WFARM2516

2013-2014

Pharmacotechnie

3.0 credits	20.0 h + 10.0 h

Teacher(s) :	Levêque Philippe ;
Language :	Français
Place of the course	Bruxelles Woluwe
Prerequisites :	Galenic pharmacy course (e.a. WFARM2159) or similar basic knowledge in formulation of dosage forms and physical chemistry.
Main themes :	The course covers the topic of pharmaceutical technology, first with an overview of the main unit operations, then with detailed presentation of selected technologies such as: - sterilization (steam); - drying (including cryodessication); - air conditioning and humidification; - coating (polymers, turbine, air fluidized bed etc.).
Aims :	At the end of the course, the student will have the knowledge of the main unit operations involved in the industrial production of pharmaceutical forms. More specifically he/she will be able to: - explain the physical, chemical or physicochemical principles underlying the unit operation in pharmaceutical technology for industrial-scale production; - explain the operating principles of machines used for industrial-scale production; - identify critical points for validation of machines or processes; - solve numerical problems similar to those solved during the lectures (yield, efficiency, capacity, sizing). *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 :	based on a written examen covering theoretical questions and numerical problems similar to those described during lectures.
Content :	Starting with the water phase diagram, several industrial applications are described, from the technological perspective, such as freezedrying (frozen water ' sublimation), sterilization (steam), as well as drying and air conditioning (relative humidity). Characterization methods and properties of both natural and synthetic polymers are described together with applications in the field of granulation, coating of dry forms, bottling and packaging by thermoforming.
Bibliography :	Illustrations are available on iCampus platform. Selected books are available at the library (Aulton's Pharmaceutics, Pharmacie galénique, Le Hir).
Cycle and year of study :	> Master [120] in Pharmacy
Faculty or entity in charge:	FARM