

Network SSID: Leeman Geophysical Guest
Password: sciencrules

#GEARS





Welcome and Safety

GEARS Workshop

8/1/22

Workshop Staff













About our Locations

- Restrooms
- Emergency Exits
- Muster Points
- SSFD/SSPD 911
- First Aid Kits
- Fire Extinguishers
- Sanitizing/Lunch Procedure
- Sunscreen
- Main St. Speed Trap
- Low cars caution on east entrance



Image: Google Earth

It's hot - stay very hydrated, especially when working in the shop!

HEAT EXHAUSTION	OR	HEAT STROKE
Faint or dizzy 		Throbbing headache, confusion 
Excessive sweating 		No sweating
 Cool, pale, clammy skin		Body temperature above 103°  Red, hot, dry skin
Nausea or vomiting		Nausea or vomiting
Rapid, weak pulse 		Rapid, strong pulse 
Muscle cramps 		May lose consciousness 
<ul style="list-style-type: none">• Get to a cooler, air conditioned place• Drink water if fully conscious• Take a cool shower or use cold compresses	CALL 9-1-1 <ul style="list-style-type: none">• Move person to cooler place• Cool using cool cloths or bath• Do not give anything to drink	

Activities

Monday



Tue/Wed



Thursday



Tonight's poster session is a low-key event to enjoy with other science people!



Sticky Note System



Required Safety Equipment

- Safety Glasses
- Closed toe/back shoes
- Work Gloves

Failure to wear any of these may mean you cannot participate in the shop activities!

Hair/Jewelry/Clothing Hazards



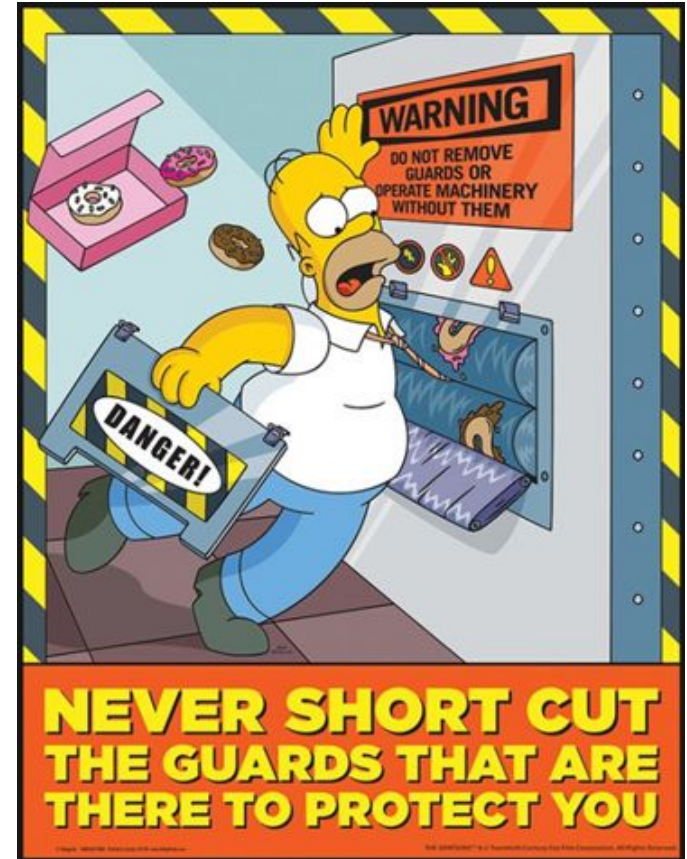
Other common PPE you will encounter

- Hearing Protection
- Respiratory Protection
- Task Specific (welding, chemicals, heavy objects)
- Hot Work
- Hard Hats
- Fall Arrest



Operating Equipment

- Always keep guards in place
- No loose hair/jewelry
- Rings don't make good fuses
- Don't touch spinning objects
- Never try to clean a spinning internal thread
- Drill/Saw safety (binding/kicking)



SSFD will cover fire safety



Other miscellaneous considerations

- Don't know what it is? Don't touch it!
- Metal can look cold, but still be very hot
- Machined parts have razor edges
- Tools aren't toys (but they are fun)
- Everything is more complex (and more expensive) than it appears

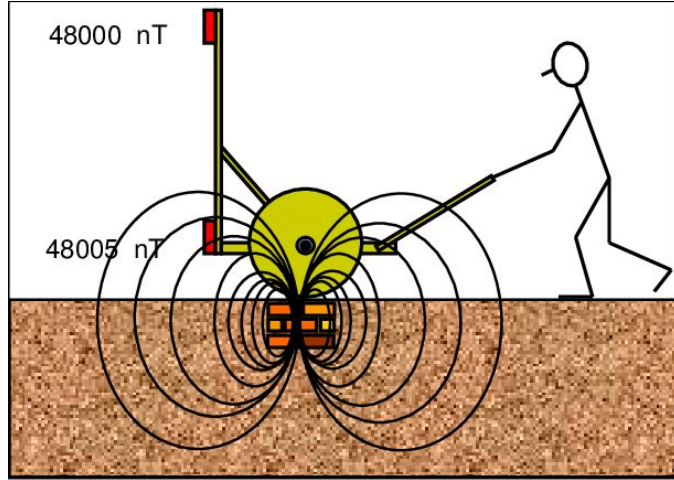


Structure



Image: Giphy

Projects



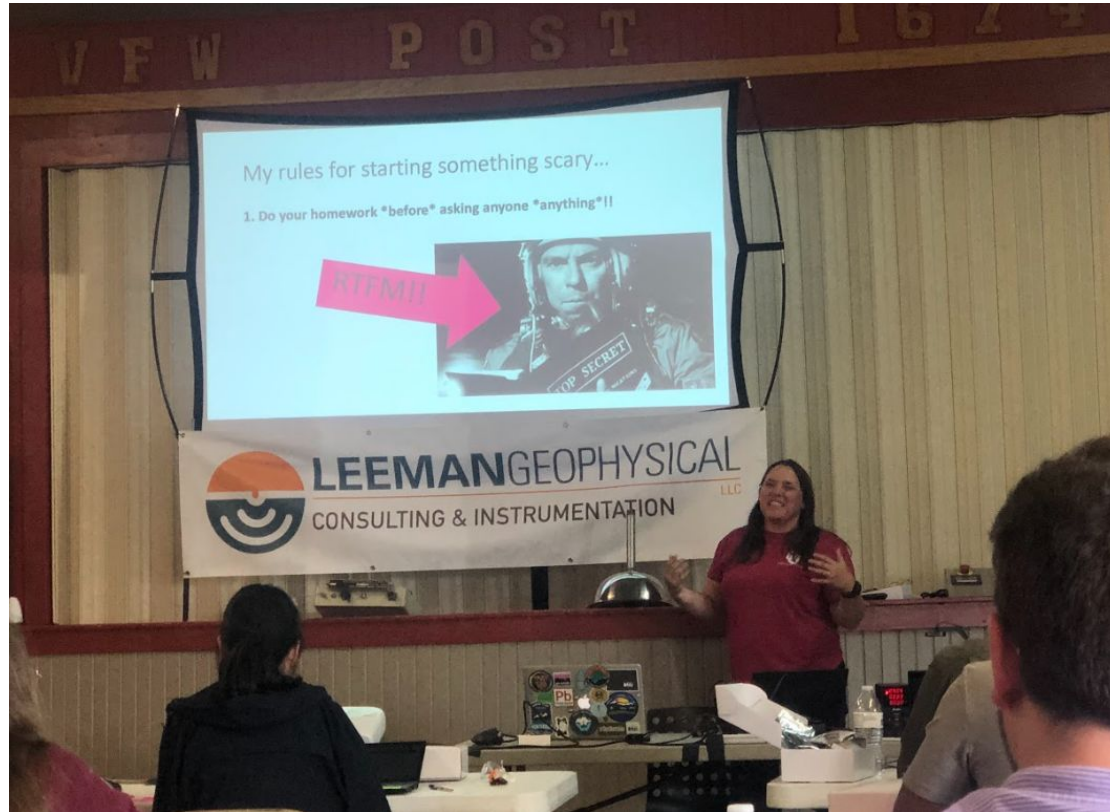
Project Groups

Pressure Sensors	Magnetometers	Stream Sensing
David S.	Federico P.	Matthew M.
Joshua O.	Navin T.	Natasha M.
Nico B.	Alex S.	Emily M.
Jessie M.		

Project Groups - Rotation

Project	Tuesday AM	Tuesday PM	Wednesday AM	Wednesday PM
Magnetometer	Electronics	Programming	Mechanical	Data Collection
Stream Gauge	Mechanical	Electronics	Programming	Deployment
Pressure	Programming	Mechanical	Electronics	Deployment

Projects presentations are Friday before lunch



Workshop Goals



The schedule is a suggestion and you get to help guide our learning



Please sign the paperwork (2 documents) in front of you before we begin the course



Things to do in Arkansas:

- Have a heat stroke
- Get bit by a water moccasin
- Sweat
- Get sucked into a tornado
- Run from wasps
- Run the AC and heater in the same day
- Get second degree sunburn
- Fist fight mosquitoes

Things to do in Arkansas:

- Lots of local eateries and downtown businesses
- World class art museums
- WalMart Museum
- Botanical Gardens
- Trails, trails, and trails
- Grape Festival
- Naturals Baseball Games

Introductions

