## **COURSE DETAIL**

### PHARMACEUTICAL MODELING

**Country** Denmark

**Host Institution** University of Copenhagen

**Program(s)** University of Copenhagen

UCEAP Course Level Upper Division

**UCEAP Subject Area(s)** Statistics Health Sciences

UCEAP Course Number

**UCEAP Course Suffix** 

UCEAP Official Title PHARMACEUTICAL MODELING

**UCEAP Transcript Title** PHARMACEUTICL MODEL

**UCEAP Quarter Units** 6.00

**UCEAP Semester Units** 4.00

### **Course Description**

This course introduces the fundamental principles behind methods in pharmaceutical modeling and provides hands-on experience with methods used in academia and industry. It focuses on mathematical models and computer programming for a quantitative understanding of diverse pharmaceutically relevant problems. This includes models at different scales, both for molecular and particle level properties, interactions between molecules and particles, and their interactions with the organism. The course uses practical examples to provide the theory behind methods used for pharmaceutical modeling and simulation of system behavior. It begins with a introduction and refresher of fundamental mathematical tools, then applies and modifies computer scripts that model the pharmaceutical systems, and discusses these models in relation to the literature.

## Language(s) of Instruction

English

Host Institution Course Number SFAB21002U

Host Institution Course Title PHARMACEUTICAL MODELING

#### **Host Institution Campus**

## Host Institution Faculty

Faculty of Health and Medical Sciences

# Host Institution Degree

Bachelor

Host Institution Department Department of Pharmacy

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