

# PHC 361 : Pharmaceutics II: Drug Delivery

This course will introduce students to the pharmaceutical aspects of drug delivery systems as well as alternative application sites with a view to optimize therapeutic effect. It will discuss selected modern formulation principles (applied as well as potential) theoretically and methodically to explain problems/issues concerning the optimization of absorption, selective transport and targeting as well as the properties and effect of excipients. The course will cover drug classes (small molecules, prodrugs, peptides, proteins, nucleotides, etc.); applicable delivery systems (solid dispersions, self-emulsifying systems, cyclodextrins, polymeric nanoparticles, liposomes, etc.) and administration routes (oral, IV, IM, topical, pulmonary, nasal, etc.). Students will learn the development and characterization of drug delivery systems, release models, transport and absorption studies in in vitro and in vivo models.

**Credits** 2

**Prerequisite Courses**

PHC 353

**Corequisites**

None