

A.	CLASS:	Graphic Arts
B.	TITLE OF UNIT:	Safety
C.	TITLE OF LESSON:	Safety
D.	COMPETENCIES ADDRESSED:	GA 1.1, 1.2, 1.3, 1.4, 1.5, 2.1
E.	DATE & TIME:	First Week-1st year students AM PM Classes
F.	WEEK OF INSTRUCTION:	First week
G.	INSTRUCTOR:	Mrs. Gossett
H.	ADDITIONAL INFORMATION	Attached Documents: msdsassignment.pdf, msdsactivity2.pdf, safetypretest.pdf, safetyvocab.pdf, safetyposttest.pdf, GAOSafety.pdf, safetylist.pdf, safetypacketcover.pdf, msdsinformation.pdf

Psychomotor:

Students will read MSDS sheets and answer questions correctly from information on those sheets. Student will take a safety pretest, view powerpoint, read chapter, answer review questions and answer Safety quiz with 100% accuracy

Students will know all safety rules
for the Graphic Arts class room
with 100% accuracy, as assessed by
100% score on Safety Post Test.

Students will appreciate and internalize the safety precautions used in the Graphic Arts Classroom. Student will understand and appreciate the information shown on Material Safety Data Sheets. Students will internalize all safety vocabulary

Discussion
Demonstration
Lecture
Other:

IV. RESOURCES REQUIRED:

Computer Text Book
Computer/Computer Projector
Outside Reference Materials
Other: Safety Packet
Safety Powerpoint
MSDS Activity handouts

V. INTRODUCTION:

Personnel in the Graphic Arts industry may be confronted with many hazards in the course of performing their duties. The include hazards of mechanical, chemical, flammable, electrical and ergonomic nature.

It is vital for workers in a graphic arts job to know basic safety rules. Because of the wide variety of processes performed, the potential for injury always exists. It is up to you to keep the work environment safe and healthy for your coworkers and yourself.

VI. CONTENT (*obj. ► content ► assessment = Internal Alignment*):

1st Assignment – Read Chapter 2 Graphic Communications book. Do Review questions at end.
Review and discuss with instructor

ALL STUDENTS SHOULD TAKE SAFETY PRETEST BEFORE POWERPOINT.

Powerpoint:

In this unit you will:

ILearn vocabulary terms

ILearn shop safety rules

ILearn steps in maintaining safety and order in the shop

ILearn listed information on a Material Data Safety Sheet

ILearn the steps to take in case of an emergency

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VOCABULARY TERMS

§Solvents

§Combustibles

§Personal Protective Equipment

§Hazard

§Material Data Safety Sheet (MSDS)

§Occupational Safety and Health Administration (OSHA)
§Ergonomics
§Lockout Device
Machine Guards

SHOP SAFETY RULES

In order to have a safe shop you must abide by the shop safety rules listed below:

§Conduct yourself in a manner conducive to safe shop practices.

§Do not use any equipment until you understand how to use it.

§Operate any presses or electrically powered equipment only after obtaining the approval of your instructor.

§**Never** walk away from equipment that is running.

§Always keep your hands away from a machine's moving parts.

§Use the correct tools and equipment when doing a job.

§Limit the operation of the paper cutter, paper drill, and stitcher to one person at a time.

§Tie back all long hair prior to operating any press or power equipment.

•Remove ties, scarves, loose clothing, rings, and other jewelry before operating any press or power equipment.

•**Do not** sit or lean on light tables.

•Avoid touching or looking directly at light sources.

•Wear eye protection in areas where flying objects and splashing solutions are possible.

•**Do not** touch heat sources with hands or other body parts.

•Wear hearing protection when subjected to continuous loud noise.

•Wash hands and arms with soap and water frequently to help prevent skin irritation from inks and solvents.

•**Do not** engage in horseplay, scuffling, or practical joking in the classroom or shop.

•Use the "buddy system" when working in the graphics laboratory.

MAINTAINING ORDER IN THE SHOP

•In order to maintain safety and order in the shop you must abide by the following guidelines listed below.

•Report any unsafe condition in the shop immediately.

•Arrange all machinery and equipment to permit safe and efficient operation.

•Keep materials and supplies safely stacked and stored.

•Keep all tools and accessories in cabinets, drawers or tool racks.

•Dispose of or store all combustible material in safe containers.

•Keep all floors clean and free of debris at all time.

•Check that adequate housekeeping equipment and cleaning

materials are on hand to ensure that maximum cleaning efficiency can be maintained.

- Participate in daily cleanup periods.

MATERIAL SAFETY DATA SHEET

When working with chemicals you need to know certain things about chemicals when emergencies come up.

Below you will find types of information found on a material safety data sheet. All chemical products have this information available upon request if it is not shipped with your order.

- Chemical name
- Hazardous ingredients/chemical identity.
- Physical characteristics
- Fire and explosion data
- Reactivity
- Health hazards
- Usage, handling, and storage
- Special protection and precautions

ERGONOMICS

In order to avoid back, neck, and knee injuries, and carpal tunnel syndrome, be sure to watch your posture at your desk:

Sit and work at computer with:

- I thighs horizontal
- I lower legs vertical
- I feet flat on floor
- I wrists flat

I monitor not too close or far away from face – your neck should be straight.

EMERGENCY

Here are the proper steps to take in case of an emergency:

1. Turn off power if power is involved
2. Report to instructor
3. Administer first aid, if qualified and possible
4. If chemicals are involved fill out MSDS sheet
5. Report to administrator
6. Call nurse or take injured person to nurse
7. Notify parents
8. Instructor fill out necessary accident forms.

After powerpoint, instructor should take students around the room and show safety hazards, highlighting vocabulary terms, Then students should find a chemical or ink from the shop and complete the MSDS questionnaire about that chemical, using the website from that chemical's manufacturer.

Students should review vocabulary terms.

ALL STUDENTS SHOULD TAKE SAFETY POST-TEST AFTER LESSONS. STUDENTS MUST RECEIVE 100% ON POST TEST TO USE ANY EQUIPMENT IN CLASSROOM.

Optional enrichment activity – Safety Jeopardy game
Powerpoint.

VII. SUMMARY:

Understanding safety terminology, hazards, ergonomics, MSDS sheets are very important to the Graphic Arts industry

VIII. ASSESSMENT (*obj. ► content ► assessment = Internal Alignment*):

Psychomotor:

Students will read MSDS sheets and answer questions correctly from information on those sheets. Student will take a safety pretest, view powerpoint, read chapter, answer review questions and answer Safety quiz with 100% accuracy

Cognitive:

Students will know all safety rules for the Graphic Arts class room with 100% accuracy, as assessed by 100% score on Safety Post Test.

Affective:

Students will appreciate and internalize the safety precautions used in the Graphic Arts Classroom. Student will understand and appreciate the information shown on Material Safety Data Sheets. Students will internalize all safety vocabulary

IX. ASSIGNMENTS (*reinforce major lesson components*):

Reading: Chapter 2, Graphic Communications Textbook

Sample Problems: Safety Vocabulary and review questions

(select) Safety Powerpoint

MSDS ACTIVITY

X. RELEVANCE TO FUTURE LESSONS:

2nd year students will create a Safety Poster for review

XI. LESSON/COURSE EVALUATION:

This lesson works well.