

3.00 credits

30.0 h

Q1

Teacher(s)	Leclercq Joëlle (coordinator) ;Muccioli Giulio ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	<ul style="list-style-type: none"> • Organic chemistry • Introduction to analytical chemistry, instrumental analysis
Main themes	The main methods and norms used for purity and quality control of drugs (qualitative and quantitative analysis of impurities, assays,') will be explained
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>- Give to the student the appropriate knowledge:</p> <p>1</p> <ol style="list-style-type: none"> 1. to use efficiently reference documents (e.g. pharmacopoeias) for quality control of a medicine or its constituents, including understand the methods described in such documents 2. to allow the student to choose the most adequate analytical method to solve a given problem in drug analysis (mixture of active molecules, related substances,')
Evaluation methods	Evaluation by a written exam and exercises
Teaching methods	Teaching method: in part, theoretical teaching except exceptional sanitary measures, as well as group work of students and reverse classes.
Content	<ol style="list-style-type: none"> 1. Drugs quality control Pharmacopoeia : general aspects 2. Purity of drugs and main degradation pathways 3. Identification methods (infra red spectroscopy, nuclear magnetic resonance) 4. General identification reactions 5. Separation methods (liquid-liquid and solid-liquid extractions, liquid, supercritical and gaz chromatographies, electrophoresis). 6. Quantification methods and validation of analytical methods 7. Introduction to mass spectrometry (MS), coupling of MS with separation methods 8. Tests 9. General monographs 10. Discussion of monographs 11. Examples of the main routes of chemical and physical degradation of a drug 12. Control of commercialised medicines
Inline resources	used supports are descibed on Moodle
Other infos	The basic principles of analytical methods are not addressed in this EU. These concepts are widely discussed in the BAC EU (e.g. WFARM1243, WFARM1312, WFARM1219). Students are strongly encouraged to review the course materials if they find weaknesses in their bachelor's degree training.
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Pharmacy	FARM2M	3		