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CTE Laboratory Management and Safety Contents

According to the National Education Association's "Code of Ethics for Educators", "in fulfillment of the obligation to the student, the educator shall make reasonable effort to protect the student from conditions harmful to learning or to health and safety." (National Education Association, 2020) Educators must keep students safe by abiding by "all school and classroom safety procedures to ensure student safety." (Zeiger, 2018) We, as educators, need to provide quality education to all students. According to the Association of American Educators, "the professional educator strives to create a learning environment that nurtures to fulfill the potential of all students." (Association of American Educators, n.d.) CTE educators must be aware of any laws, policies, standards and/or regulations from the federal, state, or local level for relevant industries. These can be set by organizations or entities with jurisdiction over public schools.

Overview of Regulatory Agencies*

Level	Agency	Hazards addressed	Jurisdiction
Federal	U.S. Department of Labor (DOL) — Employment Standards Administration — Wage and Hour Division	Young workers prohibited to work in certain types of hazardous jobs Limits to number of working hours	All workers especially young workers under age 18
Federal	U.S. Department of Labor — Occupational Safety and Health Administration (OSHA)	Safety and health hazards in the workplace	Private and Federal employees
Federal	U.S. Environmental Protection Agency (EPA)	Environmental, safety, and health hazards	General public and the environment
Local	Guam Department of Labor (DOL Guam)	Safety and/or health hazards in the workplace	Employees
Local	Guam Department of Public Health and Social Services (DPHSS Guam)	Health hazards in the workplace and selected health-related services to the general public	State, county, and municipal employees and the general public
Local	Guam Environmental Protection (EPA Guam)	Environmental, safety, and health hazards	The general public and the environment
Local	Guam Department of Education (GDOE)	Environmental, safety, and health hazards	Students and teachers in public schools

Local	Guam Fire Department (GFD)	Fire and building construction safety	The general public					
*(Centers fo	*(Centers for Disease Control and Prevention, 2014)							

Prostart Laboratory Management

I. Kitchen Lab Safety

The purpose of kitchen labs and skill development is for the student to practice, develop, and demonstrate proficiency in basic culinary skills including food safety, workplace safety, teamwork and communication, and organization.

A. Responsibilities

1. Instructor Responsibilities*

Teachers are the key to a successful comprehensive safety program. They develop positive safety attitudes and awareness towards unsafe working conditions or practices. Teachers are the persons responsible for putting innovative safe programs into practice. They set the immediate example for the students to follow. The major responsibility for laboratory safety instruction in accident prevention falls on them. The following functions are considered to be the responsibilities of teachers in a comprehensive safety program.

- a) When the kitchen is not in use, power, gas lines, and vents must be shut off. All circuit panels are to remain locked. Classroom doors shall be locked. All keys shall be kept with the teacher at all times.
- b) Incorporate safety instruction into the course of study. Maintain documentation as to when instruction was given and which students received the instruction.
- c) Present and document instruction on potential hazards and accident prevention specific to the particular school facility.
- d) Initiate a comprehensive safety program for a particular school facility.
- e) Develop specific safety practices and regulations relating to facilities. Provide for the enforcement of those practices and regulations.
- f) Keep informed of new and accepted safety practices for accident prevention.
- g) Set a proper safety example for students to follow (a role model).
- h) Require that adequate uniforms be worn in the kitchen at all times.
- i) Require that personal protective equipment (PPEs) (clothing, guards, etc.) be used in all kitchen areas when necessary.
- i) Establish and enforce safe housekeeping procedures.
- k) Require that guards meeting accepted standards be provided and used whenever a machine is operated.

- Establish pre-planned procedures in case an accident or emergency occurs.
- m) Provide for the supervision of students in the classroom/laboratory in accordance with legal requirements. Note: Instructor is not to leave the classroom unsupervised at any time when students are present!
- n) Provide input in development of Individualized Education Program (IEP's) for classified students, placing special emphasis on unique safety considerations!
- o) Regularly review laboratory facilities to maintain safe conditions, giving special attention to: keep aisles clean, equipment safety guarding, storage and condition of tools, storage/labeling/handling of food, beverages, and/or potentially hazardous materials, and personal safety equipment and practices.
- p) Make recommendations to the department coordinator/supervisor for improving safety conditions.
- q) Carry out recommendations of administration for improving safety instruction.
- r) Monthly safety checks by the teacher will be logged and reviewed by the supervisor quarterly.
- s) Records of students' safety and equipment tests will be kept on file.
- t) Ensure sharpness of all cutting tools.
- u) Communicate with students' parents/guardians regarding their progress in class.

2. Student Responsibilities*

A prime purpose of any school safety program is to protect the students from accidents. They are the catalysts to a successful school safety education program. The following student responsibilities must be established to maintain an effective safety education program:

- a) Comply at all times to the safety regulations.
- b) Develop a safety awareness attitude. (Attention to detail)
- c) Report all injuries to the teacher immediately.
- d) Operate any machine only with instructor permission.
- e) Understand and apply the safe operation instructions to all machines
- f) Adhere to the teacher's instructions at all times.
- g) Always wear proper uniform attire.
- h) Inform the instructor of all unsafe conditions immediately.

i) Complete Kitchen Checklists, Temperature Logs, HACCP Weekly
 Cleaning form and ProStart Lab Report after every Kitchen Lab.
 *Adapted from the Technology Education Safety Guide. (TECHNOLOGY
 EDUCATION SAFETY GUIDE, n.d.)

B. Personal Protective Equipment (PPE)

PPE was not a common phrase before March 2020. COVID-19 or not, there are several pieces of PPE and gear your students should be using for your class at home.

- 1. Non-slip Shoes. More and more kitchens are not letting people, including guests and vendors, into the space unless they have non-slip shoes. There are many types of non-slip shoes available but the best for your students are the ones designed and manufactured for kitchens. Why? The shoes are more water and oil resistant not only on the sole but on the top as well.
- 2. Cut Gloves. More and more foodservice businesses are requiring cut gloves. This is being driven by Worker's Compensation insurance companies. In fact, many kitchens are requiring the person using the cut glove to wear a disposable glove on top because you can't readily wash cut gloves. I recommend you have your students practice this periodically. It is hard enough for a recent graduate to go into a kitchen and start doing professional knife cuts as it is. Now, in many establishments they need to do this wearing two gloves. If you haven't tried it, believe me it is a different skill set.
- 3. Chef Pants. Baggy chef pants are designed to be easily removed in the event of a major spill of things like simmering pasta sauce or hot oil. For minor spills, their baggy nature allows them to be easily lifted off the skin. Imagine what would happen if your students spilled hot oil on their thighs if they were wearing torn jeans, yoga pants or even shorts.
- 4. Chef Coats. Chef coats are double-breasted for a few reasons and one involves OSHA safety. There cannot be any exposed undergarments or skin if a coat is double-breasted. I don't understand short-sleeve chef coats. One of my most serious burns happened when I was wearing one. An oven door swung shut on my entire arm. My arm under the coat was fine, but the part from wrist to elbow was badly burned. I have seen similar issues with people using fryers and kettles. (Weiner, 2021)
- C. Hazard Analysis Critical Control Point (HACCP)

HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product. For successful implementation of a HACCP plan, management must be strongly committed to the HACCP concept. A firm commitment to HACCP by top management provides company employees with a sense of the importance of producing safe food. HACCP is a systematic approach to the identification, evaluation, and control of food safety hazards based on the following seven principles:

- 1. Principle 1: Conduct a hazard analysis.
- 2. Principle 2: Determine the critical control points (CCPs).
- 3. Principle 3: Establish critical limits.
- 4. Principle 4: Establish monitoring procedures.
- 5. Principle 5: Establish corrective actions.
- 6. Principle 6: Establish verification procedures.
- 7. Principle 7: Establish record-keeping and documentation procedures.

US FDA HACCP

D. Chemical Safety

1. HazCom

"HazCom" is short for "Hazard Communication," which works to keep people safe by providing information about potential sources of injury — specifically, hazardous chemicals in the workplace. OSHA's Hazard Communication Standard (HCS) is the set of regulations covering chemical labels in the workplace. (HazCom - What Is It & OSHA Requirements, n.d.)

- a) OSHA HazCom
- 2. Protecting Workers Who Use Cleaning Chemicals
- 3. Cleaning Chemical and Your Health

E. Safety Data Sheets (SDS)

The Hazard Communication Standard (HCS) requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format. This brief provides guidance to help workers who handle hazardous

chemicals to become familiar with the format and understand the contents of the SDSs.

- 1. OSHA SDS
- 2. ProStart SDS

II. Facility & Equipment Safety

- A. Facility & Equipment Maintenance
 - 1. Both the classroom and the kitchen facility must be adequate; following all proper procedures and inspected.
 - 2. Make sure all machines are operable and electrical outlets are in good working conditions.
 - a) All pieces of equipment should be used according to the manufacturer's instructions.
 - b) Maintenance check on machines
 - c) Have your appliances regularly inspected by a professional. Do not attempt to repair broken appliances by yourself.

(National Restaurant Association Staff, 2017)

B. Equipment

1. Knives

There are many different types of kitchen knives. Knife safety is usually taught with basic knife skills. However, you need to monitor the students and constantly reinforce the rules.

- a) Knives that are not in active use should be in a tool kit, knife bag, guard or on a rack, and not laying around.
- b) Generally, knives should not be left laying haphazardly on cutting boards. A knife should either be on the right side parallel to the board or horizontal at the top of the board. Some kitchens require they be in a separate container next to the board.
- c) ONLY carry a knife with the handle down by your side and the blade pointing backward. Do not let your students carry them in bowls, hotel pans, or on top of cutting boards. Make two trips if necessary.
- d) Call out when walking with a knife.
- e) Hold the knife correctly.
- f) Do not use a kitchen knife for opening boxes, cans, or bottles.
- g) A knife is not to be waved around while talking with your hands or used as a pointer. It is amazing to me how often I had to correct students on this issue.
- h) Never put your knife in a bus tub or at the bottom of a sink.

- i) When cutting watch what you are cutting and your hands. Do not look around.
- j) Never pass a knife to someone. Put the knife down and let the other person pick it up.
 (Weiner, 2021)

2. Ovens

- a) Commercial oven: Most restaurants will have at least one commercial or standard oven. This type of oven is great for even style cooking and ideal for baked dishes.
- b) Convection oven: Unlike commercial ovens, these ovens have fans that help circulate hot air. A convection oven is essential for bakeries and ideal for baking things like bread, pastries, pies and cookies, as well as toasting, roasting and dehydrating.

3. Ranges

- a) Gas ranges: known for their temperature control. These types of ranges start at your desired heat immediately and offer much more control than an electric range. Gas ranges will keep on working even during a power outage.
- b) Electric ranges: Electric ranges are known for their efficiency. They are easy to clean and can cook food more evenly than gas ranges.

4. Ventilation

Commercial kitchens can be an uncomfortable and crowded environment to work in. A ventilation system manages the airflow and temperature control all throughout your commercial kitchen, helping maintain a pleasant, clean and healthy environment for your staff.

5. Mixers

- a) Hand mixers: Also known as stick mixers or immersion blenders, these mixers are handheld and are great for blending things like soups and sauces. With this type of mixer, you can emulsify, chop or mix at high speeds.
- b) Countertop mixers: Countertop mixers are great if you don't have a very high output and aren't counting with a lot of space.

6. Cutting boards

Provide NSF approved cutting boards. NSF plastic is not as porous as wood, making it harder for bacteria to hide in the cracks. Plastic cutting boards are easier to clean and dishwasher safe, and will help you prevent cross-contamination.

7. Freezers and refrigerators

To keep your food fresh for as long as possible (and avoid any risk of food safety and health code violations) you need to invest in quality freezers and refrigerators.

- a) Reach-in refrigerator
- b) Reach-in freezer

8. Sinks

Sinks are used for three main purposes in your restaurant: dish washing, food preparation and hand washing. In general, to meet health and safety requirements, you will likely need a certain minimum type of sinks and a commercial dishwashing machine.

- a) Compartment sinks
 Compartment sinks come in a variety of sizes and can add versatility.
- b) Handwashing sinks As the name states, these are generally smaller sinks with the main purpose of allowing staff to wash their hands, to not contaminate other sinks.
- c) Utility sinks Mop sinks are also known as janitorial sinks and are mainly used for filling buckets and draining mops. These can be set up on the floor.

9. Ice maker

Look out for an ice machine that's constantly dispensing ice right into a bin so it's ready for your students to use at all times.

(Navarra, 2020)

III. Emergency Procedures

Emergency procedures (Fire Drill, Bomb Threat, Earthquake Drill, Lock-Down/Shelter in Place, Active Shooter, and Foodborne Illness) will be followed according to that which has been described in the student handbook (where applicable) and according to the Guam Community College's emergency procedures (where applicable). Please refer to the student handbook for emergency procedures and evacuation routes.

A. GCC Evacuation Procedures

1. If an emergency arises which requires evacuation, it is extremely important that you follow your instructor's directions for evacuating the building, including where to congregate. Although an evacuation plan is posted near the door of each classroom, circumstances could change the posted routes. A fire alarm or bell will be utilized to initiate an evacuation. If there is no electricity, a gong will sound three (3) times. Once the reason

- for evacuation is resolved, the school bell will ring eight (8) times to signal everyone to return to your assigned buildings.
- 2. When it is dangerous to stay inside the building (i.e., fire, bomb threat):
 - a) At the sound of the alarm and voice announcement, immediately evacuate using the nearest stairway or exit door. Look for exit signs. Do not use elevators because the elevator might take you to the location of the fire.
 - b) If the alarm does not sound, but fire or smoke is present, immediately pull the nearest fire alarm and then evacuate. Fire alarm stations are located in the hallways of buildings 400, 500, 600, 900, 1000, 2000, 3000, 4000, 5000 & 6000 and outside buildings A, B, C, D, and E.
 - c) Close doors behind you as you exit. This will restrict the spread of fire and smoke.
 - d) If fire or smoke blocks your exit, seek an alternate exit. If smoke is present, keep low to the floor and take short breaths to avoid inhaling excessive smoke.
 - e) If a door feels hot, do not open it. Seek an alternate exit.
 - f) Do not return to an evacuated building unless directed to do so by the Guam Fire Department, Guam Police Department, College Official, or when the MASS Notification System indicates an "All Clear."

(Guam Community College Student Handbook, n.d.)

- B. COVID-19 Pandemic Safety Precautions
 - 1. Students must always wear their student ID visibly.
 - 2. Wearing face masks/face coverings is mandatory before entering and while on campus.
 - 3. Thermal scanning and screening are required upon entry on campus.
 - 4. Always follow the three (3) feet physical distancing requirements.
 - 5. All students are to participate in COVID-19 related training.
 - 6. Signs are posted around the campus to remind students of the health and safety precautions.
 - 7. Conduct passive screening before leaving the house. If you are feeling sick or exhibit any of the symptoms, stay home. Call the school for further guidance.
 - 8. Frequent handwashing with soap and water is highly encouraged. If soap and water are not available, use alcohol rub and/or hand sanitizer before entering the campus.

- 9. More COVID-19 updates on the GDOE website. Please refer to the GDOE guidance regarding procedures for rolling school closure.
- C. OSHA First-Aid
- D. Fire Safety
 - 1. OSHA Fire Safety

ProStart Lab Opening Checklist

Equipment	Mon. Date: Group:	Tues. Date: Group:	Wed. Date: Group:	Thur. Date: Group:	Fri. Date: Group:
Inspect & document gas level in the tank	Gas:	Gas:	Gas:	Gas:	Gas:
Turn on the main gas line					
Turn on the hood vents					
Dish Pit Set-Up: • 3 compartment sink • Sanitizing solution: • Dishwashing machine					
Set up trash bins to have liners					
Cleaning & sanitizing buckets • Wash • Rinse • Sanitize • Blue towels in each					
Inspect kitchen floors, equipment, work stations, chillers, dish pit area					
Check & restock handwashing stations • Hand soap & paper towels					
Check for & document evidence of insects, rodents, other pests					
Check floor drains, clean & free of debris					
Check for any maintenance issues					

ProStart Lab Closing Checklist

Equipment	Mon. Date: Group:	Tues. Date: Group:	Wed. Date: Group:	Thur. Date: Group:	Fri. Date: Group:
Inspect & document gas level in the tank	Gas:	Gas:	Gas:	Gas:	Gas:
Turn off the main gas line					
Turn off & inspect the hood vents					
Inspect & clean stovetops, ovens, grills, flat tops, & drip trays					
Inspect & clean workstations					
Proper storing Wrap, label, store food items in appropriate containers & storage units					
Inspect kitchen floors, equipment, work stations, chillers, dish pit area					
Inspect & clean chillers storage units					
Breakdown dish pit area & ensure equipment washed are dry & stored in proper areas					
The dish pit area is clean, wiped down, & drying shelves are empty					
Ensure kitchen floors are swept, mopped, and scrubbed, including under & behind all kitchen equipment					
Floor mats are scrubbed & washed					
Check & clean floor drains, ensure free of debris					

Ensure dry storage room is cleaned & organized Ensure chemical cabinet is cleaned & organized (chemical spray bottles are stored properly) All laundry is washed, dried, & folded Ensure all trash is removed from the kitchen, all trash bins are washed, rinsed, & sanitized, liners are replaced Check for any maintenance issues

New CTE Teacher Guide to Manage a CTE Classroom and Laboratory

Comments:

Temperature Log Sheet

Equipment	nday (C)	Tues Date: (O)	sday (C)	Wedn Date: (O)	esday (C)	Thur Date: (O)	rsday (C)	Fric Date: (O)	lay (C)
Chiller 1									
Chiller 2									
Chiller 3									
Chiller 4									
Freezer									
Dishwasher									

Equipment	Monday Date:		Tuesday Date:		Wednesday Date:		Thursday Date:		Friday Date:	
	(O)	(C)	(O)	(C)	(O)	(C)	(O)	(C)	(O)	(C)
Chiller 1										
Chiller 2										
Chiller 3										
Chiller 4										
Freezer										
Dishwasher										

Verified by:

ProStart Lab HACCP Weekly Cleaning Schedule & Work Record Week of: _____

Areas to clean	When & Frequency	Assigned to:	Cleaning Procedures PPE Required	Instructor's verification Sign & date	Comments / Discrepancies
Equipment: A. Chillers & Freezer B. Work Counters C. Stove range, Oven D. Table top Equipments E. Dishwasher F. Utility Carts	Daily and after each use	Designated groups Group:	 A) Organize, remove empty containers & expired food items B) Clean & Sanitize C) Clean spills, remove & replace foil lining from crumb insert D) Clean & Sanitize E) Clean, drain, delime, wipe exterior F) Clear, clean, sanitize Important Note: Check temps of chillers & freezer 		
Tools: A. Hand Tools & Utensils B. Pots & Pans	After each use	Designated groups Group:	A) Clean, Rinse, Sanitize, Air-dry B) Store Properly		
Containers: A. Pantry Food Containers B. Prep Containers C. Hotel/Sheet D. Pans	A) When empty, before filling in with new product B) At the end of each	Designated groups Group:	A / B) Wash, sanitize, air-dry C) Empty & wash rash cans		

	lab/day			
Spaces / Areas: A. Classroom B. Kitchen C. Pantry D. Dish Pit Area (Three-compartment sink, drying racks)	At the end of each lab and class	Designated groups Group:	A) Sweep, mop, wipe & sanitize tables, organize (classroom) B) Sweep, wash, mop (kitchen) C) Organize, sweep, mop (pantry), remove empty containers for washing. Dispose expired products. D) Clear, scrub, clean, wash, sanitize	
Floors: A. Under sinks, Metal Tables, Stove ranges, Chillers B. Rubber Mats	At the end of each class and lab	Designated groups Group:	A) Sweep & mop B) Scrub, clean, rinse, sanitize, drain to dry	
Drain	At the end of each lab	Designated groups Group:	Clear, scrub, clean, rinse, santize	
Laundry	At the end of each lab	Designated groups Group:	Wash, dry, & fold	
Walls	When soiled	Designated groups Group:		
Ceiling	When soiled/at the end of each day	Designated groups Group:	To be outsourced	
Hood Vents	At the end of each day	Designated groups Group:	To be outsourced	

Uniform Check Grading Rubric

Please circle: Chef Uniform or Professional Attire

	5	4	3	2	1
Hair	Men: Cleanly cut hair,	Men: Short hair but not	Men: Hair is long but combed	Men: Hair is long and is not	Men: Inappropriate hairstyle
	short away from the face.	neat.	neatly away from the face.	neat and away from the face.	and color.
	Ladies: Hair in a bun for	Ladies: Hair in a bun for	Ladies: Hair in a bun for long	Ladies: Hair is not in a bun	Ladies: Hair is not in a bun
	long hair or a ponytail for	long hair or a ponytail for	hair or a ponytail for short hair.	for long hair or a ponytail for	for long hair or a ponytail for
	short hair. Neatly combed	short hair. Neatly combed	Not combed back or pinned	short hair. Neatly combed	short hair. Not neatly combed
	back and pinned away	back but not pinned away	away from the face.	though.	back or pinned away from the
	from the face.	from the face.			face.
Chef Coat	Men: Ironed white long	Men: White long sleeve	Men: White long sleeve but not	Men: White short-sleeved	Men: Not an ironed white
	sleeve with a black tie.	with a black tie. Not ironed.	ironed and no black tie.	with a black tie.	dress shirt and no tie.
	Ladies: White, clean &	Ladies: White & clean	Ladies: White short, ³ / ₄ or long	Ladies: Dress shirt but not	Ladies: Not a White, clean &
	ironed short, 3/4 or long	short, ³ / ₄ or long sleeve shirt.	sleeve shirt. Not cleaned &	standard uniform.	ironed short, 3/4, or long sleeve
	sleeve shirt	Not ironed	ironed.	Both: Clean but stained and	shirt.
	Both: Clean, ironed chef's	Both: Clean, chef's jacket.	Both: Clean but stained chef's	worn chef's jacket. Not	Both: Dirty chef's jacket. Not
	jacket.	Not ironed	jacket. Not ironed	ironed.	ironed
Pants	Pants: Black slacks or	Pants: Black slacks or	Pants: Black slacks or kitchen	Pants: Black slacks or	Pants: Black slacks or kitchen
	kitchen pants*	kitchen pants* (appropriate	pants* (Good condition but	kitchen pants* (Inappropriate	pants* (Pants are not dress or
	(appropriate length, clean,	length, clean, good condition	inappropriate length, not clean	length, NOT clean/ironed, no	kitchen pants. Using black
	good condition, and	but not ironed). Solid black	and ironed). Solid black belt.	good condition, and no solid	denim and are too tight).
	ironed). Solid black belt.	belt.	Skirts: (Ladies only) (below	black belt.	Skirts: (Ladies only) (Above
	Skirts: (Ladies only)	Skirts: (Ladies only)	knees but without stockings.	Skirts: (Ladies only) (Above	knees worn without stockings.
	(Below knees worn with	(below knees but has run in		knees worn with stockings.	
	stockings.	stockings.			
Shoes	Dress/Kitchen*	Solid Black <u>Dress/Kitchen*</u>	Solid Black shoes and socks	Solid Black shoes and socks	Improper shoes (Shoes are not
	Solid Black shoes and	shoes. (Closed-toe, clean,	(Shoes do not dress shoes, using	(Shoes do not dress shoes, not	black dress shoes and socks
	socks (Closed toe, clean,	and in good condition).	sports socks).	clean, using sports socks).	are not black dress socks).
	and in good condition).	Usingblack sports socks.			
Personal	N/A	N/A	Nails are clean and cut, no	Nails are clean but not cut,	Nails are not clean and cut,
Hygiene			colored nail polish, clean teeth,	using colored nail polish,	using nail polish, did not brush
			generally clean appearance.	clean teeth, generally	teeth, general sloppy
				acceptable appearance.	appearance.
Accessories	N/A	N/A	N/A	Minimal to no jewelry.	Too much jewelry.
				If wearing non-kitchen attire:	If wearing non-kitchen attire:
				Men: Shell necklace or lei.	Men: No Shell necklace or lei.
				Ladies: Necklace & Flower	Ladies: Missing necklace &/or
					flower.
					Total Points (x2): /50pts

Kitchen Lab Safety Agreement In order to conduct safe and effective kitchen activities, all students must follow proper lab procedures.

Please initial each item and sign where indicated.

Gener	ral Rules
1.	Prepare for the kitchen lab by reading the instructions and safety information ahead of time.
2.	Always pay attention to the work—don't fool around in the lab. No horseplay, pranks, or practical jokes.
3.	Follow all verbal and written instructions given by the instructor.
4.	Never work in the lab unsupervised or perform unauthorized or unapproved actions.
5.	Do not eat, drink, apply cosmetics, manipulate contact lenses, or chew gum in the kitchen.
6.	Keep work areas tidy. Keep aisles and exits clear, and move backpacks, jackets, and other personal items out of the kitchen.
Perso	nal Safety
1.	Approved uniform must be properly worn at all times while you perform kitchen lab work. (Chef uniform, chef pants, close-toe, non-slip shoes, hat/hairnet, appropriate hand care, etc.)
2.	Wear any additional safety equipment (aprons, gloves, googles, etc.) as directed by the instructor.
3.	Wear closed-toe, non-slip shoes. Fully cover hair by wearing a hat and/or hairnet. Avoid skin-tight clothing. DO NOT wear short skirts or shorts while performing lab work.
4.	Report all accidents, spills, or injuries to the instructor immediately.
5.	Know the location of, and how to use, all classroom safety equipment. Know the location of the nearest exit.
6.	Wash hands with soap and water following the CDC Guidelines.
Labo	ratory Safety
1.	Consider all chemicals and kitchen equipment to be dangerous. Do not touch, smell, or taste any chemicals unless specifically instructed to do so.
2.	Read the label on bottles carefully before using chemicals. Be sure you're using the correct chemical before removing it from the bottle.
3.	Do not remove chemicals, equipment, or other supplies from the kitchen unless instructed to.
4.	Follow proper procedures when operating a burner or other heat source. Always turn it off when not in use.

5. Do not handle broken glass with bare hands. Use a brush and dustpan to clean up broken glass

and place it in a designated glass disposal container.

6. Dispose of all waste materials only as directed by the instructor. _____

New CTE Teacher Guide to Manage a CTE Classroom and La	Laboratory
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Do you have allergies of	or other medical	conditions	that your	instructor	should l	oe aware	of?
Yes/No	If yes,	please desc	ribe:				

I have read and fully understand the rules, safety practices, and regulations governing my conduct in the kitchen. I will abide by these rules to ensure my safety and the safety of all laboratory participants. I will follow all written and verbal instructions given by the instructor and ask questions if I do not understand a direction or procedure. I understand that violation of these rules may result in removal from the kitchen, removal from the ProStart program, a lowered grade, or other consequences as determined by the instructor.

Student:	Date:		
Parent:	Date:		

^{*}Form adapted from the Carolina Biological Supply Company. (Student Laboratory Safety Agreement | Carolina.com, n.d.)

JFK Tools & Equipment List (G104 & G105)					
Description	Quantity	Working Condition			Comments
Description		Excellent	Good	Poor	Comments
Chef knives	10		\checkmark		
Boning knives	8		\checkmark		
Cutting boards	10		\checkmark		
Pots	15		\checkmark		
Pans	20		\checkmark		
Stainless steel mixing bowls	20		✓		
Full sheet pan	4		\checkmark		
Half sheet pan	8		✓		
Speed Rack	2		✓		
Carts	1		\checkmark		
Stainless steel tables	7		\checkmark		
Hood vents	2			✓	Needs to be serviced
Range Stove w/ ovens	1		\checkmark		
Convection oven	1			V	Needs to be serviced
Flat top Grill	2			\checkmark	Needs to be serviced
Grill	1			✓	Needs to be serviced
Microwave	1		\checkmark		
Toaster Ovens	2		\checkmark		
Kitchen Aid	1		\checkmark		
Blenders	3		\checkmark		
Ice machine	1		✓		Needs to be serviced
Reach-in chiller	1		✓		
Low Boy chiller	3		✓		
Reach-in freezer	2	\checkmark		\checkmark	Freezer #1 needs to be serviced

New CTE Teacher Guide to Manage a CTE Classroom and Laboratory
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Three-compartment	1		✓	
Handwashing sink	1		V	
Dishwashing Machine w/ sink	1		\checkmark	
Dish racks	6		\checkmark	
Green bucket	3		✓	
Red bucket	3		✓	
Trashcan	2		V	
Coolers	3		✓	
Drink Cooler	1		V	
Fire Extinguisher (Class A)	1	\searrow		JFK Property; Inspected April 2021
Fire Extinguisher (Class K)	1	V		JFK Property; Inspected April 2021



Prostart Lab Report

TEXTBOOK INFORMATION Chapter Number & Title: List the student learning outcomes of this lesson. (5pts)	(Insert lab photo here)
Group Members	
Chef of the Day:	
Sous Chef:	
Chef De Partie:	
Kitchen Assistants:	

Culinary Skills Identified & Demonstrated (10 pts)					
Name of Recipes:					
Lab Main Ingredient:					
Cooking Methods Used, Identify the types.	Moist Heat	Dry Heat	Combination Heat	Other	

List the new culinary skills/techniques & preparations used through this lab.	
Identify Kitchen tools and equipment used for this lab.	
Reflection of Lab (5pts)	
 What went well today? How can I make it better next time? Evaluation of product. Texture Color Taste 	
Total Points Earned	/20
Evaluator's Name & Date	

Electrical Laboratory Management

Lab Management and Safety Contents

Classroom Safety

Safety Rules (required in the classroom and shop)

- 1. No horseplaying
- 2. Always wear safety glasses
- 3. Use proper clothing. No loose shirts, lanyards, and long sleeves.
- 4. Know all fire exits and location of fire extinguishers.
- 5. Be sure to put all hazardous materials back after use.
- 6. In case of emergency, all work shall cease. All machinery and equipment shall be shut down.
- 7. Do not work under the influence or when sick or tired.
- 8. Respect all coworkers and their belongings.
- 9. Report all injuries and near misses
- 10. Notify the instructor of unsafe conditions.
- 11. Keep the floor clear of debris or trash and enforce good housekeeping.
- 12. Do not put sharp tools in your pocket.
- 13. Report all broken tools to the instructor
- 14. Wipe up or cover up all wet spots in the shop
- 15. All liquids shall be sealed correctly and stored properly
- 16. Do not use damaged or altered extension cords or plugs

Notice:

Construction is dangerous and safety is for everyone.

Course Standards

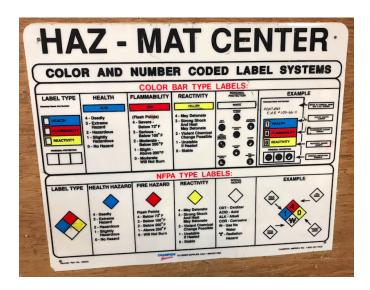
Students under the Construction Trades program are required to take HL130: First Aid and Safety. All safety rules and regulations are implemented by Occupational Safety and Health Administration (OSHA) and Department of Labor (DoL). Federal and Guam rules and regulations coincide.

Facility Management

Students receive a safety briefing from the instructor every class session. Rules and regulations and safety hazards are posted within the classroom. Instructor monitors students working on individual projects. In the event of a group or class project, scope of work is given along with the respective safety guidelines.

Facility Maintenance

Materials and equipment are in its respective area readily available for students to use. Equipment is properly spaced out. In the event tools or equipment are damaged or deemed unsafe to use, instructors will report equipment to the department chair and will be sent for repair or replacement. Students are instructed to properly dispose of any waste used in the classroom. Twenty (20) minutes prior to the end of the class session, students are instructed to store their project in their designated area and clean their respective work stations ready for the next class session.



Electrical Safety

All electrical wiring must be in compliance with the National Electrical Code (NEC).

Additionally, the following guidelines help ensure electrical safety:

- Never bypass safety interlocks (i.e., circuit breakers, fuses).
- All labs must have master shut-off valves/switches.
- Do not overload electrical outlets. All outlets within 5 feet of sinks and serving delicate electrical equipment must be fitted with ground-fault interrupters.
- Use surge protectors where sensitive electrical equipment is being used, in geographic areas where thunderstorm activity is a regular phenomenon, and where electrical spikes and drops are common.
- Only use extension cords sized for the equipment and its power and only for temporary service.

Additionally, follow these guidelines with regard to the use of extension cords:

- Place extension cords out of traffic areas or enclose them in electrical cord ducting strips
 to prevent tripping, and do not fasten extension cords to a wall; affix them to structures;
 extend them through walls, ceilings or floors; or place them under doors or floor
 coverings.
- Maintain extension cords in good condition without splices, deterioration, or damage. Do not subject extension cords to environmental damage or physical impact.
- Plug extension cords directly into an approved receptacle, power tap, or multiplug adapter and—except for approved multiplug extension cords—extension cords must serve only one portable appliance.
- Ground extension cords when they are serving grounded portable appliances.
- Do not perform maintenance or repair on any electrical equipment unless as part of the approved curriculum or under the supervision of a qualified individual.
- Ensure that lab equipment is listed and approved for its intended use (i.e., do not use equipment listed for household use in a lab setting).
- Do not use multiplug adapters, such as cube adapters, unfused plug strips or any other device not complying with NFPA 70.
- Relocatable power taps must be of the polarized or grounded type, equipped with
 overcurrent protection, and must be listed in accordance with UL 1363. Additionally,
 relocatable power taps must be directly connected to a permanently installed receptacle.
 Do not extend relocatable power tap cords through walls, ceilings, floors, under doors or
 floor coverings, or subject them to environmental or physical damage

Electrical Protection

<u>Understanding the Electrical Resistance of the Body</u>

Current is forced through the resistance of a circuit by voltage, which is electrical pressure or force. A lower resistance in the circuit allows more current to pass through the circuit for a given amount of voltage. If the human body is thought of as a circuit, then the amount of current that can flow between any two points of the body depends on the resistance between those two points at that time and the amount of voltage or electrical pressure applied. Normally, skin resistance is high. This high resistance tends to impede the current flowing into and out of the body. However, there are several conditions that can lower skin resistance drastically and which permit a larger amount of current to pass through the body with the same voltage applied.

The average body resistance is over 100,000 ohms. However, if the skin is wet from perspiration or other moisture, or if the pulse rate is high, the body's resistance can be as low as a few hundred ohms. Also, if the skin is broken with a cut or an abrasion, a lesser voltage is required at that point to force the same amount of current through the body.

Precautions to be Used When Working with Electrical Circuits

- 1. Practice a precaution used by experienced technicians. Try to keep one hand in your pocket or behind you when you are making voltage and current measurements. If two hands are in contact with the circuit or if one hand is in contact with the circuit and the other hand is in contact with ground (such as a metal panel or the case of a piece of test equipment), the current path is across the chest where the heart and lungs are located. THIS IS EXTREMELY DANGEROUS.
- 2. Do not work on electronic circuits when the power is on.
- 3. Electrolytic and other large capacitors can hold a voltage charge for several hours after the power is removed. Make it a habit to check if they are fully discharged by shorting them with a screwdriver with an insulated handle or clip lead before working on a circuit.
- 4. Do not work on electronic equipment while standing on a damp floor or when leaning on any metal object.
- 5. Certain components, such as resistors and vacuum tubes, get quite hot. Give them time to cool off before removing them.
- 6. Know the location of and how to use an available fire extinguisher.
- 7. Be sure equipment is in proper working order before using it. (see *Electrical Protection*)
- 8. Electrical equipment Electrical equipment is found in nearly every vocational subject area. Students shall be taught the dangers present in electrical equipment and wiring and learn how to protect themselves and others from injury.

Points to Remember

- 1. All electrical wiring needs to be in compliance with the National Electrical Code.
- 2. Never use temporary wiring. All extension cords for tools and appliances must be three-wire parallel ground with grounding lug plugs. Do not overload the circuit.
- 3. Treat all electrical equipment as if it is "live."
- 4. Never bypass safety interlocks (i.e., circuit breakers, fuses, etc).
- 5. Never work on electrical equipment alone; always have someone else nearby.
- 6. While working on electrical equipment, stand on rubber mats or wooden floors. Wear protective gloves and a hat.
- 7. Use safety lights in closed or fume-laden areas. When working in a closed area, or in a place where fumes could collect, one should use only approved, sealed safety lights and explosion-proof equipment. Some explosions in the past haven't killed anyone, but the bare wires whipping around as a result of the big boom electrocuted those present.
- 8. Make sure that grounding is proper and complete. Most electrical industrial equipment comes with carefully designed grounding provisions. Most cords use three or four-wire cable to ensure one's safety by providing a built-in low resistance path to ground in case of a short circuit. Don't guess about this. If there is any doubt about the condition or function of any electrical equipment one may have to use, get help from authorized and trained personnel instead of taking a chance.
- 9. Touching a bare wire, an exposed socket, or a faulty electrical tool or appliance may give a person an electrical shock. Shock hazards also exist inside various types of electronic equipment and around power lines. The possibility of shock is greatly increased if the person is also in contact with a ground surface or if the floor or his/her body is wet.

In attempting to rescue someone who is in contact with an electrical source, one should:

- 1. Shut off the current quickly.
- 2. Attempt to move the victim away from the conductor using some sort of insulating material if the current cannot be shut off quickly.
- 3. Not touch the victim until electrical contact is broken. Use a wooden pole, such as a broom handle, to separate the victim and the conductor. A large cloth, such as a coat, may be used.
- 4. Move the victim quite a distance from the conductor as a line conductor may cling to the victim.
- 5. Apply CPR immediately if the victim is not breathing. Speed is essential. In 600 cases studied, 70 percent recovered when artificial respiration was applied within three minutes. Another minute of delay reduced the figure to 58 percent. Five minutes is too long—the chances are slim.

Sure Death

Two hundred thirty milliamperes (230) of current flowing through one's body in the region of the heart is well within the band of current flows labeled "SURE DEATH." This is the area where the heart stops pumping and just trembles ineffectually (ventricular fibrillation). Naturally, the effect of current flow on the body varies not only with its intensity, but also with the path it follows.

Effects of Electric Shock

To get an idea of the effects of so-called "low voltage" shock, let's see what happens when a sixty-cycle alternating current at 110 volts passes through a person from hand-to-hand or hand-to-foot. As the current flow gradually increases, the following effects become apparent:

- 1 to 8 MILLIAMPERES—a sensation of shock; not very painful. A person can still let go because muscle control is not lost.
- 8 to 15 MILLIAMPERES—painful shock, but still one can let go. The hazard up through this amount of current flow often comes from the so-called "fright reaction" or recoil when the shock occurs. People have fallen from ladders and other high locations or have bumped their heads hard enough to cause unconsciousness, increasing the possibility of continued current flow; thus prolonging the exposure.
- 15 to 20 MILLIAMPERES—loss of muscle control begins, and the person cannot let go in spite of the painful shock. At 25 MILLIAMPERES one will be "frozen" to the point of contact. At 20 to 50 MILLIAMPERES—severe muscle contractions include those muscles controlling breathing. In addition to the difficulty in breathing, the victim may be "knocked out."
- 50 to 75 MILLIAMPERES—almost certain unconsciousness.
- 75 to 100 MILLIAMPERES—as the current nears 100 MA, the person is almost certain to die. Ventricular fibrillation sets in and the heart no longer circulates blood in the body. Even after the current is cut off, no pulse can be detected. Artificial respiration should be attempted. However, unless a trained physician can restore the natural rhythmic action of the heart by massage or controlled electrical shock treatment, using special equipment usually found only in hospitals, it's almost impossible to save the victim's life. Usually, the maximum time limit for resumption of natural heart function under these circumstances is about six minutes. (Closed heart massage is taught in many first aid courses. This technique, applied by a person trained in its use, may save a life if used prior to the arrival of medical personnel.)
- 0.20 to 2 AMPERES—this intensity of flow will paralyze the nerves near the diaphragm or the nerve centers at the base of the brain. Breathing will be cut off.

• 2 AMPERES and over—the person will suffer severe burns due to "frying" of the body fluids and to external arcing at the point of contact. In addition, internal burns of the slow-healing type will also occur. This latter fact might seem academic under the circumstances, but a peculiar thing sometimes happens when flows of above 10 AMPs occur for very short periods. The severe muscle contractions the person experiences may prevent ventricular fibrillation. After release, if the proper first aid is administered soon enough, he/she might survive if the heart picks up its regular pumping rhythm again.

The tabulation above is a general guide only. Naturally there will be variations due to individual circumstances. The physical condition of the victim may be a factor. But an important thing to remember is that fewer low-voltage victims can be revived than those receiving 1,000 volts or more.

What One Must Know About Electricity

- 1. If the body becomes part of a circuit, either as the load or as the conductor and the load, a person will get an electrical shock.
- 2. The body will become part of the circuit if one comes in contact with both a source of potential and a ground while one's total resistance is low enough to allow a flow of current.
- 3. Current flow is what kills or injures—the voltage only pushes the current through body resistance.
- 4. Direct current (DC) is generally considered to carry less shock hazard than alternating current (AC) for a given voltage, but it is likely to burn more severely since the arcs from DC are more persistent than those from AC.
- 5. Body resistance is highly variable, principally because of the changes in skin resistance from one body area to another due to the thickness and amount of moisture on the surface.
- 6. Electrical energy sources (AC or DC)—operating with an open circuit potential of 30 volts or more, with a capability of delivering 2.5 milliamperes or more into a short circuit—are hazardous to a person.
- 7. Low voltage (less than 600 volts) can be more dangerous than high voltage. Statistics show that 62 percent of victims recovered after being knocked out by potentials over 1,000 volts; for lower voltages, only 39 percent recovered.
- 8. The seriousness of electrical shock depends on the balance between several factors: the voltage, the body resistance, the amount of current flow and its path through the body, the duration of contact, and the condition of the body organs in the current path.
- 9. The most hazardous currents are those in the frequency range from 20 to 100 cycles per second (cps). Currents of higher frequencies are less hazardous because they tend to flow

- on the surface of conductors rather than through the conductors themselves. High-frequency current will cause electrical shock but to a lesser extent.
- 10. The current required to operate just one 100-watt light bulb is eight to ten times the amount that is needed to kill a person.

Electrical Worker "I'm An Electrical Worker...What Can Hurt Me?"

Electrical workers face many chemicals and other health hazards on the job. These health hazards are often hidden, so you might not know you're being exposed or affected. Common health hazards you may face are:

- Epoxy resins from cable coatings
- PCBs in older transformers
- Solvents, such as ethylene chloride
- Isocyanides from wire covering
- Fumes from soldering

You can also face other hazards while on the job, including hazards from other work going on around you.

Electrical workers also face many safety hazards on the job. You're probably familiar with many of the obvious ones, such as:

- Being struck by falling objects
- Strains from lifting and moving heavy equipment
- Falls from ladders and platforms
- Eye injuries

Fire Safety

State and local fire prevention codes dictate many fire safety practices. Consult with the state or local fire marshal for more information. Refer to the Virginia Statewide Fire Prevention Code (SFPC) (https://codes.iccsafe.org/public/document/VFC2012) and Virginia Fire Safety Regulations

(<u>http://www.vafire.com/content/uploads/2017/02/Virginia-Fire-Safety-Regulations.pdf</u>) for more information.

Additionally, the following guidelines support fire safety:

- 1. Maintain a neat and orderly environment so that potential hazards, such as fabric close to a heat source, are visible and can be remedied.
- 2. Plan at least two escape routes in case of fire.
- 3. Adequate numbers of multipurpose ABC fire extinguishers must be strategically placed. These must be checked and serviced regularly. Special-hazard extinguishers may be necessary, depending on the hazards present in the lab.
- 4. Use only approved containers for the storage and disposal of flammable chemicals.
- 5. Exercise care with both flammable and combustible materials. Flammable materials ignite more easily than combustible materials. Examples of flammable materials are gasoline, acetone, and lacquer thinner. Examples of combustible materials are kerosene, fuel oil, mineral spirits, and brake fluids. Many liquids produce vapors that are heavier than air and can accumulate in low points, lying in wait for a stray spark. Many are readily oxidized, or release heat, so rags or waste coated with them can catch fire spontaneously. Nearly all flammable and combustible liquids will burn violently.

How Can I Spot These Hazards?

One way you can spot possible health hazards on the job is by using your senses of sight, hearing, smell, and touch. Visible clouds of dust, eye and nose irritation, or skin rashes could indicate possible hazards.

How Can Hazards Be Controlled?

Once you've found hazards, there are three basic ways they can be controlled:

- 1. The most effective way is to eliminate the hazard through engineering controls. For example, substitute a cadmium-free solder for one containing cadmium. Avoid using very toxic solvents such as benzene or toluene.
- 2. Another way is through work practices, like washing your hands before eating or smoking or leaving work to remove metal fume contamination.
- 3. And finally, you can use personal protective gear when you are exposed to a hazard. For example, you should wear the proper gloves when working around equipment leaking PCBs or the proper respirator when soldering in a confined area.

While it is always best to eliminate the hazard, personal protective gear is widely used on construction sites. This gear must be used and maintained properly—if not, it won't protect you.

What Are My Rights?

As a construction worker, you have rights to protect your health and safety on the job. Your employer must tell you about the hazards of the solvents, soldiers, fluxes, and other materials you work with. If necessary, you can file a complaint with the Department of Labor and Industries requesting an inspection into hazards on your job. These are only two of the rights you have under state law. If you belong to a union you may have additional rights.

What Should I Tell My Doctor?

Because the health effects of exposures can take years to show up, you need to keep records of your workplace hazards. For example, exposure to solvents may cause liver damage many years later. Your work health history is important for your doctor to know. It can also be vital in worker compensation claims, union grievances, and for OSHA complaints.

(optional link: https://ehs.research.uiowa.edu/electrical-safety-laboratory)

Electrical Equipment

Electrical Tools and Equipment for Electrical Subcontractors

Electrical contractors and hired electricians working in commercial construction require many different types of construction tools and equipment.

Whether you're an electrical contractor or hired electrician working in the world of commercial construction, you're reliant on certain types of electrical tools and equipment to complete your jobs. These are essential for a few different reasons:

- Avoiding project disruption by not being able to work efficiently.
- Ensuring safety on certain projects.
- Avoiding the additional costs/dissatisfied customers that come with project delays.

So, with these points in mind, here's a list of electrical tools and equipment to put to use when assembling your gear for your next project.

Job Safety and Efficiency

It is paramount for an electrical worker and his or her team to have the right tools and equipment to do his or her job at the site. Without the proper tools, the electrician would not only not be able to work properly, but this is something that would likely disrupt the overall project. For example, if an electrician does not have the right tools, he or she is not going to be able to work efficiently, which means that he or she might delay his or her job.

A small delay can end up delaying the overall project, which can be quite costly. As a result, electricians working on commercial construction require proper construction tools and equipment for them to be able to work efficiently and productively.

Construction Tools and Equipment

• T-Stripper

There are some basic items that just about any electrician should have, such as screwdrivers. Something that should be held in the same regard in terms of electrical engineering tools and equipment is the "T-stripper." Cutting and stripping wires is one of the base tasks that electricians have to do as a part of their daily work. As a result, this is essential to actually perform said task. Electrical wire is normally insulated with thermoplastic that you can't remove easily with a conventional wire knife. This makes a T-stripper an essential tool to keep things safe and efficient.

Pliers

OPliers are generally used for a variety of different purposes, with handling various types of wires being one of the main starting points. If any contractor touches a live wire accidentally, this can create an extremely dangerous situation. As a result, the best way to avoid risk is by using pliers to hold the wires whenever live electricity is a factor. There's also the chance of using these for other purposes, such as wire cutting.

• Cable Puller

No discussion of electrical tools and equipment can be held without talking about the cable puller. This is designed to help pull cable (as the name implies) at different speeds. Depending on the type of cable, this can range from 25 feet per minute to 100 feet per minute. Many electrical contractors also make heavy use of the portable variant of this piece of equipment. Portable or stationary, this is generally used to simplify the process of laying cable across large distances.

• Pipe Bender

• The pipe bender is another vital construction tool that an electrical contractor is required to have while working at commercial construction sites. This tool allows

the electricians to bend the pipes that they are installing when working on commercial construction buildings. The heavy pipe can be bent with extreme accuracy which allows a cable to be run through the pipes properly. For example, a wire might be required to run through a pipe and that pipe might have to be bent at a 90-degree angle. By using the pipe bender, an electrician can easily round the pipe, and thus work in a faster and more efficient manner.

Drilling Machines

Along with standard tools used in electrical work, many professionals are also reliant on certain construction power tools, such as drilling machines. One thing that works in the favor of most electrical professionals is these tools getting lighter and smaller, while at the same time, increasing in power. While you have the option to go corded or cordless, cordless is favored due to the increased flexibility. For example, if you had to drill a hole in the wall to install a wire, factors like long wires or where to find an electrical wire are not a concern.

Measuring Tools

Lately, you may see a lot more interest in laser measuring tools. However, all
electricians should also pack a basic tape measure as well. Some professionals
invest in measures with rare earth magnetic tips. This gives them the ability to
stick to surfaces like iron and steel so you can get a quick and accurate
measurement by yourself

• Fish Tape

• Fish tape is one of the more popular pieces of electrical tools that you'll see and gets used on just about every job site. The main purpose of this is running wiring between gang boxes and other types of electrical components via conduit piping. To do this, the fish tape gets housed in a coil and moved around through the piping. When the end of the tape shows up on the other side, wiring can be installed and you can retract the tape.

Saws

Saws are similar to drills in that they are general power tools that find use in this specialized setting. Most electrical professionals favor handheld reciprocating saws because they are versatile and dependable in a variety of different settings. However, there is a large variety of saws also used by electrical subcontractors. Examples include cut-off saws, hole saws, and spiral saws. Which saw you bring with you will depend on your specialties as a contractor.

• Circuit Finders

o In some settings, it can be hard for an electrician to determine exactly what outlets are connected to what circuits in a given location. Rather than relying on trial and error to find the right spot, circuit finders are the modern solution. These components have two main parts: a digital transmitter and a receiver you plug into

the outlet. When you hold the transmitter to different circuits on the breaker, the device will send a signal to the receiver, showing which circuit is associated with which outlet.

Material Safety Data Sheet (MSDS)

Material Safety Data Sheet (MSDS) is a communication tool that identifies all characteristics of a product's chemical make-up. It lists all hazardous compounds that are in the product, and provides information on how to treat injuries that may occur with the product. Other information such as the Company's full information will be provided, as well as other vital information, such as storage instructions, dangers of mixing with other chemicals, and the use of proper personal protective equipment.

- An MSDS will be required for all chemical products used in the class labs.
- MSDSs will be kept in a protective binder in a safe and accessible location for all students and teachers to use.
- MSDSs will be inspected and updated on a monthly basis and when a new chemical product is added to the HAZMAT locker.
- The teacher will be the sole custodian of the MSDS for his/her class lab.
- Everyone is responsible for maintaining and keeping the MSDS in good condition whenever they use it.

Permission Form

	has our/my permission to operate the
(student's name)	
equipment in the	shop/laboratory at
	ol. It is understood that instruction in safe she is allowed to use any piece of equipment upervised at all times.
In case of accident, it is preferred	that he/she be given treatment by:
Dr	
or Dr.	
Home phone number is:	
Father's work phone number is: _	
Mother's work phone number is: _	
	at the above numbers, please notify:
(responsible person)	(phone number)
Date:	-
	Signed:
	(father/legal guardian)
	(mother/legal guardian)

Statement of Acknowledgement

This is to certify that I have received safety instructions in/on	
My instructor has demonstrated to me how to operate each made	hine correctly
and safely. I promise to observe all safety precautions, and if ev	er in doubt
regarding any operation, I will consult my instructor and obtain the	ne necessary
information.	
Signed	
Date	

Student Medical Information Sheet

All information must be completed and this form returned before a student will be allowed to operate any power equipment in the laboratories. This information will be used to make this class as safe as possible and to expedite emergency help if needed.

Student Name		
City	State	Zip
Parents/Guardians' Name		
Address if different from above		
City	State	Zip
Parent/legal guardian		work telephone number
Parent/legal guardian		work telephone number
Family doctor		
Address		
In case of serious accident, p	lease notify:	
Name		Relation
Address		
Telephone number		Extension

Confidential Information

Does your child have any physical or mental impairment that may be of concern the CTE instructor? () Yes () No If yes, please specify:
During the school year does the student take medication of any type that may limit activities or effect vision, hearing, balance, or other senses? () Yes () No
f yes, please specify:
Allergies to medicine?
have read the attached information describing the technical education course. I promise the information above is correct and true. I will inform the instructors of any changes that may occur this year relevant to my child in the safe operation of this course.
Signature Date
f more space is needed for comments, please continue below.

AUTHORIZATION TO CONSENT TO TREATMENT OF A MINOR

Name of Minor	
I authorize any of the employees/volunte	ers of the
such medical treatment to include, without medical, dental, or surgical examination of	Name of school inor when I cannot be contacted and to consent ut limitation, x-ray examination, anesthetic, or treatment and general hospital care. No prior ncy or danger of serious or permanent injury e made under this authorization.
of any specific diagnosis, treatment, or he	ragraph, this authorization is given in advance ospital care being required but is given to of the adult to give specific consent to any and are.
,)
person or entity which provide or causes hospital care pursuant to this authorization negligent therein) and conditionally agree of third party benefits or otherwise, full artreatment, or hospital care. I am the person having the power to constitution of the power to constitu	
	for the school year, unless revoked by the f, such destruction being the only method of
All blanks of this authorization were filled	in before I signed this authorization.
Parent/legal guardian	Date
Insurance company	Insurance company telephone number
Group number	
Certification number	Social security number

INSURANCE WAIVER

Although every attempt is made to ensure a safe learning environment for our students, accidents do occur. Parents and guardians should be aware that in the event your child is injured at school, the district does not carry student medical insurance and will not cover the medical expenses from an accident, whether at school or at home. At the time your child enrolls, you should receive an enrollment brochure for OPTIONAL student accident insurance.

l,Parent/guardian	the parent/guardian of	Name of student
acknowledge the opportunity	to participate in the school	ol insurance program. I do not
Name of student	to be enrolled in the scho	ool insurance program.
He/she is covered under my	family policy with our own	n insurance coverage.
Please fill in the additional inf	formation in the event of a	an accident. If your child is
enrolled in the school insurar company.	nce program, please indic	ate school insurance as the
We,Name of parent	with	accident and health insurance on
Name of student	Insurance company	Policy number

	Teacher Written test Performance Test				
Item/Tool Equipment	Teacher Written test Performance Test				
	Demonstration	100%	100%		

The teacher will keep this record until the student exits the program.

TEACHER OBSERVATION REPORT OF STUDENTS

Teacher(s):		
School:		
Class Period:	Subject:	

	Unsafe Acts or Distractions				
✓	100%	Demonstrates SAFE and good working habits and participation.			
1.	-20%	Failure to wear personal SAFETY gear.			
2.	-20%	Horseplay.			
3.	-20%	Poor housekeeping practices.			
4.	-20%	Improper handling or disposal of hazardous materials.			
5.	-10%	Poor participation.			
6.	-10%	Using equipment without permission.			

	Date(s)					
	Mon	Tue	Wed	Thur	Fri	1
Student	/ /	/ /	//	//	11	Total
Names	/ /	' '	/ /	/ /	''	Grade
ivallies						Grade

Date and time of accident: Describe the injury in detail and indicate the part of the body affected. What was the student doing when injured? How did the accident occur? Name the object or substance that directly injured the student. If treated, name and address of the physician or hospital. Prepared by: _____ Building principal:

ACCIDENT REPORT FORM

Annual CTE Lab Safety Checklist						
Evaluation	School Date Instructor					
AREA	PROCEDURES TO FOLLOW	YES	NO	DATE		
Training	WCSD Training					
Teacher	Students may not work in shop without certified teacher present.					
	Attentive, alert and directly supervise student use of equipment.	1				
	Appropriately trained with teaching endorsement for training area.			†		
	Students adhere to all safety procedures.					
	Proper hand tool safety is demonstrated and practiced.			†		
	Proper machine tool safety is demonstrated and practiced.					
	Proper eye protection equipment is provided and utilized.					
	PPE - Personal Protective Equipment is provided and utilized.					
	Proper safety testing is given on all tools and equipment.					
	Maintain safety records until student graduates.					
	Accident Report Investigation forms on file with teacher.					
	Safety instruction is performed throughout the course.					
	Students use best safety practices with equipment & machine guards.					
	Maintain a clean and uncluttered work enviroment.					
	Conduct an Annual Equipment Safety Evaluation.					
	Keep all equipment in safe operating condition.					
	Familiar with basic First Aid.					
	Implements best practices to set a proper safety example.					
	Maintains adequate order and control at all times with students.					
	Students know facility safety procedures.					
	Students can be left unsupervised in the classroom/lab.					
	Labs are locked when instructor leaves for planning, lunch, etc.					
	Delegation of lab time can be given to a Teacher Aide.					
	Class enrollment is not excessive.					
	Administrative support is in place for safety protocols.					
Facility	All OEM safety devices/guards are in place and operational.					
	Eye wash station is functional.					
	Dust collection system is properly serviced and maintained.					
	Air ventilation systems are serviced and operational.					
	All flammable material are stored in a flammable safety cabinet.					
	MSDS - Material Safety Data Sheets are updated and accessible.					
	All emergency "shut off" switches are functional.					
	Adequate work space is provided for each piece of equipment.					
	Safety zones are established and designated on machinery/equipment.					
	Safety signs, posters and procedures are adequately displayed.					

Instructions: 1. The Annual CTE Lab Safety Checklist (self evaluation) will be performed by the Instructor and signed by the: Instructor, Safety Specialist and CTE Director at the beginning of each school year. 2. The Instructor/Safety Specialist wil keep and maintain a 5 year record of the Annual CTE Lab Safety Checklist on file. 3. The instructor will keep a copy of the 5 year CTE - Safety Management Accountability Form in the same file. 4. When needed the Annual CTE Lab Safety Checklist may be performed by the Safety Specialist or CTE Director as part of program evaluation.					
CTE Direct	or Signature		Date		
Safety Spe	cialist Signature		Date		
Instructor	Signature		Date		
	is subject certified. Ci	assroom space to be provided in this situation.			
Teacher	er the absence of the certified instructor unless the substitute teacher				
Substitute	No substitute teacher	is allowed to manage any shop/lab time during			
	permitted in the shop	/lab areas.]		
	•	c devies such as iPods, cell phones, etc. are			
		on before operating any equipment.			
	Must observe all rules	s, procedures and respect others.			
	Must report all injurie				
	welding helmet, glove				
	-	itor to wear appropriate PPE. ing face shield, hearing protections, respirator,			
	and agree to follow al				
	_	nent stating they have received safety training			
		to work, perform, or operate equipment until ng score on their safety test(s).			
Student	-	sent Forms are completed, signed and filed.			
	Adequate ventilation	is provided.			
		d switches meet OSHA standards.			
		ng is provided in all work areas.			

Provide federal rules and regulations related to workplace safety.

- ◆ OSHA
- ♦ NEC/NFPA 70

 $\frac{https://doe.nv.gov/uploadedFiles/ndedoenvgov/content/CTE/Programs/SkilledTechSciences/Standards/Construction-Technology-STDS-ADA.pdf$

CONTE	NT STANDARD 7.0: APPLY ELECTRICAL PRINCIPLES
PERFOR	MANCE STANDARD 7.1: IDENTIFY ELECTRICAL SAFETY PROCEDURES
7.1.1	Demonstrate safe working practices in the construction environment
7.1.2	Explain the purpose of OSHA and how it promotes safety on the job
7.1.3	Identify electrical hazards and how to avoid or minimize them in the workplace
7.1.4	Explain electrical safety issues concerning lockout/tagout procedures, confined space entry, respiratory protection, and fall protection systems
7.1.5	Develop a task plan and a hazard assessment for a given task and select the appropriate PPE and work methods to safely perform the task
PERFOR	MANCE STANDARD 7.2: IDENTIFY FUNDAMENTAL ELECTRICAL SYSTEMS
7.2.1	Explain the role of the National Electrical Code® in residential wiring and describe how to
	determine electric service requirements
7.2.2	Explain the grounding requirements of a residential electric service
7.2.3	Calculate and select service-entrance equipment (i.e., panel box, load requirements, breakers)
7.2.4	Select the proper wiring methods for various types of residential construction systems
7.2.5	Compute branch circuit loads and explain their installation requirements
7.2.6	Discuss the types and purposes of equipment grounding conductors
7.2.7	Explain the purpose and appropriate usage of ground fault circuit interrupters
7.2.8	Explain the purpose and appropriate usage of arc fault circuit interrupters
7.2.9	Size outlet boxes and select the proper type for different wiring methods
7.2.10	Describe the installation rules for dedicated circuits for various equipment (e.g., ranges, dryers, HVAC systems, hot tubs, water heaters, etc.)
7.2.11	Explain how wiring devices are selected and installed
7.2.12	Describe the installation and control of lighting fixtures
7.2.13	Install a basic electrical system

Individual Classroom Management Plan

Natsumi Kuranami

My Philosophy of Classroom Management

Classroom management "is about teaching them (students) how to behave properly and influencing them to do so in a kind and positive manner." (Charles & Cole, 2019, 2) "First and foremost, effective classroom management maintains a safe and positive environment in which high-quality teaching and learning can occur. Second, effective classroom management promotes civility and responsible behavior in classroom interactions. Third, effective classroom management helps students develop and use inner motivation and ongoing self-control." (Charles & Cole, 2019, 8) My personal definition of classroom management is being able to provide my students with a high-quality learning environment (mentally, physically, and emotionally) for effective instruction.

I want my classroom to look neat and organized. I want my students to be able to understand the policies and procedures of my class so that they are able to know what is expected. This provides an orderly learning environment. I want my students to be self-managed and successful. I would encourage open communication with my students and their guardians to foster positive relationships.

According to the National Education Association, "The educator accepts the responsibility to adhere to the highest ethical standards... The Code of Ethics of the Education Profession indicates the aspiration of all educators and provides standards by which to judge conduct." (Code of Ethics for Educators | NEA, 2020) In regards to classroom management and safety, the educator "shall make reasonable effort to protect the student from conditions harmful

to learning or to health and safety." (Code of Ethics for Educators | NEA, 2020) "Where classroom management is concerned, your primary professional obligation is to establish and maintain a safe and productive learning environment for your students... keeping the environment physically and emotionally safe, keeping students on task, fostering positive relationships among members of the class, and minimizing behavior that interferes with your teaching or your students' learning." (Charles & Cole, 2019, 18) "Teachers are expected to maintain a safe, secure, and supportive environment for learning, and to recognize their own roles as professionals and role models for their students... teachers are responsible for helping students acquire important knowledge and skills. Teachers are expected to provide their students with engaging, meaningful, and worthwhile activities that lead students to accomplish content and skill objectives. Teachers must help students learn to behave responsibly and to strive for excellence." (Charles & Cole, 2019, 14) I will maintain professional and ethical behavior while teaching the courses. I want to help and guide my students to make appropriate choices in order to become self-managed. However, if needed due to the dangers of kitchen labs, I will enforce strict rules and consequences. I definitely want an open line of communication with my students that way both parties understand each other. When needed, I will contact their parents, guardians, and administration regarding their behavior, grades, and any incidents.

My students will be expected to be responsible for their behavior and actions. They are expected to follow classroom rules and understand why they are set in place. My students are responsible for communicating with me in regards to the classroom and the course. They should understand that compliance to my classroom expectations is for the benefit of themselves and everyone in the classroom. "Students have the obligation to make a reasonable effort to learn... by attending class, paying attention, cooperating with the teacher, participating considerately in

class activities, and doing assigned work. Students are obliged to refrain from interfering with class work or the progress of others. They must not unnecessarily disrupt the teacher or instructional activities, or interfere with other students' efforts to learn. Students are obliged to display acceptable behavior, which includes abiding by class rules, behaving civilly, and showing consideration for others." (Charles & Cole, 2019, 30)

The four necessary components of a classroom management system are classroom procedures, rules and consequences, instructional technique, and communication. In the ProStart program, we state our classroom procedures onto the course syllabus so students are able to read and understand. With it tied to our syllabus, students, parents and guardians must agree and sign off on what is expected out of them throughout each course. Each syllabus is tailored to each school site's overall school policies. The syllabus then must be approved by each school's administration, so they are aware of your classroom management. This strategy of explaining your classroom procedures was adapted from Harry and Rosemary Wong's approach to classroom management. First, clarify the expectations of both the students and the instructor. After explaining, strictly practice the procedures for the next two weeks. This provides an opportunity for students to build a habit and follow classroom procedures automatically for an efficient environment. Classroom procedures would cover entering or exiting the classroom, attendance, make-up policies, cleaning, asking for help, etc.

In regards to rules and consequences, the ProStart program has set standard of conduct and behavior as follows:

PROSTART STANDARDS OF CONDUCT AND BEHAVIOR

Students are expected to conduct themselves in a professional manner, with obedience, respect, courtesy, and honesty, AT ALL TIMES.

Disruptive and negative behavior will not be tolerated. **Disruptive behavior are those actions that impede the ability of the teacher to teach the class productively**. These disruptive or bad behaviors include but are not limited to:

- 1. Showing up to class under the influence of alcohol, marijuana, or drugs **SERIOUS OFFENSE**
- 2. Leaving the classroom without permission.
- 3. Yelling, arguing, fighting, swearing, use of foul language, or other intimidating and/or aggressive behavior **SERIOUS OFFENSE**
- 4. Sleeping, eating, drinking, chewing gum, or engaging in side conversations during class discussions or course lectures.
- 5. Shuffling through paper, doodling, cleaning out backpacks, putting on makeup, braiding hair, etc. during class discussions or course lectures.
- 6. Interrupting the teacher or classmates in any way such as making smart-aleck remarks or comments or asking nonsense questions unrelated to the topic being discussed.
- 7. Unauthorized use of cellphones to talk, text, film, photograph (selfie/group photos), using your phone's camera to look at yourself, or use social media during class.
- 8. Sexting, bullying cyber or face-to-face, or of similar offense **SERIOUS OFFENSE**

CONSEQUENCES

Violations of the classroom policies, procedures, and standards of behavior will result in the following disciplinary actions.

MINOR OFFENSE:

1st Offense	General reminder. The class will be addressed and reminded of the policy and procedures.
2nd Offense	You will be reminded privately.
3rd Offense	Your offense will be documented and signed by you and your parents/guardians.
4th Offense	Parents/guardians, counselors, academic teachers conference with or without the student.
5th Offense	Office referral and/or removal from the program.

SERIOUS OFFENSE:

1st Serious Offense	Parents/guardians, counselors, academic teachers conference with or without the
	student; removal from the program.

Students must understand that they are to conduct themselves in a professional manner.

They are representing the program, which is a great privilege. If disruptive and negative behavior is shown, consequences will be issued depending on the severity.

As a fairly new instructor, I am still trying to find the best instructional techniques for all the ProStart courses. Bookwork can be informational, but not all students may grasp information the same as they are different types of learners. What I like about CTE programs like ProStart, is that it provides students with opportunities to work hands-on and showcase their skills. I try my best to incorporate engaging activities to help students absorb the information they are learning. I will interact with my students in an appropriate manner; trying to be encouraging and positive. I want to be cooperative, but also firm depending on the severity of the classroom environment.

In regards to communication, I was intrigued with William Glasser's Choice Theory. He "uses noncoercive influence strategies to help students make responsible behavior choices." He believes that providing quality teaching will "help students strive for quality learning." (Charles & Cole, 2019, 198) If the situation allows, I would like to build professional relationships with my students through effective communication. I believe that following some of Glassor's strategies, like the "Seven Connecting Habits", can help with that. (Charles & Cole, 2019, 210) By providing the Choice Theory Model in which students will make a connection on their actions to others. They will be given time and support on what they can do right.

All teachers must provide a safe and positive environment for students in order to promote high-quality teaching and learning. Effective managers teach students to abide by class expectations and routines. Students need to know what to do, how to do it, and when to do it. Good classroom management involves not just setting expectations, but actively teaching students how to become better and better at meeting those expectations." (Charles & Cole, 2019,

8) I will promote effective communication, self-management, positive relationships, making choices, normalizing mistakes, and prevention. "Effective teachers plans and adjust their instruction in accordance with students' carried traits, needs, and motivations.... When students are engaged and motivated, they tend to cause fewer management problems." (Charles & Cole, 2019, 8)

Regine Olarte

My Philosophy of Classroom Management

My definition of classroom management is having a sense of direction and order in the classroom. "Classroom Management refers to teachers' efforts to establish and maintain 4 standards of fundamental importance in all classrooms." (Building Classroom Management: Methods & Models, 12th Edition, C.M. Charles, Karen M. Cole. Chapter 3 Classroom Management Concepts & Terms pg. 50). As a teacher, I believe in establishing classroom management in the classroom beginning the first day of school. This will allow my students to be self-managed, making them effective students in the classroom, knowing the routines established.

My classroom will be organized and always clean. It will be a cohesive and conducive environment that promotes learning, collaboration, and a place where my students feel comfortable to be in. I want my classroom to be a place where students are self-regulated and able to do tasks on their own with minimal supervision from me. A place where my students can achieve their goals and come out successful.

Some of the main responsibilities I have in regards to classroom management include:

- Professional & Ethical Behavior: I will always conduct myself ethically, treat your students and colleagues fairly, be honest with them, and never say or do anything that might hurt their feelings or hinder their desire to learn or cooperate.
- Effort: I will do everything I can to help my students benefit from the educational experience in my classroom and find satisfaction in doing so.

- Teaching: I will teach in a manner that is conducive to success for every one of your students.
- Helpfulness: I will do what I can to help students, collectively and individually. I will
 help them succeed academically and find satisfaction in school and learning.
- Respect: I will cultivate and demonstrate respect for my students. I will spread my attention to all my students evenly.
- Cooperation: I will help my students understand that accepting each other and working together will benefit everyone in the class. I will ensure that each of my students will feel part of the process and be inclusive.
- Communication: I will have open communication with my students and their parents. I
 will ensure they are well aware of what is expected of them.
- Charisma: I will make myself personally interesting and by being upbeat, pleasant, and approachable, using humor appropriately.

The main responsibilities my students will have in my classroom with regards to behavior and classroom management are very critical. My students should know of the rules, regulations, and procedures established from the very first day of school. They should know what is expected of them and be able to take responsibility for their actions. Routines will be set, which students should follow, and they should behave accordingly with the understanding that consequences are in place should there be any non-compliance that occurs.

I believe that the four essential elements of classroom management include autonomy, competence, relatedness, and relevance. Autonomy because students should have a sense of responsibility and they should be self-regulated and are able to do things on their own.

Autonomy provides students with the freedom of choice, which is essential in a classroom where they should be able to make the right choices. Competence is highly important in classroom management because students should be able to accept feedback and constructive criticism. It boosts morale and allows for students to feel good when they have done something right. An important factor in developing intrinsic motivation in students is by promoting good quality relations with the teachers they respect. And relevance as students needs an understanding of how the things they are learning in the classroom relate to their life in real-world situations.

Making real-life connections to the things they learn in the classroom allows students to make their own decisions and connections.

In regards to rules and consequences, the ProStart program has set standards of conduct and behavior as follows:

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Disruptive and negative behavior will not be tolerated. **Disruptive behavior are those actions that impede the ability of the teacher to teach the class productively**. These disruptive or bad behaviors include but are not limited to:

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- 5. Shuffling through paper, doodling, cleaning out backpacks, putting on makeup, braiding hair, etc. during class discussions or course lectures.
- 6. Interrupting the teacher or classmates in any way such as making smart-aleck remarks or comments or asking nonsense questions unrelated to the topic being discussed.
- 7. Unauthorized use of cellphones to talk, text, film, photograph (selfie/group photos), using your phone's camera to look at yourself, or use social media during class.
- 8. Sexting, bullying cyber or face-to-face, or of similar offense **SERIOUS OFFENSE**

CONSEQUENCES

Violations of the classroom policies, procedures, and standards of behavior will result in the following disciplinary actions.

MINOR OFFENSE:

1st Offense	General reminder. The class will be addressed and reminded of the policy and procedures.
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3rd Offense	Your offense will be documented and signed by you and your parents/guardians.
4th Offense	Parents/guardians, counselors, academic teachers conference with or without the student.
5th Offense	Office referral and/or removal from the program.

SERIOUS OFFENSE:

1st Serious Offense	Parents/guardians, counselors, academic teachers conference with or without the	
	student; removal from the program.	

To prevent or limit the known causes of misbehavior, I will take from Harry Wong's approach and introduce a set of rules, routines, and procedures which students will need to follow. Each year in our program, we encounter a brand new set of students in the first of a three-year program. Each year brand new students are introduced to the ProStart standards of conduct and behavior and each year, something new is added or rules and procedures are tweaked to accommodate necessary changes that have transpired from the year prior. This set of rules and procedures allows students to know what exactly it is that they need to do, where they need to be, and what is expected of them. If any misbehavior or noncompliance occurs,

reinforced to ensure that students do not fall through the cracks.	consequences are introduced.	. This set of rules and procedures are constantly reiterated an	
	reinforced to ensure that students do not fall through the cracks.		

Rozelle Ragat

My Classroom Management Plan

My definition of classroom management is for myself, as a teacher, to build a learning environment for my students that will allow them to learn effectively and efficiently. I want my classroom to be a safe and positive learning environment, and I want to ensure that they are interacting with each other and engaging in the lesson plan and activities. My main responsibilities in the classroom are to behave legally, ethically, and professionally, as well as being supportive and communicative. I must show them that they are cared for and treat them like they are my own kids while perceiving them as mature and independent. I also hope to create a connection with each and every one of them. As for my students' main responsibilities, I would enforce them to show respect and to choose to be at their best behavior at all times. I hope to instill the idea of being accountable and taking pride in the work that they produce through my teachings and carry it along with them as they grow.

The necessary components of a classroom management system is content management, conduct management, and covenant management. The purpose of content management is to gain the students' cooperation, and this would allow them to be focused on the material rather than what's going on around them. Jason Kounin preferred to have multiple activities going on simultaneously, and he wanted the students to be engaged in what they were learning. Having them focus on the content decreases the possibility of someone acting out or misbehaving. Conduct management focuses on the nature of people and their identity. It also refers to the teacher's control of consequences. B.F. Skinner's strategy of using positive reinforcements would persuade the student to retain their good behavior, and with William Glasser's Choice Theory, we encourage the student to choose their behavior. The purpose for covenant

management is that the classroom should be regarded as a social system. Fritz Redl's theory of Group Dynamics insists that teachers need to understand each role in a group before they could understand each student's behaviors as an individual.

As an educator, I shall follow the Code of Ethics for Educators from the National Educator's Association and commit fully to the teaching profession. As important as it is for a teacher to be charismatic, I shall also inhibit the qualities of being professional, ethical, respectful, communicative, cooperating, helpful, and always giving my best effort. I should always dress professionally and choose the appropriate language. Despite taking on the role of educating students, I shall also make it a point to continuously educate myself in my profession and improve or advance my methods when needed. I should not be stagnant and complacent with the work I do or the teaching strategies I perform. To establish positive relationships and trust with my students, my colleagues and my students' caregivers, I believe maintaining a positive tone and demeanor is of utmost importance. According to Haim Ginnot, it is best to utilize congruent communication which is defined as being harmonious with your students' feelings about situations and themselves. Instead of saying "Mark, you are being rude and disruptive towards your classmates," you could address the situation itself and instead say, "I am worried that the commotion in the classroom is affecting others, let's try to keep it down, okay?" I will aim to address any type of situation with a calm and/or positive demeanor.

The kind of behavior that I will promote in my classroom is for students to treat their peers how they would want to be treated. In order to guide my student's behavior, I would like to first ensure that they are given the classroom rules and procedure. Basic rules in the classroom that I will implement for my students include: be quiet, keep your hands to yourself, be respectful and kindly listen to your fellow peers and the teacher, be on time and prepared for

class, be honest and have integrity with the work you do, and be kind and do good always. I will most likely use the tactic Harry and Rosemary Wong used in their classroom management style which is to introduce a procedure on the very first day of class and to reiterate it daily for two weeks. My classroom procedure will consist of what they will do before they get into the classroom, when they get to their seats, how to turn in their assignments, and what they should do before the class ends.

To prevent or limit the known causes of misbehavior that might otherwise influence my class is to make sure I provide my students with a lesson or activity that will keep them preoccupied for most of the class period. Similar to Jason Kounin's classroom management theory, he wanted his students to primarily focus on the lesson and activity as a proactive tactic preventing students from thinking about something that might lead to misbehavior. Kounin would be in charge of what the students would be doing throughout the class period which would make them more efficient. I aspire to have a versatile learning environment where my students are not always sitting on their seats lollygagging and waiting for the class to end.

In order to support my students' efforts to participate and persevere, I would like to hone the Seven Caring Habits that William Glasser utilizes: supporting, encouraging, listening, accepting, trusting, respecting, and negotiating differences. I want to be a mother-like figure for my students, and even though I currently do not have children of my own, I already know and feel that a child's success would be my greatest accomplishment. I should also keep in mind to never leave a child behind. I would like to monitor my students' progress and help them with their weaknesses. If they seem to perform poorly on an assignment, I would confer with them about it and allow them to re-do it or provide a possible alternative. I would like to encourage

them to do the best work they can possibly do, and by doing so, I aim to plan my lesson plans meticulously so that my students can be excited and engaged throughout.

In the event that they might misbehave and disrupt the class, I would like to first use Ron Morrish's Real Discipline approach to classroom management which is about teaching my students how to be respectful, responsible, and cooperative. By doing so, I would have to create my own set of rules for the classroom, establish my authority as a teacher, practice students complying, act as a coach, and allow students to redo their behavior in an acceptable manner. My next step would be utilizing Craig Seganti's approach which is disciplining students by giving detention or having them re-write the rules repetitively. For example, if my student is talking during the time they're not supposed to (and I have confronted them already before), I would not give a warning and immediately give them 15-minute detention. Some follow up procedures I would use to prevent the recurrence of misbehavior is to speak effectively for any acts of misbehavior whether big or small. I should not have room for arguments or continually justifying my decisions for the student. I need to keep in mind that if I don't enforce my rules, my students will perceive that my rules don't exist. To maintain student dignity and good personal relations, I would strongly focus on academic learning and make it enjoyable for them as long as the students are being respectful and cooperative.

Robert Torres

My definition of classroom management is the ways and means of how I conduct my classroom and the effectiveness of how teachers and students work together. I will be constantly adjusting my classroom management styles and techniques as the school year progresses, due to the changes that will occur between myself and my students. Throughout history there have been many classroom management styles and theories introduced by multiple educators. These management techniques may be applied to different classroom situations. Classroom management will be an ongoing learning process as students and teachers evolve and interact with each other. For example, reinforcing stimulus will be used to help students learn from their mistakes or help them to feel a sense of gratitude after successfully completing a task, project, or assignment. I shall provide my students with a safe, fun, and positive atmosphere. I want my students to feel comfortable with me and their fellow classmates. I want them to be able to express themselves without the fear of being judged or embarrassed when they make a mistake. Failure can be very disheartening for students. I will promote a positive classroom attitude when failure occurs. Students will be taught that failure by themselves or by others is nothing to be discouraged by, instead I will keep an orderly classroom which will teach my students the importance of organization and proper housekeeping. My top responsibilities in classroom management are to ensure the safety of my students and that respect for one another is given at all times. I believe that we, as a class, are a team and must share the duties and responsibilities if we are to practice and maintain good class management.

Necessary components of a classroom management system consists of, but not limited to:

- > Teaching students to abide by class expectations and routines. I will teach and make all students aware of classroom expectations and routines. I will review with my students these expectations to ensure that they are still well informed and abiding by them.
- ➤ Providing a high-quality learning environment for students by demonstrating effective class leadership and by being in charge democratically. I shall be the leader of the classroom and I will be ultimately responsible for the class environment, whether it be positive or negative. Moreover, as the teacher in charge, I will allow my students to assume the responsibility for certain roles they request to take on, or that I have decided to give to them as a duty. By doing this, my students will have the opportunity to experience what it means to be part of the classroom management team, and hopefully they will gain a new perspective of this responsibility.
- ➤ Monitoring students work frequently and effectively.
- Redirecting student misbehavior humanely and compassionately, preserving students' personal dignity.
- > Shall make reasonable effort to protect the student from conditions harmful to learning or to health and safety.
- > Shall not intentionally expose the student to embarrassment or disparagement.

I will adhere to all school Standard Operating Procedures (SOP), and Policies. It is important to keep up to date with all federal and state laws and provisions to ensure that teachers and students are protected from any illegal actions.

I believe that our actions speak louder than our words and I would want to be judged by what I do. I hope to stay true to my words by displaying in action what I say. I will treat everyone with respect and dignity, and I will expect to be treated the same in return.

- > I will lead by example and expect my students to follow.
- > Students will be expected to follow certain rules such as, respecting each other, help one another when needed or requested, keep an eye out for misbehavior and inform the teacher.
- > I will provide a daily plan each day for all the students to see. There shall be little to no reasons for each student to not be aware of what the plan of the classroom is for the day.
- I will maintain a vigilant watch over my students. I cannot predict which students will have a behavior issue, so I will stress to all my students the importance of their obligations toward the school system, the teachers, and their peers. Obligations such as, putting in a reasonable effort to learn, refraining from interfering with classwork or the progress of others, displaying acceptable behavior, which includes abiding by class rules, behaving civilly, and showing consideration for others.
- ➤ I will use a calm and collective tone. I will use age appropriate words, and gain feedback to ensure understanding. I shall interact with my students professionally, and use nurturing methods, depending on the student's age. I will make a point to donate my time equally amongst my students.
- > Students will be well informed about the plan of the day and will be expected to write it down first thing in the morning. They will also be aware that plans may change and that they will need to be flexible and willing to accept any changes that may occur.
- My teachings will require active participation and teamwork. Students will work together, helping and learning from each other. Working with electrical systems and circuits will require two or more persons, this will ensure that there is always a safety observer present.

- > Eye contact with my students is important. I will be able to determine if a student is understanding what is being taught by their facial expressions, but mostly through constant feedback. I will continuously be seeking feedback from my students to gauge their understanding.
- ➤ I will continuously be seeking feedback from my students to gauge their understanding and progression.
- ➤ I will lead by example. For example, I may join in on a project or activity as if I were a fellow student, by doing this, I will be able to work side by side with my students, just as a supervisor would when working with their subordinates out in the field.
- ➤ I will display a strong and positive posture. I want my students to see me as a person who they can look up to. I hope to be a good role model for my students by showing them my confidence, subject knowledge, and even my physical appearance. I believe that displaying a healthy weight and lifestyle can influence others to follow suit and reduce the amount of overweight and unhealthy individuals.
- > Students need to know that they are capable of high quality work in order for them to produce high quality work. I will actively commend my students for the work they put out. Even for those students who may struggle producing high quality work, they need to feel that they are capable of improving, otherwise, I will fail as a teacher to bring out the best in my students.
- > I will treat all students with respect and dignity, and I will expect the same in return. One of my goals is to instill moral and ethical behavior into my students. By teaching students moral and proper ethical behavior, the chances of preserving students' personal dignity will increase.

- > I will reiterate to all my students the importance of their obligations toward the school system, the teachers, and their peers. Obligations such as, putting in a reasonable effort to learn, refraining from interfering with classwork or the progress of others, displaying acceptable behavior, which includes abiding by class rules, behaving civilly, and showing consideration for others.
- ➤ Disciplinary actions shall be imposed as necessary.
- ➤ I will seek to find the root cause and try to understand the reasoning as to why a student may refuse to comply with directions or do acceptable work. I will be compassionate and empathetic to their situation and find solutions to help rectify the situation.

Glossary

Classroom procedures Detailed instructions that show students how to perform all activities in class-----effective use can eliminate a number of discipline problems.

Class rules Written statements that specify acceptable and unacceptable behavior in the classroom.

Career and Technical Education (CTE) is a term applied to schools, institutions, and educational programs that specialize in the skilled trades, applied sciences, modern technologies, and career preparation

Duty of Maintenance Ensuring a safe environment for students and teachers.

Duty of Supervision Adequate supervision as defined by professional, legal and district guidelines to ensure students behave properly in light of any foreseeable dangers.

Ethical Code of Conduct Ethical Codes of Conduct are adopted by organizations to assist members in understanding the difference between right and wrong and in applying that understanding to their decisions.

Hazard Analysis Critical Control Point (HACCP) A management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.

Hazardous Materials (HAZMAT) A material (such as flammable or poisonous material) that would be a danger to life or to the environment if released without precautions

Food and Drug Administration (FDA) Agency of the U.S. federal government authorized by Congress to inspect, test, approve, and set safety standards for foods and food additives, drugs, chemicals, cosmetics, and household and medical devices.

Liability The state of being responsible for something, especially by law.

Material Safety Data Sheet (MSDS) Material Safety Data Sheet (MSDS) is a communication tool that identifies all characteristics of a product's chemical make-up. It lists all hazardous compounds that are in the product, and provides information on how to treat injuries that may occur with the product. Other information such as the Company's full information will be

provided, as well as other vital information, such as storage instructions, dangers of mixing with other chemicals, and the use of proper personal protective equipment.

National Electric Code (NEC) is a regionally adoptable standard for the safe installation of electrical wiring and equipment in the United States. It is part of the National Fire Code series published by the National Fire Protection Association.

National Fire Protection Association (NFPA) is an international nonprofit organization devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards.

Negligence Conduct that falls below a standard of care established by law or profession to protect others from an unreasonable risk of harm, or the failure to exercise due care.

Occupational Safety and Health Administration (OSHA) is a government agency of the United States Department of Labor that has visitorial powers to inspect and examine workplaces to ensure the safety of workers.

Personal Protective Equipment (PPE) Protective clothing and equipment used to protect an individual from dangers that may be present while engaged in an activity that may include hand tools, electric tools, gas powered tools, chemicals, or biohazards.

Reasonable Diligence The exercise of justifiable and appropriate persistent effort.

Safety The state of being "safe", the condition of being protected from harm or other danger.

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