

9.00 credits

0 h + 160.0 h

Q1 and Q2

Teacher(s)	Elens Laure ;Frédérick Raphaël ;Leclercq Joëlle ;Muccioli Giulio (coordinator) ;Préat Véronique ;
Language :	French
Place of the course	Bruxelles Woluwe
Main themes	The student approaches the topics of the drugs with a multidisciplinary access (chemical, biochemical, analytical, galenic, toxicological and pharmaceutical). These approaches lead to a global analysis of the medical compound from the experimental work in laboratory to the data processing and statistical management with a critical discussion of the results by a research of the appropriated documents (pharmacopoeia, medicinal and chemical data bases, Internet and Intranet).
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>1 The objectives of these practical exercises are to make conspicuous the multidisciplinary of the pharmaceutical studies. The different practical exercises regrouped around the topics of the drugs (chemistry, biochemistry, analytical chemistry, kinetic, pharmacopoeia, dissolution, stability) illustrate the potentiality of the multidisciplinary pharmaceutical approach and make it possible to be a crucible where the theoretical and practical concepts are confronted. At last, these practical exercises stimulate the initiatives and the team work.</p>
Teaching methods	seminars, exercices, practical activities (TP). Students work by groups.
Content	<p>The activity WFARM2135 includes seminars, TD and TP activities. The contents were designed to help students integrate the different aspects of pharmaceutical science into a coherent knowledge. This activity also allows to illustrate (in a practical way) many concepts addressed in numerous master's activities, including WFARM2117, WFARM2156 & WFARM2157 (Galenic), WFARM2139, ...</p> <p>Among the objectives of this activity we can cite:</p> <ul style="list-style-type: none"> Master the tools Conduct the experiments Work in a team, but in a personalized way Organize and distribute the work in a homogeneous way Show a critical look at your results Write a report that is synthetic but complete <p>The content of this activity is multi-faceted:</p> <ul style="list-style-type: none"> Statistics Seminars Notions of "good laboratory practices" Synthesis of an active ingredient Quality control of an active ingredient according to the Pharmacopoeia Quantification of an active ingredient in a mixture - comparison of two methods Separation of an active ingredient from its impurity by HPLC Study of the degradation of an active ingredient (chemical kinetics and stability) Capsule preparation and study of their conformity Study of the impact of a drug on hepatic metabolism of another PA Drug detection in biological environment
Other infos	<p>During his work, the student will be evaluated on the preparation and the comprehension of his work. It will be then judged on his report that it will defend with the various coordinators, thus making it possible to judge integration of its knowledge. The student must be familiarized with the statistical and data-processing tools in order to conclude his work. 15 H of seminars help the student to refresh his knowledge in the different areas. A team will support the student during the different steps: coordinator, scientific personnel specialized in the field and a technical staff. To help the student, an Intranet will be placed at its disposal in a data-processing network. This Intranet available on 50 "thin-clients" connected with a server and distributed in 2 computer rooms near the laboratory. The purpose of this multi-media tool will be to better prepare the student in the comprehension of his practical work. Two rooms with computers will allow him to better search the informations (MEDLINE and other scientific data bases, Internet), the drafting of the report with WORD and the data processing with EXCEL, XLSTAT and JMP.</p>
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Pharmacy	FARM2M	9		