# UCL Université catholique de Louvain

## WFARM2117
### 2016-2017

# Analyse et contrôle de qualité des médicaments

| 3.0 credits | 30.0 h | 1q |
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| Teacher(s) : | Muccioli Giulio ; Leclercq Joëlle (coordinator) ; |
| Language : | Français |
| Place of the course | Bruxelles Woluwe |
| Prerequisites : | -- <br> Organic chemistry <br> -- <br> 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 |
| Aims : | - Give to the student the appropriate knowledge: <br> -- <br> 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 <br> -- <br> 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,') <br> *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 : | Evaluation by a written exam and exercises |
| Teaching methods : | Teaching method: theoretical teaching |
| Content : | -- <br> Drugs quality control ' Pharmacopoeia : general aspects <br> -- <br> Purity of drugs and main degradation pathways <br> -- <br> Identification methods (infra red spectroscopy, nuclear magnetic resonance) <br> -- <br> General identification reactions <br> -- <br> Separation methods (liquid-liquid and solid-liquid extractions, liquid, supercritical and gaz chromatographies, electrophoresis). <br> -- <br> Quantification methods and validation of analytical methods <br> -- <br> Introduction to mass spectrometry (MS), coupling of MS with separation methods <br> -- <br> Tests <br> -- <br> General monographs <br> -- <br> Discussion of monographs <br> -- <br> Examples of the main routes of chemical and physical degradation of a drug |
| Faculty or entity in charge: | FARM |

| Programmes / formations proposant cette unité d'enseignement (UE) | | | | |
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| Intitulé du programme | Sigle | Credits | Prerequis | Acquis d'apprentissage |
| Master [120] in Pharmacy | FARM2M | 3 | - | 🔍 |