assessment**

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Safety Test on Personal Safety in the Construction Technology Laboratory.

## **Accommodations/Modifications**

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Students with accomodations or modification can retest or take the test with their special needs teacher if requested.

## **Unit Resources**

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You Tube videos. Textbook. Internet Access to Safety Organizations.

## **21st Century Life and Careers**

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CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
CAEP.9.2.12.C.7	Examine the professional, legal, and ethical responsibilities for both employers and employees in the global workplace.
CAEP.9.2.12.C.8	Assess the impact of litigation and court decisions on employment laws and practices.

## **Interdisciplinary Connections**

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Science

