

LBIR1318

2012-2013

Organic analysis I : separation techniques

6.0 credits	60.0 h + 30.0 h	2q
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Teacher(s):	Jerkovic Vesna ; Collin Sonia (coordinator) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	Background : CHIM 1170
Main themes :	Principles and practice of analytical chromatography - basics and beyond - contribution to organic analyses - gas chromatography - HPLC chromatography
Aims:	Acquiring knowledge, know-how and experimental practice of separation techniques and analytical methods (HSE, critical thinking, team work). 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 :	exam - individual homework including preparation and oral presentation of an analytical protocol - optionalities : single course attendance or combined with seminars
Content :	1. Introduction to extraction and separation techniques & mp; qualitative and quantitative analysis. 2. Theoretical aspects: - Extraction: solubility, miscibility, lipophilicity, extraction procedures (6h) - Derivatisation techniques to improve extraction and analysis (4h30) - Main concepts in chomatography (2h) - Gas chromatography (GC, GC²) and high pressure liquid chromatography (HPLC) (8h) - Separation techniques of chiral compounds
Cycle and year of study:	> Bachelor in Bioengineering
Faculty or entity in charge:	AGRO