Course Specifications
Valid as from the academic year 2017-2018

Chemical Laboratory Skills (C002686)

Course offerings and teaching methods in academic year 2019-2020
A (year) Dutch microteaching 23.75 h
lecture 8.75 h
work placement 30.0 h

Lecturers in academic year 2019-2020
Vanhoe, Hans WE06 staff member
Strubbe, Katrien WE06 lecturer-in-charge

Offered in the following programmes in 2019-2020
Master of Science in Chemistry

Teaching languages
Dutch

Keywords
Supervision of practical exercises in chemistry, communication on chemistry, organisation and planning, safety

Position of the course
This course aims at teaching students how to prepare, organise and supervise chemical practical exercises. The main competences that are being developed are in the field of interaction, working as a team, to drive groups and individuals, planning, organising, communication.

Contents
Theory
• prepare, plan and organise practical exercises and/or seminars
• environment and safety
• efficient use of didactic material
Exercises:
• the students are incorporated in the guidance and evaluation of practical exercises in general chemistry in first bachelor courses (6 times). The student has to prepare and supervise these exercises and has to give an introduction lesson.
• microteaching: the student gives a limited number of seminars to 1st bachelor students

Initial competences
Possess the diploma of Bachelor of science in chemistry

Final competences
1 To know the regulation concerning working in a chemical lab.
2 To know several didactic ways to teach chemistry and apply them.
3 Be aware of the importance of safety and prevention.
4 To apply the safety rules in a chemical lab.
5 To show professional behaviour, characterised by passion, accuracy and self-employment.
6 To plan practical exercises and seminars in chemistry.
7 To show responsibility and engagement in the guidance of chemical lab sessions.
8 Working in a team.
9 To teach knowledge of chemistry to (future) chemists and non-chemists.

(Approved)
Conditions for credit contract
Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract
This course unit cannot be taken via an exam contract

Teaching methods
Guided self-study, lecture, microteaching, work placement

Learning materials and price
Courses in chemistry from the bachelor programme, practicum note's, environmental, health and safety guidelines, UGent.

References

Course content-related study coaching
The practical sessions are under guidance of a mentor, who follows the student during his training and who gives feedback
Possibility for feedback after the lectures, the seminars and the practical exercises and after making an appointment

Evaluation methods
end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period
Written examination with open questions, written examination with multiple choice questions

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions, written examination with multiple choice questions

Examination methods in case of permanent evaluation
Skills test, job performance assessment, report

Possibilities of retake in case of permanent evaluation
examination during the second examination period is possible

Extra information on the examination methods
Periodic evaluation: written test concerning the contents of the practical chemistry sessions, the seminars and the first bachelor course in general chemistry (practical aspects)
Non-periodic evaluation: evaluation of knowledge and competences, demonstrated during the internship, evaluations of the reports
For the second chance, the non-periodic evaluation is replaced by means of a compensating activity in-between the first and the second examination period, which consists of giving a lecture/seminar in chemistry. The student who doesn't have marks for the periodic evaluation, can not pass for this course.

Calculation of the examination mark
periodic evaluation (30 %), non-periodic evaluation (70 %)