

---

**COURSE: Safety in Chemical Laboratories**

---

**ACADEMIC YEAR: 2019-2020**

---

**TYPE OF EDUCATIONAL ACTIVITY: Other**

---

**TEACHER: Prof. Maria Funicello**

---

e-mail: maria.funicello@unibas.it

website: scienze.unibas.it/site/home.html

phone: +39 0971205490

mobile (optional): **+39 3204371612**

---

Language: **Italian**

---

ECTS: (lessons e tutorials/practice) 1	n. of hours: (lessons e tutorials/practice) 8(Theoretical lessons)	Campus: <b>Potenza</b> Dept./School: <b>Dipartimento di Scienze</b> Program: <b>Chemistry (L27)</b>	Semester: I (date)
---	---	---	-----------------------

---

**EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES**

The main objective of the course is to provide students with the following knowledge:

- Basic elements to learn to recognize the main risks to which those working in chemical laboratories are exposed;
- Knowledge related to incompatibility between chemical compounds
- Knowledge of the main rules of good behavior

The main abilities expected to be achieved are:

- Ability to assess risk in the handling of toxic-harmful substances
  - Knowledge of current legislation and REACH
- 

**PRE-REQUIREMENTS**

It is not necessary to possess special knowledge provided by other teachings

---

**SYLLABUS**

The following topics will be covered in the course:

- Definition of work environment and accident in the work activity. Common types of accidents and their causes in the workplace and in the common life.
  - Flammable substances and fire triangle, definition of point and zone of flammability and temperature of auto-ignition of the most common solvents. Main rules of behavior in case of fire. Extinguishing media and their appropriate use.
  - Dangerous substances, main routes of exposure and types of damage over time. Incompatibility between chemicals. Risk phrases (H) and prudence (P). Toxicity and biological damage.
  - Information in safety data sheets and labels: how to read them. Signs in the workplace: prescription, danger, fire and emergency.
  - PPE, choice of gloves and main rules of good behavior in the laboratory. Law 626 and D.M. 81.
  - REACH: new regulation and cataloging of chemical substances, new risk phrases and prudence and pictograms
- 

**TEACHING METHODS**

The course only includes lectures in class with compulsory attendance of at least eighty percent of the scheduled hours

---

---

---

#### EVALUATION METHODS

The course is accredited after checking the hours attended and after verification (carried out through simple oral questions) of the ability to connect and compare different aspects treated during classroom lessons.

---

---

#### TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- R. Fornasier "Guida alla Sicurezza nei Laboratori Chimici", Ed. Libreria Cortina, Padova;
- Dispense sul REACH.

---

---

#### INTERACTION WITH STUDENTS

Contact by mail and receiving by appointment on every day

---

---

#### EXAMINATION SESSIONS (FORECAST)<sup>1</sup>

20/2/2019; 20/3/2019; 14/5/2019; 19/6/2019; 16/7/2019;15/10/2019; 13/12/2019

---

---

SEMINARS BY EXTERNAL EXPERTS    YES  X    NO

---

---

#### FURTHER INFORMATION

---

---

<sup>1</sup>Subject to possible changes: check the web site of the Teacher or the Department/School for updates.