

Pharmaceutical Technology, Drug Delivery and Regulatory Aspects

(CHEM 6080(1))

MODULE OUTLINE

Part I: Basics in Pharmaceutical Sciences (35 hours)

Introduction into drug formulation and pharmaceuticals: Definitions, routes of administration, the Pharmacopeias.

Liquid formulations - Ophthalmic and injectable preparations; Sterilization and control.

Solid formulations - Tableting technology: powder technology, tablet preparation, biopharmaceuticals of oral administration; Hard and soft gelatine capsules.

Seminars of applications.

Part II: Drug delivery concepts and polymer science (25 hours)

Introduction in biopharmaceuticals, drug delivery and targeting; Coating of solid dosage forms;

Special tablets: controlled oral delivery; Alternative application routes; Dermal and transdermal delivery systems; New drug delivery systems: targeting, protein and nucleic acids delivery;

Science of excipients; Polymer science in pharmacy; Good manufacturing processes.

Seminars of application.

Part III: Specific aspects of drugs preparation in Mauritius (30 hours)

Regulatory aspects in Mauritius; Drug distribution in Mauritius; Specific research topics in Mauritius.