

CGN3508L
Civil Engineering Material Laboratory
Safety Guidelines

1 General Safety

- Only enter the laboratory when authorized
 - Always sign-in and sign-out
- A supervisor must be present at all times
- Never work alone in the laboratory
- You have the primary responsibility for your safety
 - Don't do anything you feel is unsafe
 - Don't do anything you are not confident about
 - Be prepared for the test/experiment you will run

2 Personal Safety

- Medical conditions must be reported immediately
 - No matter how small they are
- No personal belongings in work area
- Be careful for your own safety
- Be as careful for the safety of others as for yourself
- Wash your hands before leaving the laboratories

3 Clothing

- Long sleeve (tight) shirts and pants
- Shoes must completely cover your feet
 - No sandals or opened-toed shoes
 - Preferably steel-toed shoes
 - * If experiment requires heavy lifting
 - * Dropping a 15 pound weight from 3 feet
- Long hair must be tied back at all times
- Remove bracelets, necklaces or other loose jewelry

4 Personal Protection

- Eye safety glasses are required during preparation and testing
 - Never wear contacts when working with volatile materials
- Use appropriate filter masks if:
 - handling fine particles
 - working in dusty environments
- Hard hats must be worn if:
 - lifting heavy objects with crane
 - there is danger of falling objects

5 Equipment Safety

- Never use a tool you are not familiar with
- Do not operate heavy equipment (cranes, forklifts, etc.)
 - Do not operate equipment you are not trained for
- All guards must be in place before equipment operation
 - Do not bypass guards or safeties
- Report faulty equipment to supervisor

- Do not use equipment that has been marked faulty
- De-energize machinery or equipment before cleaning or adjusting

6 Laboratory Regulations

- Follow the assigned instructions and procedures exactly
- No food or liquids are allowed inside the laboratory
- Do not taste or ingest anything while in the laboratory
- Smoking is prohibited
- Keep work area well lit and dry (as much as possible)
- Always keep your work area and the entire laboratory clean

Before running your experiment:

- locate all fire extinguishers in the laboratory
- access the first aid kits and check for completion
- test the eyewash stations
- find out where the fire alarm is located
- check emergency and exit routes
- locate the nearest phone

7 Use of Emergency Equipment

Fire Extinguisher

Use the **P A S S** Technique

- **P**ull the pin at top of the extinguisher
- **A**im at the base of the fire, not the flames
- **S**queeze the lever slowly
- **S**weep from side to side

<http://www.fire-extinguisher101.com/using.html>

<http://www.fireextinguishertraining.com>

8 Chemical Hazards

- Know the properties and dangers of the chemicals you are handling
- No open flames are allowed when chemicals are present
- Never smell or taste chemicals

9 Disposal

- Do not wash any material down the drain
- Do not dispose any chemicals without specific directions by the instructor
- Chemical waste must be disposed in appropriate and designated receptacles

10 Laboratory Accidents

- Be prepared to act intelligently and quickly
- Always notify the instructor in the event of an accident, no matter how minor it appears
- If corrosive liquids (acidic or basic) touch your skin, flood the area with water immediately
 - Rinse at least 15 minutes
 - Notify the instructor after finishing
- In the event of eye contact with any substances in the laboratory, use the eyewash stations to rinse immediately
 - Notify the instructor after finishing

In case of emergency, contact one of the following:

- | | |
|-------------------------------------|---------------|
| • Raphael Kampmann (Instructor) | Tel: 410-6127 |
| • Jack Johnson (Laboratory Manager) | Tel: 410-6106 |
| • Kamal Tawfiq (Department Chair) | Tel: 410-6143 |
| • Main Office | Tel: 410-6139 |

CGN3508L
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Safety Compliance Form

I, _____ acknowledge that I have received the Civil Engineering Material Laboratory Safety Guidelines. By signing below I agree to adhere the official guidelines for CGN3508L. Furthermore, I will take full responsibility for all of my actions while using the Civil Engineering Laboratories and while handling any construction materials. In the event that I do not follow the stated guidelines I understand that I may be subject to disciplinary action at the discretion of the laboratory course instructor. Such action may include, but is not limited to, removal of laboratory privileges and a failure grade for the laboratory course.

Last Name (Print): _____

First Name (Print): _____

Signature: _____

Date: _____ Phone: _____

Emergency Contact:

In the event of an emergency all attempts will be made to contact the person listed below

Contact Name: _____

Relationship: _____

Contact's Phone Number: _____

(original to student file; copy returned to student)