

Name	Chromatographic methods
ECTS credits	3
Year / Semester	1/2°
Specific learning outcomes	On successful completion of this module students should be able to: Learn to identify and assay by chromatography
Contents	<p>I. Chromatographic generality</p> <ol style="list-style-type: none"> 1. Definition 2. Purposes of chromatography 3. Chromatographic variants <p>II. CHROMATOGRAPHY IN LIQUID PHASE</p> <ol style="list-style-type: none"> 1. Thin layer chromatography 2 High Performance Liquid Chromatography 3. Ionic chromatography 4. Size exclusion chromatography, or by gel permeation 5. Qualitative analysis 6. Quantitative analysis <p>III. Gas Chromatography</p> <p>IV. Supercritical phase chromatography</p>
Teaching and learning methods	Face to face, 45 hours
Teaching techniques	Practical classes, 45 hours
Assessment methods	<p>Written.</p> <p>A first-term written test and a second-term written test are not foreseen.</p> <p>The first-term written test will be devoted to the assessment of the level of achievement of LOs I and II</p> <p>The second term written test will be devoted to the assessment of the level of achievement of LOs III and IV.</p>
Assessment criteria	<p>In the first-term test students should demonstrate their ability to analysis products by Thin layer chromatography and High Performance Liquid Chromatography and interpret their results. In the second term test students will be able to analysis products by Gas Chromatography and interpret their results. Finally, students' ability to participate in class discussions with teachers and colleagues will be assessed in practical classes.</p>
Assessment metrics	Attribution of a final grade
Criteria of attribution of the final grade	<p>The grade goes from 1 (minimum) up to 20 (maximum). The minimum threshold to pass is 7. To pass the exam students should obtain the minimum evaluation in all the assessments.</p> <p>The final grade will be determined according to the following rules:</p> <ul style="list-style-type: none"> - Written exam: 50% - term written test: 20% - Practical classes : 30%
Preparatory course units	N.A.
Didactic material	<ul style="list-style-type: none"> - Principes d'analyse instrumentale, SKOOG, HOLLER, NIEMAN, ED DeBoeck. 2003 - Analyse chimique, F ROUESSAC, A ROUESSAC, ED MASSON 1992