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Division of Chemical Engineering

Department of Civil, Environmental and Natural Resources Engineering

## **PH D COURSE LAB SAFETY 5 hp**

The course is intended for PhD students, postdocs and others who need basic knowledge on how to work safely with chemicals in the lab.

General knowledge on hazardous materials will be given and thereafter each student will work with assignments specific for their PhD project.

How to use basic lab equipment in order to have scientifically accurate data will be practiced during a lab session with a written report.

### Contents:

Hazardous Materials (Haz-Mat)

Laws and regulations

Classification

Physico-chemical properties

Terminology

Working safely in the lab

Handling of basic lab equipment and procedures

### Study objectives:

Have knowledge of basic concepts and terminology used in haz-mat context

Know about some of the laws and regulations that have to be followed

Know how hazardous materials are classified and labelled based on their properties

Be aware of dangers in the lab by following guidelines in a lab safety inspection protocol

Be able to predict and evaluate risks by using haz-mat properties and chemistry knowledge

Know how to prepare safety measures to avoid or to take care of incidents by considering haz-mat properties

Know how to handle waste depending on its haz-mat properties

Be able to write a risk assessment

Be able to handle basic lab equipment in a reliable way

Be able to analyse data and write a lab report

Examination:

Assignment Risk assessment

Assignment Lab safety inspection protocol

Laboratory exercise Written lab report

Written exam

Literature:

Available in the Lab Safety Canvas room

Contact:

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