Unit 01: Safety

Content Area: **Applied Technology**
Course(s):
Time Period: **Marking Period 1**
Length: **2 weeks**
Status: **Published**

Summary

Introduction: Students will learn basic safety protocols for the CADD Lab and construction sites, including but not limited to the location of safety equipment, such as the emergency shut-offs, fire extinguishers, safety glasses, protective gloves, etc.

Students will learn safety procedures for materials and equipment including the drill press, scroll saw, 3-D resin printer, soldering irons, 3-d printers, electric drill, xacto knives, glues, chemicals, hand tools, and any other materials in the classroom. Students will learn to identify safety concerns, hazards, and procedures in construction sites.

Revision Date: July 2023

Essential Questions/Enduring Understandings

Essential Questions:

Why is it important to develop good safety habits?

Why is it important to know the dangers in the CADD lab and construction sites?

What are the safety procedures to follow when working in the CADD lab and construction sites?

Enduring Understandings:

Safety is the number one priority.

Proper use of personal safety attire will prevent personal injury.

Proper use of equipment is essential to preventing accidents.

Proper disposal of waste produced in the CADD lab is essential to minimizing contamination of the environment.

Objectives

Students Will Know:

safety procedures and danger areas of the CADD Lab

know and practice shop safety procedures.

the location of all safety-related equipment.

the proper disposal of hazardous materials.

accidents happen and what procedures to follow when they do.

construction sites are innately dangerous places.

construction involves many trades with their own safety procedures.

Students Will Be Skilled At:

perform hands-on demonstrations of location and use of safety equipment.

demonstrating safe work habits.

reading and understanding safety procedures

identifying safety concerns in the classroom and a construction site.

Learning Plan

Unit topics will be addressed throughout the year.

Preview the essential questions and connect to learning throughout the unit.

Instructor-led discussion on the importance of safe work habits and why good safety habits should be developed early. The discussion will also focus on what safe work habits are and how to practice them.

Tour of the shop, description of the equipment, and its proper use. The tour will include the location of fire extinguishers emergency shut-offs and their proper use.

Textbook readings and questions from Carpentry and Building Construction Unit 9-Safety.

Manufacturer provided safety procedures for specific products, i.e. Resin Printer.

Internet research is to be incorporated throughout the unit of study.

Assessment

Formative

answer essential questions

exit ticket

participate in class discussions regarding safety rules and procedures.

Summative

test on safety procedures and disposal of hazardous materials.

behavior observation assessment of instructional safety objectives.

Benchmark

Midterm Exam/Final Exam

Alternative Assessment

create safety video

research and present on topical safety procedures

Materials

Carpentry and Building Construction, Feirer, Hutchings, Feirer

CADD lab including but not limited to: drills and drill press, soldering irons, scroll saw, resin and filament 3d printer and their supplies.

safety equipment such as: emergency shut offs, fire extinguishers, safety glasses, smocks, gloves.

Standards

2.3.12	Safety
2.3.12.PS	Personal Safety
	Consideration of the short- and long-term impact of decisions can assist individuals in determining whether a choice is likely to result in healthy or unhealthy consequences.
2.3.12.PS.1	Apply a thoughtful decision-making process to evaluate situations and influences that could lead to healthy or unhealthy consequences (e.g., peers, media).

Integrated Accommodation and Modifications, Special Education students, English Language Learners, At-Risk Students, Gifted and Talented students, Career Education, and those with 504s