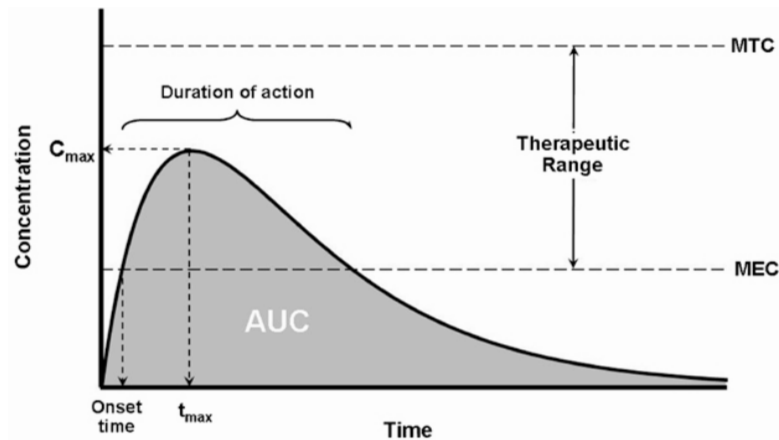


ChE475 - Pharmaceutical Engineering - Fall 2011

Professor Daniel Lepek

Department of Chemical Engineering



The design, development, engineering, and manufacturing of pharmaceuticals and drug products encompasses a wide range of chemical engineering principles. This course will introduce students to the fundamentals behind how drugs are engineered in the pharmaceutical industry. An overview of the pharmaceutical industry, including concepts on drug discovery and development and regulatory and approval processes will be provided. The principles behind pharmacodynamics, pharmacokinetics, and biopharmaceutics will be presented to show how dosage forms are linked to drug delivery systems. The course will culminate in a survey of pharmaceutical unit operations used to develop, engineer, and manufacture active pharmaceutical ingredients, as well as the solid and liquid dosage forms of the drug product.

Pre-requisites: ChE121, ChE142, and Ch262, or permission of instructor.

For more information, contact Professor Lepek at lepek@cooper.edu