UCLouvain

wfarm1307

2025

Physical pharmacy

2.00 credits	15.0 h	Q2

Teacher(s)	Vanbever Rita ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	*The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Main themes	1. Pharmaceutical solutions : Dissolution Solubility Partition coefficient Osmotic presssure 2. The solid state : Solid state properties : The cristalline structure Polymorphisme The amorphous state Solid dispersions Properties of powders : Particle size Particle shape Specific surface area Powder density Powder flowability and particles cohesion Wettability 3. Rheology : Fluid viscosity Determination of the flow properties of Newtonian fluids Types of non-Newtonian behavior Determination of the flow properties of non-Newtonian fluids 4. Disperse systems : Interfacial phenomena Liquid interfaces Solid interfaces Colloidal systems 5. Polymers : General properties of polymers Water-soluble polymers Water-insoluble polymers and polymeric membranes
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 To assimilate the physicochemical principles necessary to the formulation of dosage forms
Bibliography	**Littérature de référence :** · Physicochemical Principles of Pharmacy. A.T. Florence and D. Attwood, 4ème édition, Pharmaceutical Press, 2005 · Pharmaceutics - The Science of Dosage Form Design. M.E. Aulton, 5ème édition, Churchill Livingstone, 2018 · Martin's Physical Pharmacy and Pharmaceutical Sciences. P.J. Sinko, 5ème édition, Lippincott Williams & Wilkins, 2006
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biomedical Engineering	GBIO2M	2		🔍
Bachelor in Pharmacy	FARM1BA	2	WFARM1243 AND WMD1102	🔍