UCLouvain

lchm1320

2020

Chimiometry

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

3 credits	30.0 h	Q2

Teacher(s)	Martin Manon ;
Language :	French
Place of the course	Louvain-la-Neuve
Aims	*The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Evaluation methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The evaluation will be partly assessed based on the ongoing work of the students and partly on a final exam.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** This course is a lecture course of 30h involving applied exercises during the lecture time. It currently is planned to be a classroom course. The entirety of this course will be dispensed in a computer room, insisting on (1) theoretical aspects that are necessary to understand the presented methods and (2) application exercises based on concrete case studies. The practical sessions will use the R software, based on RMarkdown documents.
Content	This course intents to complement the competencies of students for the treatment (pre-processing and statistical data analysis) of chemical data through the application of multivariate methods. It will be based on real case studies from industry and research to illustrate the importance of using such tools for the pre-processing, the exploration, the visualisation, and the modelling of data from analytical chemistry. The course will explain and apply the main pre-processing steps, as well as the most common exploratory, regression and discrimination methods (PCA, clustering, PCR, PLS, LDA, …).
Inline resources	Every student must be registered on the Moodle course LCHM1320. The communications between the professor and the students will be made mostly via this channel.
Other infos	The slides of the course will be made available on Moodle.
Faculty or entity in charge	CHIM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Minor in Chemistry	MINCHIM	3		🔍
Additionnal module in Chemistry	APPCHIM	3		🔍