

# JOB HAZARD ANALYSIS

CARPENTER		SAFE OPERATING GUIDELINES										2017				
	<b>HAZARD POTENTIAL EVALUATION</b>					<b>ERGONOMICS ASSESSMENT</b>										
	<input checked="" type="checkbox"/> Struck By	<input checked="" type="checkbox"/> Weather Conditions	<input checked="" type="checkbox"/> Lifting	L	M	F	<input checked="" type="checkbox"/> Walking	L	M	F	<input checked="" type="checkbox"/> Kneeling	L	M	F		
	<input checked="" type="checkbox"/> Struck Against	<input checked="" type="checkbox"/> Hazardous Substance	<input checked="" type="checkbox"/> Carrying	L	M	F	<input checked="" type="checkbox"/> Standing	L	M	F	<input checked="" type="checkbox"/> Hearing/Noise	L	M	F		
	<input checked="" type="checkbox"/> Slip/Trip/Fall	<input checked="" type="checkbox"/> Electrical Hazards	<input checked="" type="checkbox"/> Reaching Above Shoulder	L	M	F	<input checked="" type="checkbox"/> Sitting	L	M	F	<input checked="" type="checkbox"/> Climbing Stairs	L	M	F		
	<input checked="" type="checkbox"/> Caught In/Between	<input checked="" type="checkbox"/> Obstruction/Confined	<input checked="" type="checkbox"/> Straight Pulling	L	M	F	<input checked="" type="checkbox"/> Crawling	L	M	F	<input checked="" type="checkbox"/> Climbing Ladders	L	M	F		
	<input checked="" type="checkbox"/> Material Handling	<input checked="" type="checkbox"/> Equipment Operating	<input checked="" type="checkbox"/> Pulling hand over hand	L	M	F	<input checked="" type="checkbox"/> Twisting	L	M	F	<input checked="" type="checkbox"/> Simple Grasp	L	M	F		
<b>HIRAC</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<input checked="" type="checkbox"/> Dual Grasp	L	M	F	<input checked="" type="checkbox"/> Pushing	L	M	F	<input checked="" type="checkbox"/> Repeated Motion	L	M	F

## TRAINING REQUIREMENTS

GENERAL CAMPUS			DEPARTMENT SPECIFIC			SPECIALTY																	
Cal Maritime	EHS Pocket Guide	Emergency Response Guide	Department	Authorized Driver	Ergonomics RMI Prevention	Basic First Aid/CPR/AED	Marine Programs	T.S. Golden Bear	As Identified/Determined														
I	A	O	H	I	A	O	H	I	A	O	H	I	A	O	H	I	A	O	H	I	A	O	H

**DO NOT USE ANY EQUIPMENT OR MACHINE UNLESS YOU HAVE RECEIVED INSTRUCTION IN THE SAFE USE AND OPERATION AND HAVE AUTHORIZATION TO USE.**

## PERSONAL PROTECTIVE EQUIPMENT

Eye Protection	Foot Protection	Hand Protection	Hearing Protection	Body Protection	Head Protection	Respiratory Protection	Fall Protection	Face Shield	OTHER
When exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation...	When working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or will protect the affected	When hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns	When exposed to a time weighted average noise level of 85 dBA or higher over an 8 hour work shift.	When exposure to: Intense heat, hot metals, other hot liquids Impacts from materials that can cut, burn Hazardous chemicals Or potentially infectious materials	Where there is a potential for injury to the head from falling objects and/or when there is a risk of impact to head	May be required if removal of contaminants from the air does not fall below permissible exposure level.	When there is a risk of falling from a height greater than 4ft GSO 6ft CSO 6ft MSO When working in confined space	Face shield can be used over the glasses if there is a presence of a lot of flying debris.	

**IF CONDITIONS CHANGE: STOP WORK IMMEDIATELY-REVIEW WITH SUPERVISOR-DOCUMENT HAZARD-REVIEW WITH SRM**











Ergonomic

(L) Low <2hrs (M) Moderate 2-5hrs (F) Frequent >5hrs per 8-hours





























Training

(I) Initial (A) Annual Refresher (O) Occasion/Post Incident (H) Hazard

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GENERAL CAMPUS SAFE OPERATING PROCEDURES			
WORK DUTIES		HAZARD POTENTIAL	HAZARD CONTROLS & PROTECTION MEASURES
1	Use of office equipment 	Electrocution, electrical shock, bruising and miscellaneous injuries	<ul style="list-style-type: none"> <li>⚓ Ensure all electrical equipment is properly grounded. (i.e. three prong electrical plugs) and in proper working order before using. Strictly follow all manufactures precautions and recommendations.</li> <li>⚓ <b>DO NOT</b> overload circuits by stringing multiple power strips (also known as daisy chaining)</li> </ul>
2	Using ladders or step-ladders 	Ladder collapsing; Slipping and falling from ladder	<ul style="list-style-type: none"> <li>⚓ Inspect ladder before use. Use ladder at proper height.</li> <li>⚓ Make sure the ladder is assembled, locked and on level ground.</li> <li>⚓ <b>DO NOT</b> exceed weight limit for ladder.</li> <li>⚓ <b>DO NOT</b> stand on the top or top rung of ladder and make sure a co-worker is holding ladder if any higher than a step-ladder.</li> </ul>
3	Work Station 	Muscle-skeletal disorders, eye/body strain and fatigue	<ul style="list-style-type: none"> <li>⚓ Ensure workstation is ergonomically correct for the person using the workstation.</li> <li>⚓ Ensure proper lighting so that there isn't a glare in order to prevent eye strain.</li> <li>⚓ Review phone placement and accessories so that operator is sitting square and limiting excessive head/neck tilt in order to prevent neck strain</li> </ul>
4	Office Furniture 	Falling objects	<ul style="list-style-type: none"> <li>⚓ Ensure all doors and drawers are fully secured. Do not overload shelves.</li> <li>⚓ Ensure bookcases are seismically strapped/secure to wall to prevent tipping over.</li> </ul>
5	Walking in offices, buildings hallways and stairs 	Slips, trips and falls	<ul style="list-style-type: none"> <li>⚓ Ensure all walking and working surfaces have been properly maintained, properly lit, are free of debris and remove potential tripping hazards.</li> <li>⚓ Use handrails when using stairs.</li> <li>⚠ Note: No opened toed footwear is allowed in food operations</li> <li>⚠ Note: No opened toed footwear is allowed on T.S. Golden Bear</li> </ul>
6	Campus Construction Activities 	Pedestrians knocking over ladders or lights or bumping into worker; pedestrians getting hit with equipment or falling tools, etc.	<ul style="list-style-type: none"> <li>⚓ Always be aware of surroundings.</li> <li>⚓ Stay away from construction zones.</li> </ul>
7	Working outside in Weather 	Heat stroke, heat exhaustion, frostbite	<ul style="list-style-type: none"> <li>⚓ Dress appropriately for the weather, keep hydrated, and take necessary breaks when needed</li> </ul>
8	Heaving lifting and reaching 	Overexertion, strains and sprains	<ul style="list-style-type: none"> <li>⚓ Use proper lifting techniques, limit duration of repetitive motion.</li> <li>⚓ Always know your weight limit, lift with your legs, get help if needed.</li> <li>⚓ Use step ladders when lifting objects above shoulder height.</li> </ul>
9	Campus 	Personal safety and security	<ul style="list-style-type: none"> <li>⚓ Always be aware of your surroundings.</li> <li>⚓ Changing weather conditions can increase slip hazards throughout the campus</li> </ul>
10	Operating university vehicles 	Motor vehicle accident, striking a pedestrian or bicyclist	<ul style="list-style-type: none"> <li>⚓ Inspect vehicles before use.</li> <li>⚓ Use seat belts. Travel at safe speed for conditions.</li> <li>⚓ Stay alert for pedestrians, other vehicles, and objects in travel path.</li> </ul>

# JOB HAZARD ANALYSIS

POSITION SPECIFIC SAFE OPERATING PROCEDURES			
WORK DUTIES		HAZARD POTENTIAL	HAZARD CONTROLS & PROTECTION MEASURES
1	Using hand tools 	Cuts, pinches, smashes, punctures, severing of fingers.	<ul style="list-style-type: none"> <li> Keep tools in good condition. Inspect tools before use.</li> <li> Wear safety glasses. Work away from yourself.</li> <li> Use normal caution required for all hand tools.</li> </ul>
2	Installing glass 	Cuts from installing or breaking glass. Inhalation of fine particles of glass	<ul style="list-style-type: none"> <li> Wear proper PPE such as leather gloves, dust mask and safety glasses/goggles.</li> <li> Dispose of broken glass so that no one else can be injured.</li> </ul>
3	Working with Power Tools 	Cuts, abrasive, electric shock, injury from flying debris, tripping over power cords, electrocution	<ul style="list-style-type: none"> <li> Wear goggles and dust mask if applicable. Keep cords away from work area.</li> <li> Keep tools in good condition.</li> <li> Inspect tools before use. Verify that guards are working properly. <b>DO NOT</b> put hand near blades.</li> <li> Make sure you have a good center of gravity and maintain control at all times</li> </ul>
4	Working around electricity 	Electric Shock, Electrocution	<ul style="list-style-type: none"> <li> Shut off power to work area. Use lock-out device to ensure power is not inadvertently switched on. Always test before beginning work to verify that power is off.</li> <li> Remove tools and other metals from body. If you must work with electricity on, wear safety glasses and leather gloves per NFPA 70E classifications. Have coworker with you in case there is a problem.</li> <li> If work area is wet, clean up standing water before working with electricity; wear rubber boots and gloves.</li> </ul>
5	Using adhesives/glues 	Inhalation of fumes	<ul style="list-style-type: none"> <li> Work in a well-ventilated area</li> </ul>
6	Using scaffolding 	Scaffolding collapsing, slipping/falling from scaffolding	<ul style="list-style-type: none"> <li> Inspect all equipment before using and make sure it is assembled correctly and all wheels are locked.</li> <li> Use safety rails and a safe way down</li> </ul>
7	Repair/replace grid ceilings, drywall ceilings and/or ceiling tiles 	Inhalation of dust, objects striking if on top of ceiling material, contact with fiberglass or asbestos	<ul style="list-style-type: none"> <li> Wear dust mask and safety glasses, be careful when removing ceiling, if in doubt about asbestos call EHS.</li> <li> Inspect vehicle before use. Use seat belts and safety prescription glasses. Stay alert for pedestrians, other vehicles and objects in path</li> </ul>
8	May work with materials containing asbestos 	Could cause possible health issues if inhaled or ingested	<ul style="list-style-type: none"> <li> Never disturb materials containing asbestos unless properly trained.</li> <li> Always use appropriate exposure control methods and wear designated PPE</li> </ul>
9			<ul style="list-style-type: none"> <li></li> </ul>

# JOB HAZARD ANALYSIS

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CORE EHS TRAINING REQUIREMENTS	ADDITIONAL NOTES
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Fall Protection Training	I	A	O	H	
Elevated Work	I	A	O	H	
Personal Protection Equipment	I	A	O	H	
Hand & Power Tool	I	A	O	H	
Lockout/Tagout (LOTO)	I	A	O	H	
Hazard Communication	I	A	O	H	
Basic First Aid /CPR/AED					Recommended

ADDITIONAL NOTES

**IF CONDITIONS CHANGE: STOP WORK IMMEDIATELY-REVIEW WITH SUPERVISOR-DOCUMENT HAZARD-REVIEW WITH SRM**

EMERGENCY RESPONSE	HOUSEKEEPING & SECURITY
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1	First Aid Kit	Located in buildings	1	Is the work area/site Clean?	Ensure work area is clean daily and that any hazardous materials are properly disposed of daily
2	AED	Located in all main buildings	2	Is the work area/site Secure?	Ensure lights are turned off and building is locked upon exiting work for the day.
3	Emergency phone	Campus Police- 707-654-1111 or 911	3		
4	Evacuation	TBD based on Facility & Emergency			

**REMINDER: IMMEDIATELY REPORT ALL INCIDENTS, REGARDLESS OF SEVERITY, TO YOUR SUPERVISOR AND THE DEPARTMENT OF SAFETY & RISK MANAGEMENT.**