

**FAMU-FSU College of Engineering**  
**Project Hazard Assessment Policy and Procedures**

**INTRODUCTION**

University laboratories are not without safety hazards. Those circumstances or conditions that might go wrong must be predicted and reasonable control methods must be determined to prevent incident and injury. The FAMU-FSU College of Engineering is committed to achieving and maintaining safety in all levels of work activities.

**PROJECT HAZARD ASSESSMENT POLICY**

Prior to starting an experiment, laboratory workers must conduct a project hazard assessment (PHA) to identify health, environmental and property hazards and the proper control methods to eliminate, reduce or control those hazards. PI/instructor must review, approve, and sign the written PHA and provide the identified hazard control measures. PI/instructor continually monitor projects to ensure proper controls and safety measures are available, implemented, and followed. PI/instructor are required to reevaluate a project anytime there is a change in scope or scale of a project and at least annually after the initial review.

**PROJECT HAZARD ASSESSMENT PROCEDURES**

It is FAMU-FSU College of Engineering policy to implement followings:

1. Laboratory workers (i.e. graduate students, undergraduate students, postdoctoral, volunteers, etc.) performing a research in FAMU-FSU College of Engineering are required to conduct PHA prior to commencement of an experiment or any project change in order to identify existing or potential hazards and to determine proper measures to control those hazards.
2. PI/instructor must review, approve and sign the written PHA.
3. PI/instructor must ensure all the control methods identified in PHA are available and implemented in the laboratory.
4. In the event laboratory personnel are not following the safety precautions, PI/instructor must take firm actions (e.g. stop the work, set a meeting to discuss potential hazards and consequences, ask personnel to review the safety rules, etc.) to clarify the safety expectations.
5. PI/instructor must document all the incidents/accidents happened in the laboratory along with the PHA document to ensure that PHA is reviewed/modified to prevent reoccurrence. In the event of PHA modification a revision number should be given to the PHA, so project members know the latest PHA revision they should follow.
6. PI/instructor must ensure that those findings in PHA are communicated with other students working in the same laboratory (affected users).
7. PI/instructor must ensure that approved methods and precautions are being followed by :
  - a. Performing periodic laboratory visits to prevent the development of unsafe practice.
  - b. Quick reviewing of the safety rules and precautions in the laboratory members meetings.
  - c. Assigning a safety representative to assist in implementing the expectations.
  - d. Etc.
8. A copy of this PHA must be kept in a binder inside the laboratory or PI/instructor's office (if experiment steps are confidential).

**Project Hazard Assessment Worksheet**

PI/instructor: Dr. Oscar Chuy	Phone #: (850) 410-6468	Dept.: ECE	Start Date:	Revision number: 304
Project: (TEAM 304) FPL Image Recognition for Pad Mounted Equipment			Location(s): Tallahassee, FL	
Team member(s): Sam Hammermaster Gage Irwin, Erin Murphy Kent Logue Jordan Wilkerson			Phone #: (703) 975-2122 (850) 637-4317 (727) 424-6979 (850) 524-6044 (772) 882-2055	Email: <a href="mailto:sth18@my.fsu.edu">sth18@my.fsu.edu</a> <a href="mailto:gci16@my.fsu.edu">gci16@my.fsu.edu</a> <a href="mailto:earn19c@my.fsu.edu">earn19c@my.fsu.edu</a> <a href="mailto:k119y@my.fsu.edu">k119y@my.fsu.edu</a> <a href="mailto:jordan1.wilkerson@fam.u.edu">jordan1.wilkerson@fam.u.edu</a>

Experiment Steps	Location	Person assigned	Identify hazards or potential failure points	Control method	PPE	List proper method of hazardous waste disposal, if any.	Residual Risk	Specific rules based on the residual risk
Model Beacon Assembly	ME Senior Design Lab	Jordan, Kent, Sam, Erin, Gage	Appendages caught in joints, drill slipping, wires getting loose	One person working at a time, stabilize drill, be aware of wires	gloves	N/A	HAZARD: 1 CONSEQ: Minor  Residual: Low	Safety controls are planned by both the worker and supervisor.
Model Transformer Assembly	ME Senior Design Lab	Jordan, Kent	Fumes from spray paint, knife slipping, pinching between edges	Cut away from body, mask for spray paint, be aware of screws	Mask, gloves	N/A	HAZARD: 1 CONSEQ: Moderate  Residual: Low Medium	Safety controls are planned by both the worker and supervisor.
Attach Beacon to Transformer	ME Senior Design Lab	Jordan, Kent	Environmental Physical Noise Electric Shock Sharp Objects	One person working at a time, checking working area, being aware of wires	gloves	N/A	HAZARD: 2 CONSEQ: Minor  Residual: Low Medium	Safety controls are planned by both the worker and supervisor.
Provide Power to Beacon	ME Senior	Sam, Gage, Erin	Environmental Physical Electric Shock	Do not crowd person working, power	static grounder, gloves	N/A	HAZARD: 3 CONSEQ: Moderate	A second worker must be in place

	Design Lab			source off, double check wiring before use, use insulated wiring			Residual: Medium	before work can proceed (buddy system)
Test Beacon Functionality	ME Senior Design Lab	Sam, Gage, Erin	Beacon hitting someone, LED not wired correctly, voltage	Stand clear of model, double check wiring	N/A	N/A	HAZARD: 1 CONSEQ: Minor  Residual: Low	Safety controls are planned by both the worker and supervisor.
Capture Image of Beacon	COE	Sam, Gage, Erin	Psychological	Person Captures Image with Phone from a distance	N/A	N/A	HAZARD: 1 CONSEQ: Negligible  Residual: Low	Safety controls are planned by both the worker and supervisor.
Run YOLOv5 Algorithm on Image of Beacon	N/A	Sam, Gage, Erin	Ergonomic	N/A	N/A	N/A	HAZARD: 1 CONSEQ: Negligible  Residual: Low	Safety controls are planned by both the worker and supervisor.

**Principal investigator(s) PHA certification:** I certify that I have reviewed and approved the PHA worksheet and will ensure the control measures are available and implemented in the laboratory.

Name	Signature	Date	Name	Signature	Date
_____	_____	_____	_____	_____	_____

**Team members' certification:** I certify that I have reviewed the PHA worksheet, am aware of the hazards, and will ensure the control measures are followed.

Name	Signature	Date	Name	Signature	Date
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Sam Hammermaster

*Sam Hammermaster*

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Jordan Wilkerson

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Erin Murphy

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Gage Irwin

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Kent Logue

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